

z/OS



# JES2 Initialization and Tuning Reference

*Version 2 Release 1*



z/OS



# JES2 Initialization and Tuning Reference

*Version 2 Release 1*

**Note**

Before using this information and the product it supports, read the information in "Notices" on page 437.

This edition applies to version 2, release 1, modification 0 of IBM z/OS (5650-ZOS) and to all subsequent releases and modifications until otherwise indicated in new editions.

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## About this document

This document describes JES2 initialization statements and their parameters and provides summary charts that highlight details of the statements. This document is specifically designed for installations running z/OS (5650-ZOS).

The associated z/OS *JES2 Initialization and Tuning Guide* describes the general functions of JES2 and provides information describing JES2 initialization, JES2 processing, network job entry (NJE), remote job entry (RJE) for JES2, and factors affecting performance.

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## Who should use this document

This document is intended for JES2 system programmers or for anyone responsible for initializing or tuning JES2.

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## How to use this document

Use this document in conjunction with z/OS *JES2 Initialization and Tuning Guide*, which provides guidance information for the initialization and tuning of your JES2 system. This document documents all JES2 initialization statements, in alphabetic order. This document also includes a summary table of the JES2 initialization statements and their primary parameters.

Most referenced publications are abbreviated throughout the text; their full titles appear in "Where to find more information." Additionally, be aware of how this document uses references to 3800 printers:

### 3800 Printer

Unless specifically noted, all references to 3800 printers refer to the 3800-1, 3800-3, 3800-6 (that is, the 3800 models 1, 3, and 6).

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## Where to find more information

This document references the following publications for further details about specific topics. Abbreviated forms of these titles are used throughout this document. The following table lists all abbreviated titles, full titles, and their order numbers that are not listed in z/OS *Information Roadmap*. See that document for all z/OS® publications.

Short Title Used in This document	Title	Order Number
MVS Remote Workstation Generation	MVS Remote Workstation Generation	GC28-1433
<i>PSF for z/OS: Customization</i>	<i>PSF for z/OS: Customization</i>	S544-5622
	<i>Advanced Function Presentation: Printer Information</i>	G544-3290



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## **z/OS Version 2 Release 1 summary of changes**

See the following publications for all enhancements to z/OS Version 2 Release 1 (V2R1):

- *z/OS Migration*
- *z/OS Planning for Installation*
- *z/OS Summary of Message and Interface Changes*
- *z/OS Introduction and Release Guide*



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# Chapter 1. Introduction

This is a general introduction to using the JES2 initialization statements. It includes a discussion of syntax rules and a table summarizing the primary parameters on each initialization statement.

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## Syntax Rules

The following general syntax rules apply to the coding of most initialization statements and commands (exceptions to these rules are explained within each individual statement or command description). Coded examples of initialization statements and commands are used to illustrate the general syntax rules.

### Specifications

Specifying JES2 initialization statements and commands involves using numeric values, alphabetic values, upper or lower case characters and blanks.

- You must code as written upper-case operands as they appear in the syntax diagrams. Also, punctuation such as commas, parentheses, and single quotation marks are not metasympols; if present in the syntax diagrams they **must** be coded. Parameters shown in lower case are **not** to be coded as written; they denote variables that are explained in the description of the particular parameter for the initialization statement or command.
- You must code numbers and upper-case letters exactly as shown.
- You must substitute specific information or specific values for lower-case letters, which represent variables.
- You can use blanks anywhere within an initialization statement or command, or you need not use any blanks.
- Table 1 defines the character specifications as they appear in the syntax diagrams.

*Table 1. Initialization Parameter Character Specifications and Their Meanings*

Character	Meaning
a	Alphabetic (A-Z)
c	All EBCDIC characters (except , ( ) - =)
n	Numeric (0-9)
m	Numeric (0-9)
h	Hexadecimal (0-9 and A-F)
j	Alphabetic (A-Z) and the special characters (\$, #, @)
v	Alphabetic (A-Z) and numeric (0-9)
x	Alphabetic (A-Z), numeric (0-9), and the special characters (\$, #, @)

### Parameter Ranges

Some commands have parameters that allow you to specify a range of values. The following explains the ranges for parameters with subscripts (**nnnn**), (**nnn**), or (**n**):

- (**nnnn**) - denotes that you may specify a range for the subscript as follows:

**nnnn**

A specific numeric value.

**nnnn-nnnn**

A specific numeric range (for example, 2-5 or 5-2 where 5-2 is interpreted as having all the values from 2 to 5)

**nnnn-\***

A generic numeric range (for example, 3-\* denotes a range from 3 to the highest value allowed).

**\*-nnnn**

A generic numeric range (for example, \*-3 denotes a range from the highest value allowed to 3).

\* A generic value that denotes all values in a defined range.

- **(nnn)** - denotes that you may specify a range for the subscript in the same way as (nnnn), where (nnn) is 1-255.
- **(n)** - denotes that you may specify a value (0-9) or a generic range (\*).

**Note:**

1. For display commands, you can omit the subscript. If omitted, this denotes a generic value to include all values in a defined range. For example, the command \$D MEMBER is equivalent to \$D MEMBER(\*).
2. Using the ALL parameter on any type of display command that may involve up to 30,000 jobs is not recommended.

## Subscript ranges

Ranges appear in JES2 initialization statements and commands as subscripts of the name associated with the initialization statement.

```
REDIRect(vvvvvvvv)
```

```
$ADD REDIRect(vvvvvvvv)
```

**Note:** The name of the initialization statement and the target of the command are the same.

All KEYWORD= ranges must be coded explicitly; whereas subscript ranges can either be coded explicitly or as a generic range using the asterisk (\*). The use of parenthesis with a generic range is optional for all numeric ranges, but is required for symbolic (character) ranges. Throughout this book the parentheses are included for consistency and clarity of presentation. It is recommended that you use parentheses when you specify a range.

- Example: Initialization statement (generic subscript)

```
NODE(5-*) PATHMGR=NO
```

- Example: Commands (generic subscript)

```
$d jobclass(d-*),qheld=yes,qheld
```

```
$Doff(*-5).JT,CLASS=a,b,c,z
```

```
$D OFF(1-10).ST
```

How JES2 interprets the use of the asterisk in specifying the subscript depends on how it is used in the command or statement. Table 2 on page 3 shows how the asterisk is coded to indicate various ranges.



An example of using a multiple-character wildcard follows:

```
Statement: APPL(OUT33*) compact=1...
```

```
Command: $d node(out*),qheld=yes,qheld
```

- Single-character wildcard, which is specified by a question mark (?). The question mark means any single character can be used here. For example, ABC?E?? matches ABCDEFG or ABC1E23 but not ABCXXE.

An example of using a single-character wildcard follows:

```
Statement: APPL(OUT?3?) compact=22,....
```

```
Command: $d node(out?A),qheld=yes,qheld
```

Each individual description of a JES2 initialization statement or JES2 command gives explicit details on how to use wildcards, if supported.

## Comments

Comments can be either added at the end of a statement or included within the statement. Use a slash-asterisk (/\*) as the delimiter and an asterisk-slash (\*/) as the ending delimiter.

- All the statements following a slash-asterisk (/\*) are treated as comments until an asterisk-slash (\*/) is found. If the ending delimiter cannot be found, and an end-of-file is detected, JES2 issues the \$HASP003 INVALID SYNTAX error message.
- The work selection parameter specifications (WS=) cannot have embedded comments.

## Format

JES2 initialization parameter statements consist of variable-length statements that conform to one of the following syntax rules, unless otherwise noted. Statements may be coded free-form in columns 1 through 71. Column 72 may be used as a continuation character, but is not required. A trailing comma indicates a continuation. The input is **free-format**, such that blanks between words and syntax symbols are insignificant as illustrated in the following example:

```
PARAMETER [/* COMMENT */]
PARAMETER=value      [/* COMMENT */]
PARAMETER=value1-value2      [/* COMMENT */]
PARAMETER=(value1,value2,...valuen)      [/* COMMENT */]
PARAMETER=(Pa,Pb,Pc,...Pn)      [/* COMMENT */]
PARAMETER= Pa,Pb,Pc,...Pn      [/* COMMENT */]
INITPARM      ,      [/* COMMENT */]
```

where:

**Pa-Pn** = the syntax structure of one of the forms (1-4) notes immediately above.

**Note:** The length of an entire initialization statement, including all blanks and comments must not exceed 4017 bytes. This results in a \$HASP003 INVALID SYNTAX error message. This restriction also holds for comments.

## Range Summary

The following tables summarize and illustrate how you should code JES2 initialization statements and commands using subscripts. Table 4 on page 5, Table 5 on page 6, and Table 6 on page 6 focus your attention to the NAME of the initialization statement or the object of the command. You can use these tables as a

reference to guide your coding. Section “Examples of numeric and symbolic subscripts” on page 7 makes you aware of how JES2 processes numbers and names.

## JES2 initialization statement and command subscript coding

Table 4. Numeric Only (used for most devices, such as PRT, PUN, LINE, RMT)

Specification	Explanation and Examples
NAMEnn	number nn RMT44 BUFSIZE=3500,COMPRESS=YES \$T R5.PU1,JOBNAME=todeko,RANGE=(1,6),....
NAME(nn)	number nn RMT(3) BUFSIZE=4096,COMPRESS=NO \$D R(3).PU(22),COMP,FLUSH,LRECL
NAMEnn-mm	Ascending or descending range nn to mm LINE5-2 COMPRESS=NO,JRNUM=2,JTNUM=2,... \$T RMT5-1,MFORM=T,SHAR=Y,TRANSPAR=N
NAME(nn-mm)	Ascending or descending range nn to mm PRT(25-22) CREATOR=fredonia,DEVFCB=TABX \$D PUN(11-10),CR,F,JOB
NAMEnn-*	Ascending range from nn to maximum possible value LINE5-* COMPRESS=NO,JRNUM=2,JTNUM=2,... \$T RMT5-*,MFORM=T,SHAR=Y,TRANSPAR=N
NAME(nn-*)	Ascending range from nn to maximum possible value RDR3-* XEQDEST=seattle \$Trdr(11-*),tr=yes,Q
NAME*-nn	Descending range from maximum possible value to nn LINE*-5 LOG=YES,TR=YES,SRNUM=224 \$\$ line *-1
NAME(*-nn)	Descending range from maximum possible value to nn LINE(*-12) LOG=YES,TR=YES \$T line (*-10),DISCON=QUIESCE
NAME(*)	All values, but holes not filled in by create requests RMT(*) BUFSIZE=512,COMPRESS=YES \$T RMT(*),BUFSIZE=1024,COMPRESS=NO
NAME(mm,nn)	Multiple subscripts LINE(2,6) LOG=YES,TR=YES \$tline(1,3),DISCON=QUIESCE
NAME(mm,nn-pp)	Multiple subscripts (one subscript is a range)  Note that if the subscripts are processed individually, it is possible for a particular element to be processed multiple times (that is, for NAME(1-3,2), element 2 is processed twice). rdr(1,10-15,22) AUTH=(JOB=YES) \$D rdr(2,4-8,11),AUTH=JOB
NAME	When allowed, equivalent to NAME(*). d PRT \$D L.jr
<b>Note:</b> Valid Names: PRT, PUN, LINE, RMT.	

Table 5. Symbolic Only. REDIRECT, APPL, JOBCLASS, OUTCLASS, SPOOL

Specification	Explanation and Examples
NAME(xxxx)	Explicit subscript REDIR(CN320) DA=cn330 \$T REDIR(cn3e0),du=cn320 \$ADD redir(cn3e0)
NAME'xxxx'	Explicit character string APPL'jmaxsum' compact=65,node=3 \$dappl'maxsum',compact,line,logmode,...
NAME('xxxx')	Explicit subscript as a character string JOBCLASS('A') COMMAND=DISPLAY,HOLD=YES \$d jobclass('c')
NAME(xxxx-yyyy)	Explicit symbolic range. Wildcard characters may be specified in ranges, but they are not treated as wild cards. OUTCLASS(a-j) blktrnc=no,trkcell=no \$Toutclass(2-3),outdisp=(purge,..
NAME('xxxx'-'yyyy')	Explicit symbolic range as characters REDIR('CN320'-'cn321') DA=cn444 \$T REDIR('cn3e0'-'cn4e0'),du=cn320
NAME(X*Y?Z)	* and ? are treated as wildcard characters APPL(jmax*) compact=65,node=3 \$dappl'maxs?m',compact,line,logmode,..
NAME'X*Y?Z'	* and ? are NOT treated as wildcard characters OUTCLASS'a*',blktrnc=no,trkcell=no \$Djob'T?cobell'
NAME(xxxx,yyyy)	Multiple keywords must be in parenthesis, may include ranges, wild cards, or quoted strings. If the subscripts are processed individually, it is possible for a particular element to be processed multiple times. JOBCLASS('A','B',c*,D),HOLD=YES \$d jobclass('c'-'d',e,f,g*)
NAME	When allowed, this is equivalent to NAME(*). Holes are never filled on create requests. JOBCLASS \$Djob,cards

Table 6. Numeric and Symbolic. NODE, MEMBER, INIT

Specification	Explanation and Examples
NAMEnn	Numeric subscript NODE001 auth=(net=yes),compact=65 \$dnode4
NAME(nn)	Symbolic name nn (if it exists, else numeric value nn) MEMBER(3) NAME=100 \$Tmember(100),IND=YES
NAME'nn'	Name nn INIT'3' name=backup,class=z \$Si'3',status=halted
NAMEnn-mm	Numeric range. INIT01-05 class=x,y,z,start=no \$di01-02,class>x,status=halted



Table 6. Numeric and Symbolic (continued). NODE, MEMBER, INIT

Specification	Explanation and Examples
NAME(nn-mm)	Numeric range. The expected performance would be as a symbolic range, and if nothing exists in range, as a numeric range. NODE(001-022) auth=(net=yes),... \$dnode(4-9)
NAME('nn-mm')	Symbolic range. MEMBER('100-115') NAME=wilcox \$dmember('100-112'),IND=YES
NAME(yyyy-mm)	Symbolic range. See note 3. NODE(nyork-102) auth=(net=yes),compact=65 \$dnode(atlanta-155)
NAME(nn-xxxx)	Symbolic range. See note 2. INIT(01-txs) class=x,y,z,start=no \$di(5-last)_02,class>x,status=halted
NAME(yyyy-yyyy)	Symbolic range. NODE(gaith-seattle) auth=(net=yes),... \$dnode(atlanta-columbus)
NAME(nn,'xxxx')	Multiple subscripts, may mix any valid flavors (numerics, symbolics, ranges, wild cards). See note 1. NODE(100,'alpha'-'sigma',102) PATHMGR=no \$d member (3,'beta',1-5),IND=YES
<b>Note:</b>	
<ol style="list-style-type: none"> <li>1. If the subscripts are processed individually, it is possible for a particular element to be processed multiple times.</li> <li>2. To avoid confusion, it is recommended that when both numerics and symbolics are allowed, symbolic names (typically specified through a NAME=parameter) either include at least one alphabetic character, or match the numeric value exactly (for example, INIT(1) NAME=1).</li> <li>3. Any numeric is allowed. Symbolic is only allowed when both numeric and symbolic are allowed.</li> <li>4. All ranges are considered numeric unless at least one of the range limits is forced to be a symbolic. Holes are filled only on numeric ranges.</li> </ol>	

### Examples of numeric and symbolic subscripts

The following table illustrates how numeric and symbolic subscripts are processed. The table is based on the following initialization statements for system initiators.

To avoid confusion, it is recommended that when both numeric and symbolic subscripts are allowed, symbolic names (specified using the NAME= parameter) either include at least one alphabetic character or match the numeric value exactly (for example, INIT(1) NAME=1). This example illustrates the confusion that can occur when this is not done.

Based on these initiator definitions, JES2 interprets the initiator number and its name as follows:

Table 7. JES2 processing of initiators

Example Initiator Statements	
INIT1 NAME=3 INIT2 NAME=2 INIT3 NAME=1 INIT4 NAME=4A INIT5 NAME=10 INIT6 NAME=6 INIT7 NAME=7 INIT8 NAME=8 INIT9 NAME=9 INIT10 NAME=10 INIT11 NAME=11	
Command Example	JES2 Processing Interpretation
\$dinit1 \$HASP892 INIT(1) NAME=3	Initiator number 1
\$dinit(1) \$HASP892 INIT(3) NAME=1	Initiator with name "1" exists.
\$dinit(5) \$HASP892 INIT(5) NAME=10	Initiator with name "5" does not exist, use init number 5.
\$dinit'1' \$HASP892 INIT(3) NAME=1	Initiator with name "1"
\$dinit3-4 \$HASP892 INIT(3) NAME=1 \$HASP892 INIT(4) NAME=4A	Initiator in numeric range of 3-4.
\$dinit(3-4) \$HASP892 INIT(3) NAME=1 \$HASP892 INIT(4) NAME=4A	Initiator in numeric range of 3-4.
\$dinit('3'-'4') \$HASP892 INIT(1) NAME=3	Initiator with names in EBCDIC range '3' to '4'
\$dinit(3-4b) \$HASP892 INIT(1) NAME=3 \$HASP892 INIT(4) NAME=4A	4b is non-numeric, therefore, initiator in EBCDIC range '3'-'4b'
\$dinit('1'-'2') \$HASP892 INIT(2) NAME=2 \$HASP892 INIT(3) NAME=1 \$HASP892 INIT(5) NAME=10 \$HASP892 INIT(10) NAME=10 \$HASP892 INIT(11) NAME=11	All initiators between EBCDIC '1' to '2' in HEX that is 'F1404040' to 'F2404040'
\$dinit('1'-'10') \$HASP892 INIT(3) NAME=1 \$HASP892 INIT(5) NAME=10 \$HASP892 INIT(10) NAME=10	All initiators between EBCDIC '1' to '10' in HEX that is 'F1404040' to 'F1F04040'
\$dinit(4-*) \$HASP892 INIT(4) NAME=4A \$HASP892 INIT(5) NAME=10 \$HASP892 INIT(6) NAME=6 \$HASP892 INIT(7) NAME=7 \$HASP892 INIT(8) NAME=8 \$HASP892 INIT(9) NAME=9 \$HASP892 INIT(10) NAME=10 \$HASP892 INIT(11) NAME=11	Numeric range (4 is numeric and * represents the maximum numeric value)

Table 7. JES2 processing of initiators (continued)

Example Initiator Statements	
<pre>INIT1 NAME=3 INIT2 NAME=2 INIT3 NAME=1 INIT4 NAME=4A INIT5 NAME=10 INIT6 NAME=6 INIT7 NAME=7 INIT8 NAME=8 INIT9 NAME=9 INIT10 NAME=10 INIT11 NAME=11</pre>	
Command Example	JES2 Processing Interpretation
<pre>\$dinit(4a-*) \$HASP892 INIT(4) NAME=4A \$HASP892 INIT(6) NAME=6 \$HASP892 INIT(7) NAME=7 \$HASP892 INIT(8) NAME=8 \$HASP892 INIT(9) NAME=9</pre>	<p>Ascending EBCDIC range '4A' to '*', in HEX that is 'F4C14040' to 'FFFFFFF'</p>
<p><b>Note:</b> There are exceptions to the processing results above. When using JES2 Commands for JOB, STC, TSU, JOBQ, a numeric subscript (JOB(nn)) is always treated as numeric unless enclosed in quotation marks. Also, job names consisting of all numerics are not valid but may occur in error scenarios, such as when a job is incorrectly submitted or received from NJE.</p>	

## How to read syntax diagrams

This section describes how to read syntax diagrams. It defines syntax diagram symbols, items that may be contained within the diagrams (keywords, variables, delimiters, operators, fragment references, operands) and provides syntax examples that contain these items.

Syntax diagrams pictorially display the order and parts (options and arguments) that comprise a command statement. They are read from left to right and from top to bottom, following the main path of the horizontal line.

For users accessing the Information Center using a screen reader, syntax diagrams are provided in dotted decimal format.

## Symbols

The following symbols may be displayed in syntax diagrams:

### Symbol

#### Definition

- ▶▶— Indicates the beginning of the syntax diagram.
- ▶ Indicates that the syntax diagram is continued to the next line.
- ▶— Indicates that the syntax is continued from the previous line.
- ▶◀ Indicates the end of the syntax diagram.

## Syntax items

Syntax diagrams contain many different items. Syntax items include:

- Keywords - a command name or any other literal information.
- Variables - variables are italicized, appear in lowercase, and represent the name of values you can supply.
- Delimiters - delimiters indicate the start or end of keywords, variables, or operators. For example, a left parenthesis is a delimiter.
- Operators - operators include add (+), subtract (-), multiply (\*), divide (/), equal (=), and other mathematical operations that may need to be performed.
- Fragment references - a part of a syntax diagram, separated from the diagram to show greater detail.
- Separators - a separator separates keywords, variables or operators. For example, a comma (,) is a separator.

**Note:** If a syntax diagram shows a character that is not alphanumeric (for example, parentheses, periods, commas, equal signs, a blank space), enter the character as part of the syntax.

Keywords, variables, and operators may be displayed as required, optional, or default. Fragments, separators, and delimiters may be displayed as required or optional.

### Item type

#### Definition

#### Required

Required items are displayed on the main path of the horizontal line.

#### Optional

Optional items are displayed below the main path of the horizontal line.

#### Default

Default items are displayed above the main path of the horizontal line.

## Syntax examples

The following table provides syntax examples.

Table 8. Syntax examples


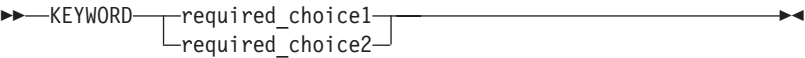
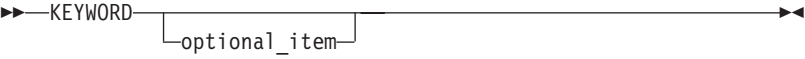
Item	Syntax example
Required item.	
Required items appear on the main path of the horizontal line. You must specify these items.	
Required choice.	
A required choice (two or more items) appears in a vertical stack on the main path of the horizontal line. You must choose one of the items in the stack.	
Optional item.	
Optional items appear below the main path of the horizontal line.	

Table 8. Syntax examples (continued)

Item	Syntax example
Optional choice.	
An optional choice (two or more items) appears in a vertical stack below the main path of the horizontal line. You may choose one of the items in the stack.	<pre> KEYWORD ├── optional_choice1 └── optional_choice2 </pre>
Default.	
Default items appear above the main path of the horizontal line. The remaining items (required or optional) appear on (required) or below (optional) the main path of the horizontal line. The following example displays a default with optional items.	<pre> KEYWORD ├── default_choice1 └── optional_choice2     └── optional_choice3 </pre>
Variable.	
Variables appear in lowercase italics. They represent names or values.	<pre> KEYWORD <i>variable</i> </pre>
Repeatable item.	
An arrow returning to the left above the main path of the horizontal line indicates an item that can be repeated.	<pre> KEYWORD ← repeatable_item </pre>
A character within the arrow means you must separate repeated items with that character.	<pre> KEYWORD ←, repeatable_item </pre>
An arrow returning to the left above a group of repeatable items indicates that one of the items can be selected, or a single item can be repeated.	<pre> KEYWORD ← ├── repeatable_item </pre>
Fragment.	
The fragment symbol indicates that a labelled group is described below the main syntax diagram. Syntax is occasionally broken into fragments if the inclusion of the fragment would overly complicate the main syntax diagram.	<pre> KEYWORD   fragment   fragment: ├── ,required_choice1 ├── ,required_choice2 ├── ,default_choice └── ,optional_choice </pre>

## Sharing JES2 Initialization Statements

Two or more instances of JES2 can share initialization statements while retaining unique values in those statements. A single initialization statement can affect multiple instances of JES2, allowing you to view the environment as a *single image* with one point of control.

System symbols can represent unique values in shared initialization statements. Each MVS™ system can define its own values to system symbols. When shared statements are processed, each MAS member replaces the system symbols with its own values.

Before you use system symbols in JES2 initialization statements, you must understand the types of system symbols, the elements that comprise them, and the general rules for using them. See *z/OS MVS Initialization and Tuning Reference* for

details about planning to use system symbols. Then read the rest of this section for specific information about using system symbols in JES2 initialization statements.

## Displaying Static System Symbols

You can enter the MVS DISPLAY SYMBOLS command to display the static system symbols and associated substitution texts that are in effect for a system. The output from DISPLAY SYMBOLS shows you the system symbols that you can specify in JES2 initialization statements. See the description of DISPLAY SYMBOLS in *z/OS MVS System Commands* for the command syntax.

## Rules and Recommendations for Using System Symbols

The general rules and recommendations for using system symbols are described in *z/OS MVS Initialization and Tuning Reference*.

As an example, suppose that you require two members (named SYS1 and SYS2) to share the following LOGON(2) initialization statement.

```
LOGON(2) APPLID=jes&SYSNAME;,...
```

You have defined &SYSNAME; as SYS1 on member SYS1, and &SYSNAME; as SYS2 on member SYS2. Following symbolic substitution, the LOGON(2) statement for each member appears as:

```
LOGON(2) APPLID=JESSYS1,... /* Init statement for member SYS1 */  
LOGON(2) APPLID=JESSYS2,... /* Init statement for member SYS2 */
```

Do not code system symbols in JES2 initialization statements that are to be processed by members that are below the JES2 SP 5.2 level. Those members cannot substitute text for system symbols in JES2 initialization statements.

## Special Considerations for Using System Symbols with NJE and RJE

Use double ampersand notation (&&) when using system symbols on initialization statements entered through RJE workstations or on initialization statements being sent from one node to another (through NJE). The double ampersand notation defers processing of the system symbols until they reach the receiving location.

For more information about using double ampersand notation, see the section on using system symbols in *z/OS MVS Initialization and Tuning Reference*.

---

## Initialization Data Set Input Sources

The variable-length statements described above are provided from the following sources:

- One source of parameter input is the HASPPARM data sets, specified through a DD statement in the JES2 cataloged procedure. The DDname used is specified in the HASPPARM=ddname initialization option. JES2 only examines columns 1-71 of the input image from this source.
- The MVS logical PARMLIB concatenation as specified on the PARMLIB statements of the LOADxx member of SYS1.PARMLIB can also be used as a source of parameter input. The logical PARMLIB is used when the PARM='MEMBER=mmmmmmm' initialization option is specified or when the INCLUDE initialization statement is used. JES2 only examines columns 1-71 of the input from this source.

- The INCLUDE initialization statement can be used to obtain parameter input from any data set. JES2 examines only columns 1-71 of the input from this source.
- When JES2 initialization processing is in **console mode**, statements (1 to 120 characters in length) can be entered at the console with a HASP WTOR reply. These statements must be syntactically complete (that is, continuation is not permitted on subsequent statements).
- Initialization statement processing exit routines (Exit 19) are presented with each variable-length statement and can add new statements. The new statements must also be of variable length as described above. (See *z/OS JES2 Installation Exits* for further information on exits and their specification.)

Initialization statements can be specified by the input source in any order. Parameters can also be specified in any order. When a statement or parameter is specified, that value is used until that statement or parameter is specified again. That is, if the same parameter occurs more than once or if the same parameter occurs more than once for a statement, JES2 will use the value of the last one it reads.





## Chapter 2. JES2 initialization statement and parameter summary tables

The following tables list each of the JES2 initialization statements, their parameters, and the valid range of values that may be specified and the default value for each. This listing can serve as a quick reference to the statement syntax and valid allowable characters as well. There are many display-only parameters that can appear on initialization statements. These are not shown in the following tables, but can be viewed by displaying the initialization statement (for example, D NJEDEF).

You can change initialization parameter settings through six methods that vary in their impact to the JES2 member. The following list provides the hierarchy, beginning with the easiest and least disruptive method, and ending with the most difficult and disruptive method for the JES2 member:

1. Operator command
2. Hot start
3. Quick start
4. Single-member warm start
5. All-member warm start
6. Cold start

The 'Minimum Action to Modify' column in the initialization statement summary tables cites the least disruptive way to change the parameter. You can change most parameters through any method more disruptive than the minimum action to modify. All exceptions to this hierarchy are noted in this table and the full parameter descriptions under each initialization statement.

Table 9. Initialization Statement - APPL(jxxxxxx)

Parameter	Range	Default	Related parameter or statement	Minimum action to modify	Location
<b>Initialization Statement - APPL(jxxxxxx)</b>					
avvvvvvv	N/A	None. Must specify.	NJEDEF	\$T APPL command	73
COMPACT	0-99	Value of COMPACT on NODE	NODE	\$T APPL command	74
CONNECT	0-1440	DEFAULT/0	NJEDEF, NODE	\$T APPL command	75
LINE	0-32767	None	NJEDEF	\$T APPL command	75
LOGMODE	N/A	Name defaults to blanks	NJEDEF	\$T APPL command	75
LOGON	0-999	0	LOGON (n)	\$T APPL command	75

Table 9. Initialization Statement - APPL(jxxxxxxx) (continued)

Parameter	Range	Default	Related parameter or statement	Minimum action to modify	Location
NODE	1-32767 or 1-8 characters.	None. Must specify.	NODE	\$T APPL command	75
REST	0-2000	Value of REST on NODE	NODE	\$T APPL command	75

Table 10. Initialization Statement - BADTRACK

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - BADTRACK</b>					
VOL	5-6 characters	None. Must specify.	N/A	Hot start	76
ADDR	Cyl-head addr. for device	None. Must specify.	N/A	Hot start	76

Table 11. Initialization Statement - BUFDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - BUFDEF</b>					
BELOWBUF	N/A	(See note below)	INTRDR, PUN PRT, RDR, PRINTDEF, PUNCHDEF, NJEDEF	\$T BUFDEF command (to increase LIMIT) Hot start (to decrease LIMIT)	"Parameter Description for BUFDEF" on page 77
EXTBUF	N/A	(See note below)	INTRDR, PUN PRT, RDR, PRINTDEF, PUNCHDEF, NJEDEF	\$T BUFDEF command (to increase LIMIT) Hot start (to decrease LIMIT)	"Parameter Description for BUFDEF" on page 77
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 12. Initialization Statement - CKPTDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - CKPTDEF</b>					
CKPT1	N/A	(See note below)	N/A	Checkpoint Reconfiguration Dialog	"Parameter Description for CKPTDEF" on page 81

Table 12. Initialization Statement - CKPTDEF (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
CKPT2	N/A	(See note below)	N/A	Checkpoint Reconfiguration Dialog	"Parameter Description for CKPTDEF" on page 81
CKPTOPT	N/A	Highest	OPTSDEF	Hot start	"Parameter Description for CKPTDEF" on page 81
DUPLEX	N/A	ON	MODE	\$T CKPTDEF command	"Parameter Description for CKPTDEF" on page 81
LOGSIZE	1-4000	(See note below)	MODE	Cold start or All-member warm start if RECONFIG is a start option.	"Parameter Description for CKPTDEF" on page 81
MODE	N/A	DUPLEX	DUPLEX	\$T CKPTDEF command or all-member warm start	"Parameter Description for CKPTDEF" on page 81
NEWCKPT1	N/A	(See note below)	N/A	\$T CKPTDEF command or cold start	"Parameter Description for CKPTDEF" on page 81
NEWCKPT2	N/A	(See note below)	N/A	\$T CKPTDEF command or cold start	"Parameter Description for CKPTDEF" on page 81
OPVERIFY	N/A	YES	N/A	\$T CKPTDEF command or cold start	"Parameter Description for CKPTDEF" on page 81
RECONFIG	N/A	No	OPTSDEF	\$T CKPTDEF command	"Parameter Description for CKPTDEF" on page 81
VERSIONS	N/A	(See note below)	N/A	\$T CKPTDEF command	"Parameter Description for CKPTDEF" on page 81
VOLATILE	N/A	(See note below)	CKPT1 CKPT2	\$T CKPTDEF command or cold start	"Parameter Description for CKPTDEF" on page 81

**Note:** See the full description of this parameter in the parameter definition with this initialization statement.

Table 13. Initialization Statement - CKPTSPACE

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - CKPTSPACE</b>					
BERTNUM	1-1000000	Greater of the two values: (JOBNUM + JOENUM/4 + 100) or 399  (See note below)		\$T CKPTSPACE command	"Parameter description for CKPTSPACE" on page 91
BERTWARN	1-99	80		\$T CKPTSPACE command	"Parameter description for CKPTSPACE" on page 91
<b>Note:</b> This parameter can be increased by using a \$T CKPTSPACE command after an \$ACTIVATE command is issued in the MAS.					

Table 14. Initialization Statement - COMPACT

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - COMPACT</b>					
Name	1-8 characters	value of NUMBER	NUMBER	Hot start	"Parameter Description for COMPACT" on page 93
CHARS	(See note below)	None	N/A	Hot start	"Parameter Description for COMPACT" on page 93
NUMBER	1-99	None.  Must specify.	NAME	Hot start	"Parameter Description for COMPACT" on page 93
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 15. Initialization Statement - CONDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - CONDEF</b>					
AUTOCMD	2-9999	20	N/A	Hot start	"Parameter Description for CONDEF" on page 95
BUFNUM	4-9999	100	BUFWARN	\$T CONDEF command to increase  Hot start to decrease	"Parameter Description for CONDEF" on page 95
BUFWARN	0-100	80	BUFNUM	\$T CONDEF command	"Parameter Description for CONDEF" on page 95

Table 15. Initialization Statement - CONDEF (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
CMDNUM	4-9999	BUFNUM	BUFNUM	\$T CONDEF command	"Parameter Description for CONDEF" on page 95
CONCHAR	single character	\$	N/A	\$T CONDEF command  (See notes 1 and 2)	"Parameter Description for CONDEF" on page 95
DISPLEN	50-70	64	MFORM on K command	\$T CONDEF command	"Parameter Description for CONDEF" on page 95
DISPMAX	10 - 21410084647	100	N/A	\$T CONDEF command	"Parameter Description for CONDEF" on page 95
MASMSG	10-999	200	N/A	\$T CONDEF command	"Parameter Description for CONDEF" on page 95
RDIRAREA	single character	Z	REDIRECT	\$T CONDEF command	"Parameter Description for CONDEF" on page 95
RDRCHAR	single character	\$	CONCHAR	\$T CONDEF command	"Parameter Description for CONDEF" on page 95
SCOPE	N/A	SYSTEM	CONCHAR	Single-member warm start	"Parameter Description for CONDEF" on page 95
<b>Note:</b>					
1. See the full description of this parameter in the parameter definition with this initialization statement.					
2. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.					

Table 16. Initialization Statement - CONNECT

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - CONNECT</b>					
NODEA	1-32767 or 1-8 characters	None. Must specify.	NODE	\$ADD CONNECT command to add \$DEL CONNECT command to delete	"Parameter Description CONNect" on page 100
NODEB	1-32767 or 1-8 characters	None. Must specify.	NODE	\$ADD CONNECT command to add \$DEL CONNECT command to delete	"Parameter Description CONNect" on page 100

Table 16. Initialization Statement - CONNECT (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
MEMBerA	1-7 (See note below)	1	MASDEF	\$ADD CONNECT command to add \$DEL CONNECT command to delete	"Parameter Description CONNect" on page 100
MEMBerB	1-7 (See note below)	1	MASDEF	\$ADD CONNECT command to add \$DEL CONNECT command to delete	"Parameter Description CONNect" on page 100
PATHMGR	N/A	(See note below)	NODE	\$T CONNECT command	"Parameter Description CONNect" on page 100
REST	2-8000	0	NODE	\$T CONNECT command	"Parameter Description CONNect" on page 100
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 17. Initialization Statement - DEBUG

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - DEBUG</b>					
DEBUG	N/A	NO	CKPTDEF	\$T DEBUG operator command	"Parameter Description DEBUG" on page 114
BERT	N/A	YES	CKPTDEF	\$T DEBUG operator command	N/A
CKPT	N/A	NO	CKPTDEF	\$T DEBUG operator command	"Parameter Description DEBUG" on page 114
MISC	N/A	NO	CKPTDEF	\$T DEBUG operator command	"Parameter Description DEBUG" on page 114
STORAGE	N/A	NO	CKPTDEF	\$T DEBUG operator command	"Parameter Description DEBUG" on page 114
SYMREC	N/A	NO	N/A	\$T DEBUG operator command	"Parameter Description DEBUG" on page 114
VERSION	N/A	NO	CKPTDEF	\$T DEBUG operator command	"Parameter Description DEBUG" on page 114

Table 18. Initialization Statement - DESTDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - DESTDEF</b>					
LOCALNUM	1-32767	32767	DESTID	Single-member warm start	"Parameter Description for DESTDEF" on page 117
Ndest	N/A	Node.	DESTID	All-member warm start	"Parameter Description for DESTDEF" on page 117
NODENAME	N/A	OPTIONAL	DESTID	All-member warm start	"Parameter Description for DESTDEF" on page 117
R   RM   RMTdest	N/A	Remote	DESTID	All-member warm start	"Parameter Description for DESTDEF" on page 117
Udest	N/A	Splocal	DESTID	All-member warm start	"Parameter Description for DESTDEF" on page 117
SHOWUSER	N/A	NOlocal	DESTID	\$T DESTDEF command	"Parameter Description for DESTDEF" on page 117

Table 19. Initialization Statement - DESTID(xxxxxxxx)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - DESTID(xxxxxxxx)</b>					
xxxxxxxx	1-8 characters	None. (See note 2)	NODE, RMT, DESTDEF	\$T DESTID(xxxxxxxx) command  (See note 2)	"DESTid(xxxxxxxx) - Route Code Name" on page 119
DEST	(See note below.)	None.	NODE, RMT, DESTDEF	\$T DESTID(xxxxxxxx) command  (See note 2)	"DESTid(xxxxxxxx) - Route Code Name" on page 119
PRIMARY	N/A	No	DESTDEF	\$T DESTID(xxxxxxxx) command  (See note 2)	"DESTid(xxxxxxxx) - Route Code Name" on page 119

Table 19. Initialization Statement - DESTID(xxxxxxxx) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Note:</b>					
1. See the full description of this parameter in the parameter definition with this initialization statement.					
2. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.					

Table 20. Initialization Statement - ESTBYTE

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - ESTBYTE</b>					
INT	1-99999	99999	N/A	\$T ESTBYTE command	"Parameter Description for ESTBYTE" on page 124
NUM	1-999999	99999	/*JOBPARM	\$T ESTBYTE command	"Parameter Description for ESTBYTE" on page 124
OPT	0-2	0	N/A	\$T ESTBYTE command	"Parameter Description for ESTBYTE" on page 124

Table 21. Initialization Statement - ESTIME

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - ESTIME</b>					
INT	1-99	1	N/A	\$T ESTIME command	"Parameter Description for ESTIME" on page 125
NUM	1-9999	2	/*JOBPARM	\$T ESTIME command	"Parameter Description for ESTIME" on page 125
OPT	N/A	NO	N/A	\$T ESTIME command	"Parameter Description for ESTIME" on page 125

Table 22. Initialization Statement - ESTLNCT

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - ESTLNCT</b>					
INT	1-9999999	2000	N/A	\$T ESTLNCT command	"Parameter Description for ESTLNCT" on page 126



Table 22. Initialization Statement - ESTLNCT (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
NUM	1-999999	2	/*JOBPARM	\$T ESTLNCT command	"Parameter Description for ESTLNCT" on page 126
OPT	0-2	0	N/A	\$T ESTLNCT command	"Parameter Description for ESTLNCT" on page 126

Table 23. Initialization Statement - ESTPAGE

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - ESTPAGE</b>					
INT	1-99999999	10	N/A	\$T ESTPAGE command	"Parameter Description for ESTPAGE" on page 128
NUM	1-99999999	40	/*JOBPARM	\$T ESTPAGE command	"Parameter Description for ESTPAGE" on page 128
OPT	0-2	0	N/A	\$T ESTPAGE command	"Parameter Description for ESTPAGE" on page 128

Table 24. Initialization Statement - ESTPUN

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - ESTPUN</b>					
INT	1-99999999	2000	N/A	\$T ESTPUN command	"Parameter Description for ESTPUN" on page 129
NUM	1-99999999	100	/*JOBPARM	\$T ESTPUN command	"Parameter Description for ESTPUN" on page 129
OPT	0-2	0	N/A	\$T ESTPUN command	"Parameter Description for ESTPUN" on page 129

Table 25. Initialization Statement - EXIT(nnn)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - EXIT(nnn)</b>					

Table 25. Initialization Statement - EXIT(nnn) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
nnn	0-255	N/A	N/A	(See notes 1 and 2)	"EXIT(nnn) - Exit and Exit Routine Association" on page 130
ROutines	1-8 characters	None	LOADMOD	Single-member warm start (See notes 1 and 2)	"Parameter Description for EXIT(nnn)" on page 131
STATUS	N/A	ENABLED	N/A	\$T EXIT(nnn) command (See notes 1 and 2)	"Parameter Description for EXIT(nnn)" on page 131
TRace	N/A	YES	TRACEDEF	\$T EXIT(nnn) command (See notes 1 and 2)	"Parameter Description for EXIT(nnn)" on page 131
<b>Note:</b>					
<ol style="list-style-type: none"> <li>1. See the full description of this parameter in the parameter definition with this initialization statement.</li> <li>2. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.</li> </ol>					

Table 26. Initialization Statement - FSS(accccccc)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - FSS(accccccc)</b>					
accccccc	1-8 characters	None	PROC	\$T FSS command (if address space inactive). (See notes 1 and 2)	"FSS(accccccc) - Functional Subsystem Definition" on page 132
PROC	1-8 characters	FSS subscript	PRT	\$T FSS command (if address space inactive). (See notes 1 and 2)	"FSS(accccccc) - Functional Subsystem Definition" on page 132
AUTOSTOP	N/A	NO	N/A	\$T FSS command (See notes 1 and 2)	"FSS(accccccc) - Functional Subsystem Definition" on page 132
HASPFSSM	1-8 characters	HASPFSSM	N/A	\$T FSS command (if address space inactive). (See notes 1 and 2)	"FSS(accccccc) - Functional Subsystem Definition" on page 132

Table 26. Initialization Statement - FSS(accccc) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Note:</b>					
1. See the full description of this parameter in the parameter definition with this initialization statement.					
2. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.					

Table 27. Initialization Statement - INCLUDE

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - INCLUDE</b>					
DSName	1-44 characters, 1-8 characters	(See note below)	N/A	Operator command	"Parameter Description for INCLUDE" on page 135
MEMBER	1- 8 characters	(See note below)	N/A	Operator command	"Parameter Description for INCLUDE" on page 135
PARMLIB	1- 8 characters	(See note below)	N/A	Operator command	"Parameter Description for INCLUDE" on page 135
UNIT	N/A	(See note below)	N/A	Operator command	"Parameter Description for INCLUDE" on page 135
VOLser	1-6 characters	(See note below)	N/A	Operator command	"Parameter Description for INCLUDE" on page 135
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 28. Initialization Statement - INIT(nnnn)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - INIT(nnnn)</b>					
nnnn	1-9999	None	INITDEF	Single-member warm start (See notes 1 and 2)	"Init(nnnn) - Initiator" on page 136
CLASS	(See note below.)	A	N/A	\$T I[vvvv] command (See notes 1 and 2)	"Init(nnnn) - Initiator" on page 136
START	N/A	YES	N/A	\$S I[vvvv] command to start \$P I[vvvv] command to stop (See notes 1 and 2)	"Init(nnnn) - Initiator" on page 136

Table 28. Initialization Statement - INIT(nnnn) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
NAME	1-4 characters	EBCDIC form of nnnn	N/A	Single-member warm start (See notes 1 and 2)	"Init(nnnn) - Initiator" on page 136
<b>Note:</b>					
1. See the full description of this parameter in the parameter definition with this initialization statement.					
2. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.					

Table 29. Initialization Statement - INITDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - INITDEF</b>					
PARTNUM	0-9999	3	INIT	Single-member warm start (See notes 1 and 2)	"INITDEF - Initiator Definition" on page 138
<b>Note:</b>					
1. See the full description of this parameter in the parameter definition with this initialization statement.					
2. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.					

Table 30. Initialization Statement - INTRDR

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - INTRDR</b>					
Auth	N/A	NO/NO/NO	N/A	\$T INTRDR command (See notes 1, 2, and 3)	"Parameter Description for INTRDR" on page 139
BATCH	N/A	YES	INTRDR	Warm start (See notes 1, 2, and 3)	"Parameter Description for INTRDR" on page 139
CLASS	1-8 character job class name	A	N/A	\$T INTRDR command (See notes 1, 2, and 3)	"Parameter Description for INTRDR" on page 139
HOLD	N/A	NO	N/A	\$T INTRDR command (See notes 1, 2, and 3)	"Parameter Description for INTRDR" on page 139

Table 30. Initialization Statement - INTRDR (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
PRTYINC	0-15	0	PRTYLIM	\$T INTRDR command  (See notes 1, 2, and 3)	"Parameter Description for INTRDR" on page 139
PRTYLIM	0-15	15	PRTYINC	\$T INTRDR command  (See notes 1, 2, and 3)	"Parameter Description for INTRDR" on page 139
SYSaff	N/A	Null	N/A	\$T INTRDR command  (See notes 1 and 3)	"INTRDR - Internal Reader" on page 138
TRACE	N/A	YES	TRACEDEF	\$T INTRDR command  (See notes 1, 2, and 3)	"Parameter Description for INTRDR" on page 139
<b>Note:</b>					
1. See the full description of this parameter in the parameter definition with this initialization statement.					
2. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.					
3. This parameter cannot be set during initialization.					

Table 31. Initialization Statement - JOBCLASS(v | STC | TSU)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - JOBCLASS(v   STC   TSU)</b>					
v	1-8 character job class name	N/A	JOB	N/A	"JOBCLASS(class   STC   TSU) - Job, Started Task, and Time Sharing User Class" on page 141
ACCT	N/A	NO	JOB	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
ACTIVE	Yes or No	YES	JOB	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
AUTH	N/A	ALL	N/A	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146

Table 31. Initialization Statement - JOBCLASS(v | STC | TSU) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
BLP	N/A	NO	LABEL(dd)	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
COMMAND	N/A	VERIFY	N/A	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
CONDPURG	Yes or No	No	N/A	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
COPY	N/A	NO	TYPRUN(JOB)	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
DUPL_JOB	N/A	DELAY	N/A	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
GROUP	N/A	N/A	JOB	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
HOLD	N/A	NO	TYPRUN(JOB)	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
IEFUJP	N/A	YES	SYSOUT(DD)	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
IEFUSO	N/A	YES	OUTLIM(DD)	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
JESLOG	(See note below.)	NOSPIN	JESMSG LG, JESSYSMSG	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146

Table 31. Initialization Statement - JOBCLASS(v | STC | TSU) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
JOBRC	MAXRC, LASTRC	MAXRC	JOBCLASS	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
JOURNAL	N/A	YES	RD(JOB   EXEC)	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
LOG	N/A	YES	JOB	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
MODE	JES or WLM	JES	N/A	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
MSGCLASS	A-Z, 0-9	A	N/A	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
MSGLEVEL	0-2, 0-1 (See note below)	(0,1)	JOB	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
OUTDisp	N/A	(See note below)	N/A	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
OUTPUT	N/A	YES	TSO/E TRANSMIT	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
PERFORM	0-255	000	JOB   EXEC	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
PGMRNAME	N/A	NO	JOB	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146

Table 31. Initialization Statement - JOBCLASS(v | STC | TSU) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
PROCLIB	00-99	00	PROCCnn(JES2)	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
QHELD	N/A	NO	N/A	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
REGION	0-2047M	1M	REGION(JOB)	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
RESTART	N/A	NO	/*JOBPARM	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
SCAN	N/A	NO	TYPRUN(JOB)	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
SCHENV	N/A	NO	N/A	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
SWA	N/A	BELOW	N/A	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
TIME	0-357912, 0-59	(30,0)	TIME on JOB   EXEC	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
TYPE6	N/A	YES	BUFNUM on SMFDEF	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
TYPE26	N/A	YES	BUFNUM on SMFDEF	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146



Table 31. Initialization Statement - JOBCLASS(v | STC | TSU) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
XBM	1-8 characters	Null	N/A	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146
XEQCOUNT	0-2M	0-2M	N/A	Cold start or \$T JOBCLASS	"Parameter Description for JOBCLASS(class   STC   TSU)" on page 146

**Note:** See the full description of this parameter in the parameter definition with this initialization statement.

Table 32. Initialization Statement - JOBDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - JOBDEF</b>					
ACCTFLD	N/A	OPTIONAL	JOB	\$T JOBDEF command	"Parameter description for JOBDEF" on page 157
BAD_JOBNAME_CHAR	N/A	?	N/A	\$T JOBDEF command (See note 6)	"Parameter description for JOBDEF" on page 157
CISUB_PER_AS	1-25	5	N/A	\$T JOBDEF command	"Parameter description for JOBDEF" on page 157
CNVT_ENQ	WAIT, FAIL	FAIL	N/A	\$T JOBDEF command	"Parameter description for JOBDEF" on page 157
CNVT_SCHENV	N/A	IGNORE	N/A	\$T JOBDEF command	"Parameter description for JOBDEF" on page 157
DUPL_JOB	N/A	DELAY	N/A	\$T JOBDEF command	"Parameter description for JOBDEF" on page 157
INTERPRET	N/A	INIT	N/A	\$T JOBDEF command	"Parameter description for JOBDEF" on page 157
JNUMWARN	1-99	80	RANGE	\$T JOBDEF command (See note 6)	"Parameter description for JOBDEF" on page 157

Table 32. Initialization Statement - JOBDEF (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
JOBNUM	10-400000 (See note 7)	1000	None	\$T JOBDEF command (See note 6)	"Parameter description for JOBDEF" on page 157
JOBWARN	1-99	80	N/A	\$T JOBDEF command (See note 6)	"Parameter description for JOBDEF" on page 157
PRTYHIGH	0-15	10	N/A	\$T JOBDEF command (See note 6)	"Parameter description for JOBDEF" on page 157
PRTYJECL	N/A	YES	/*PRIORITY (See note 3)	\$T JOBDEF command	"Parameter description for JOBDEF" on page 157
PRTYJOB	N/A	NO	PRTY(JOB) (See notes 1 and 5)	\$T JOBDEF command	"Parameter description for JOBDEF" on page 157
PRTYLOW	0-15	5	N/A	\$T JOBDEF command (See note 6)	"Parameter description for JOBDEF" on page 157
PRTYRATE	0-1440	0	JOBPRTY, OUTPRTY	\$T JOBDEF command (See note 6)	"Parameter description for JOBDEF" on page 157
RANGE	1-999999	1-9999	JNUMWARN	\$T JOBDEF command (See notes 1 and 4)	"Parameter description for JOBDEF" on page 157
RASSIGN				\$T JOBDEF command	"Parameter description for JOBDEF" on page 157

**Notes:**

1. See the full description of this parameter in the parameter definition with this initialization statement.
2. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.
3. This parameter cannot be set during initialization.
4. If you modify this parameter value and then restart JES2 with any type of warm or hot start, the parameter value in effect before termination will be used.
5. This refers to the PRTY parameter on the JCL JOB statement.
6. This parameter cannot be modified through a hot start, quick start or single-member warm start.
7. This parameter can be increased by using a \$T JOBDEF command after an \$ACTIVATE command is issued in the MAS.

Table 33. Initialization Statement - JOBPRTY

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - JOBPRTY</b>					
n	1-9	None. Must specify.	N/A	Single-member warm start	"JOBPRTY(n) - Job Priority" on page 161
PRIORITY	0-15	(See note below)	N/A	\$T JOBPRTY(n) command	"Parameter Description for JOBPRTY(n)" on page 161
TIME	1-279620	(See note below)	N/A	\$T JOBPRTY(n) command	"Parameter Description for JOBPRTY(n)" on page 161
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 34. Initialization Statement - L(nnnn).ST(n)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - L(nnnn).ST(n)</b>					
nnnnn	1-32767	None	N/A	Single-member warm start	"L(nnnnn).ST(n) - SYSOUT Job Transmitter" on page 164
n	1-7	None	N/A	Single-member warm start	"L(nnnnn).ST(n) - SYSOUT Job Transmitter" on page 164
LIMIT	0-4294967295	0-4294967295	N/A	\$T L(nnnnn).ST(n) command	"Parameter Description for L(nnnnn).ST(n)" on page 166
OUTDISP	N/A	N/A	N/A	\$T L(nnnnn).ST(n) command	"Parameter Description for L(nnnnn).ST(n)" on page 166
PLIM	0-4294967295	0-4294967295	N/A	\$T L(nnnnn).ST(n) command	"Parameter Description for L(nnnnn).ST(n)" on page 166
WS	N/A	(1)	LIMIT, PLIM, OUTDISP	\$T L(nnnnn).ST(n) command	"Parameter Description for L(nnnnn).ST(n)" on page 166

Table 35. Initialization Statement - L(nnnn).JT(n)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - L(nnnn).JT(n)</b>					
nnnnn	1-32767	None	N/A	Single-member warm start	"Parameter Description for L(nnnnn).JT(n)" on page 163

Table 35. Initialization Statement - L(nnnn).JT(n) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
n	1-7	None	N/A	Single-member warm start	"Parameter Description for L(nnnnn).JT(n)" on page 163
LIMIT	0-4294967295	0-4294967295	N/A	\$T L(nnnnn).JT(n) command	"Parameter Description for L(nnnnn).JT(n)" on page 163
WS	N/A	(1)	LIMIT	\$T L(nnnnn).JT(n) command	"Parameter Description for L(nnnnn).JT(n)" on page 163

Table 36. Initialization Statement - LINE(nnnnn) - BSC

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - LINE(nnnnn) - BSC</b>					
nnnnn	1-32767	None. Must Specify.	NODE, RMT	Single-member warm start	"LINE(nnnnn) - NJE/RJE BSC Lines" on page 168
AUTODISC	N/A	YES	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
CODE	N/A	A	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
COMPRESS	N/A	YES	RMT	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
CONNECT	0-1440	DEFAULT/0	NJEDEF, NODE	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
DUPLEX	N/A	HALF	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
INTERFAC	N/A	A	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
JRNUM	0-7	NJEDEF JRNUM parm.	SRNUM	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171

Table 36. Initialization Statement - LINE(nnnnn) - BSC (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
JTNUM	0-7	NJEDEF JTNUM parm.	STNUM	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
LINECCHR	N/A	EBCDIC	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
LOG	N/A	NO	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
NODE	N/A	N/A	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
Password	1-8 characters	None	/*SIGNON or LOGON	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
REST	0-2000	0	NODE	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
RESTART	0-1440	NO	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
SPEED	N/A	LOW	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
SRNUM	0-7	NJEDEF SRNUM parm.	JRNUM	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
START	N/A	NO	N/A	N/A	"Parameter Description for LINE(nnnnn) - BSC" on page 171
STNUM	0-7	NJEDEF STNUM parm.	JTNUM	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
TRaceio	N/A	NO	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171

Table 36. Initialization Statement - LINE(nnnnn) - BSC (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
TRANSPAR	N/A	NO	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171
UNIT	line addresses	Null	RMT	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - BSC" on page 171

Table 37. Initialization Statement - LINE(nnnnn) - SNA

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - LINE(nnnnn) - SNA</b>					
nnnnn	1-32767	None. Must specify.	NODE, RMT	Single-member warm start	"LINE(nnnnn) - NJE/RJE SNA Lines" on page 176
COMPRESS	N/A	YES	RMT	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - SNA" on page 178
CONNECT	0-1440	DEFAULT/0	NJEDEF, NODE	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - SNA" on page 178
JRNUM	0-7	NJEDEF JRNUM parm.	SRNUM	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - SNA" on page 178
JTNUM	0-7	NJEDEF JTNUM parm.	STNUM	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - SNA" on page 178
LOG	N/A	NO	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - SNA" on page 178
NODE	N/A	N/A	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - SNA" on page 178
Password	1-8 characters	None	/*SIGNON or LOGON	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - SNA" on page 178
REST	0-2000	0	NODE	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - SNA" on page 178

Table 37. Initialization Statement - LINE(nnnnn) - SNA (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
RESTART	0-1440	NO	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - SNA" on page 178
SRNUM	0-7	NJEDEF SRNUM parm.	JRNUM	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - SNA" on page 178
START	N/A	NO	N/A	N/A	"Parameter Description for LINE(nnnnn) - SNA" on page 178
STNUM	0-7	NJEDEF STNUM parm.	JTNUM	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - SNA" on page 178
TRaceio	N/A	NO	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - SNA" on page 178
UNIT=SNA	N/A	N/A	RMT	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - SNA" on page 178

Table 38. Initialization Statement - LINE(nnnnn) - TCP/IP

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - LINE(nnnnn) - TCP/IP</b>					
nnnnn	1-65535	None. Must specify.	NODE, RMT	Single-member warm start	"LINE(nnnnn) - NJE TCP/IP lines" on page 181
CONNECT	0-1440	DEFAULT/0	NJEDEF, NODE	\$T LINE(nnn) command	"Parameter Description for LINE(nnnnn) - TCP/IP" on page 183
JRNUM	0-7	NJEDEF JRNUM parm.	SRNUM	\$T LINE(nnn) command	"Parameter Description for LINE(nnnnn) - TCP/IP" on page 183
JTNUM	0-7	NJEDEF JTNUM parm.	STNUM	\$T LINE(nnn) command	"Parameter Description for LINE(nnnnn) - TCP/IP" on page 183
NODE	N/A	N/A	N/A	\$T LINE(nnn) command	"Parameter Description for LINE(nnnnn) - TCP/IP" on page 183
Password	1-8 characters	None	/*SIGNON or LOGON	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - TCP/IP" on page 183

Table 38. Initialization Statement - LINE(nnnnn) - TCP/IP (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
REST	0-2000	0	NODE	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - TCP/IP" on page 183
RESTART	0-1440	NO	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - TCP/IP" on page 183
SRNUM	0-7	NJEDEF SRNUM parm.	JRNUM	\$T LINE(nnn) command	"Parameter Description for LINE(nnnnn) - TCP/IP" on page 183
START	N/A	NO	N/A	N/A	"Parameter Description for LINE(nnnnn) - TCP/IP" on page 183
STNUM	0-7	NJEDEF STNUM parm.	JTNUM	\$T LINE(nnn) command	"Parameter Description for LINE(nnnnn) - TCP/IP" on page 183
TRaceio	N/A	NO	N/A	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - TCP/IP" on page 183
UNIT	3-4 characters	N/A	RMT	\$T LINE(nnnnn) command	"Parameter Description for LINE(nnnnn) - TCP/IP" on page 183

Table 39. Initialization Statement - LOADmod(jxxxxxxx)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - LOADmod(jxxxxxxx)</b>					
jxxxxxxx	1-8 characters	None. Must specify.	N/A	Single- member warm start	"LOADmod(jxxxxxxx) - Load Installation Exit Routine Modules" on page 186
STORage	N/A	PVT	N/A	Hot start	"Parameter Description for LOADmod(jxxxxxxx)" on page 186

Table 40. Initialization Statement - LOGON(nnn)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - LOGON(nnn)</b>					
nnn	1-999	N/A	NODE, RMT	Single-member warm start	"LOGON(nnn) - Identification of JES2 to VTAM" on page 186
APPLID	1-8 characters	JES2	N/A	\$T LOGON(nnn) command	"Parameter Description for LOGON(nnn)" on page 187



Table 40. Initialization Statement - LOGON(nnn) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
LOG	N/A	None	N/A	\$T LOGON(nnn) command	"Parameter Description for LOGON(nnn)" on page 187
Password	1-8 characters	None	N/A	\$T LOGON(nnn) command	"Parameter Description for LOGON(nnn)" on page 187
RESTART	0-1440	NO	N/A	\$T LOGON(nnn) command	"Parameter Description for LOGON(nnn)" on page 187
START	N/A	NO	N/A	N/A	"Parameter Description for LOGON(nnn)" on page 187
TRaceio	N/A	NO	N/A	\$T LOGON(nnn) command	"Parameter Description for LOGON(nnn)" on page 187

Table 41. Initialization Statement - MASDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - MASDEF</b>					
AUTOEMEM	N/A	OFF	RESTART	\$T MASDEF command	"Parameter Description for MASDEF" on page 189
CKPTLOCK	N/A	ACTION	N/A	\$T MASDEF command during initialization	"Parameter Description for MASDEF" on page 189
DORMANCY	0-3000, 100-6000	(100,500)	HOLD	\$T MASDEF command	"Parameter Description for MASDEF" on page 189
HOLD	0-99999999	99999999	DORMANCY	\$T MASDEF command	"Parameter Description for MASDEF" on page 189
LOCKOUT	500-15000	1000	N/A	\$T MASDEF command	"Parameter Description for MASDEF" on page 189
OWNMEMB	1-4 characters	(See note below)	(See note below)	Single-member warm start	"Parameter Description for MASDEF" on page 189
RESTART	N/A	NO	AUTOEMEM	\$T MASDEF command	"Parameter Description for MASDEF" on page 189
SHARED	N/A	CHECK	N/A	\$T MASDEF command (not on warm start)	"Parameter Description for MASDEF" on page 189
SYNCTOL	0-300	120	N/A	\$T MASDEF command	"Parameter Description for MASDEF" on page 189

Table 41. Initialization Statement - MASDEF (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
XCFGRPNM	N/A	local node name	N/A	All-member warm start	"Parameter Description for MASDEF" on page 189
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 42. Initialization Statement - MEMBER(xxxx)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - MEMBER(xxxx)</b>					
NAME	1-4 characters	None. Must specify.	N/A	Single-member warm start	"Parameter Description for MEMBer" on page 194

Table 43. Initialization Statement - NAME

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - NAME</b>					
member	1-8 characters	None. Must specify.	REP, VER	N/A	"Parameter Description for INCLUDE" on page 135
csect   *	1-8 characters	None. Must specify.	REP, VER	N/A	"Parameter Description for NAME" on page 196

Table 44. Initialization Statement - NETACCT

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - NETACCT</b>					
NACCT	1-8 characters	None. Must specify.	NTHRU	Single-member warm start	"Parameter Description for NETACCT" on page 198
NTHRU	1-8 characters	Value of NACCT	NACCT	Single-member warm start	"Parameter Description for NETACCT" on page 198
JACCT	1-4 characters	None. Must specify.	JTHRU	Single-member warm start	"Parameter Description for NETACCT" on page 198
JTHRU	1-4 characters	Value of JACCT	JACCT	Single-member warm start	"Parameter Description for NETACCT" on page 198
TYPE	N/A	None	/*NETACCT	Single-member warm start	"Parameter Description for NETACCT" on page 198Jim

Table 45. Initialization Statement - NETSERV (nnn)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - NETSERV (nnn)</b>					
nnn	1-999	N/A	NODE, SOCKET	Single-member warm start	"NETSERV(nnn) - Define NJE over TCP/IP server address space" on page 199
RESTART	0-1440	NO	N/A	\$T NETSRV command	200
SOCKET	1-8 characters	None. Must specify.	N/A	\$T NETSRV command	201
START	N/A	NO	N/A	N/A	201
STACK	0-8 characters	blanks (all stacks)	N/A	\$T NETSRV command	201
TRaceio	N/A	NO	N/A	\$T NETSRV command	201

Table 46. Initialization Statement - NJEDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - NJEDEF</b>					
CONNECT	1-1440	YES/10	APPL, LINE, NODE, and SOCKET	\$T NJEDEF command	202
DELAY	10-999	120	N/A	\$T NJEDEF command	202
HDRBUF	N/A	N/A	L(nnnnn).ST(m)	\$T NJEDEF command	202
JRNUM	0-7	1 (See note below)	SRNUM	Hot start	203
JTNUM	0-7	1 (See note below)	STNUM	Hot start	203
LINENUM	0-32767	0	LINE	Hot start	203
MAILMSG	N/A	NO	N/A	\$T NJEDEF command	204
MAXHOP	0-65535	0	N/A	\$T NJEDEF command	204
NODENUM	1-32767	1	NODE	All-member warm start (to increase) Cold start (to decrease)	204
OWNNODE	1-32767	1	N/A	Cold start	204

Table 46. Initialization Statement - NJEDEF (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
PATH	1-8	1	RESTTOL	Hot start	204
RESTMAX	0-79992000	79992000	N/A	\$T NJEDEF command	205
RESTNODE	1-2000	100	N/A	\$T NJEDEF command	205
RESTTOL	0-8000	0	PATH	\$T NJEDEF command	205
SRNUM	0-7	1 (See note below)	JRNUM	Hot start	205
STNUM	0-7	1 (See note below)	JTNUM	Hot start	205
TIMEtol	0-1500 minutes	1440	N/A	\$T NJEDEF command	206

**Note:** See the full description of this parameter in the parameter definition with this initialization statement.

Table 47. Initialization Statement - NODE(xxxxxxxx)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - NODE(xxxxxxxx)</b>					
xxxxxxxx	1-NODENUM on NJEDEF	None. Must specify.	NJEDEF	Single-member warm start (See note 1)	373
jxxxxxxx	1-8 characters	None. Must specify.	N/A	Single-member warm start (See note 2)	"Format Description for NODE(xxxxxxxx)" on page 207
COMPACT	0-99	0	APPL	\$T NODE(xxxxxxxx) command	210
CONNECT	0-1440	NO	LINE, APPL, NJEDEF, and SOCKET	\$T NODE(xxxxxxxx) command	210
Auth	N/A	(Device=Y, Job=Y, Net=N, System=YES)	N/A	\$T NODE(xxxxxxxx) command	209
ENDNODE	N/A	NO	N/A	Hot start (at local node)  \$T NODE(xxxxxxxx) command (for other nodes)	211
HOLD	N/A	NONE	NJEDEF	\$T NODE(xxxxxxxx) command	211

Table 47. Initialization Statement - NODE(xxxxxxxx) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
LINE	1-32767	None	APPL	\$T NODE(xxxxxxxx) command (for inactive node)	211
LOGMODE	N/A	(See note 1)	APPL	\$T NODE(xxxxxxxx) command (for inactive node)	212
LOGON	0-999		LOGON	\$T NODE(xxxxxxxx) command	212
NAME	1-8 characters	Nnnnnn, where xxxxxxxx is subscript	DESTID	\$T NODE(xxxxxxxx) command  (See notes below)	212
Password	1-8 characters	None	N/A	\$T NODE(xxxxxxxx) command  (See note 2)	213
PATHMGR	N/A	YES	CONNECT	\$T NODE(xxxxxxxx) command (for inactive node)	214
PENCRYPT	N/A	NO	N/A	\$T NODE(xxxxxxxx) command	214
PRIVATE	N/A	NO	N/A	\$T NODE(xxxxxxxx) command (for inactive node)	215
RECeive	N/A	BOTH	N/A	\$T NODE(xxxxxxxx) command	215
REST	2-8000	0	APPL	\$T NODE(xxxxxxxx) command	215
SENTREST	N/A	ACCEPT	PATHMGR	\$T NODE(xxxxxxxx) command	216
SUBnet	1-8 characters	None	N/A	\$T NODE(xxxxxxxx) command	216
TRace	N/A	No	N/A	\$T NODE(xxxxxxxx) command	216
TRAnsmit	N/A	BOTH	N/A	\$T NODE(xxxxxxxx) command	216
<b>Note:</b>					
1. See the full description of this parameter in the parameter definition with this initialization statement.					
2. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.					

Table 48. Initialization Statement - OFF(n).JR

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - OFF(n).JR</b>					

Table 48. Initialization Statement - OFF(n).JR (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
n	1-8	None. Must Specify.	OFFLOAD	Single-member warm start	"OFF(n).JR - Offload Job Receiver" on page 217
Class	1-36 single character job classes or 1-8 multi-character job classes	Null	WS	\$T OFF(n).JR command	"Parameter Description for OFF(n).JR" on page 219
CREator	1-8 characters	Null	WS	\$T OFF(n).JR command	"Parameter Description for OFF(n).JR" on page 219
Hold	N/A	Null	N/A	\$T OFF(n).JR command	"Parameter Description for OFF(n).JR" on page 219
JOBname	1-8 characters	Null	N/A	\$T OFF(n).JR command	"Parameter Description for OFF(n).JR" on page 219
MOD	N/A	Null	N/A	\$T OFF(n).JR command	"Parameter Description for OFF(n).JR" on page 219
NOTify	N/A	NO	N/A	\$T OFF(n).JR command	"Parameter Description for OFF(n).JR" on page 219
RANGE (See note below)	1-2147483647	J1-2147483647	N/A	\$T OFF(n).JR command	"Parameter Description for OFF(n).JR" on page 219
Routecde	N/A	Null	N/A	\$T OFF(n).JR command	"Parameter Description for OFF(n).JR" on page 219
START	N/A	YES	\$S OFFLOAD	\$S OFF(n).JR command to start  \$P OFF(n).JR command to stop	"Parameter Description for OFF(n).JR" on page 219
SYSaff	N/A	Null	N/A	\$T OFF(n).JR command	"Parameter Description for OFF(n).JR" on page 219
WS	(See note below)	(CLASS/)	N/A	\$T OFF(n).JR command	"Parameter Description for OFF(n).JR" on page 219
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 49. Initialization Statement - OFF(n).JT

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - OFF(n).JT</b>					

Table 49. Initialization Statement - OFF(n).JT (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
n	1-8	None. Must Specify.	OFFLOAD	Single-member warm start	"OFF(n).JT - Offload Job Transmitter" on page 223
Class	1-36 single character job classes or 1-8 multi-character job classes	Null	WS	\$T OFF(n).JT command	Class
CREator	1-8 characters	Null	WS	\$T OFF(n).JT command	Class
DISP	N/A	DELETE	N/A	\$T OFF(n).JT command	Class
Hold	N/A	Null	N/A	\$T OFF(n).JT command	Class
JOBname	1-8 characters	Null	N/A	\$T OFF(n).JT command	Class
LIMIT	0-4294967295	0-4294967295	N/A	\$T OFF(n).JT command	Class
NOTify	N/A	NO	N/A	\$T OFF(n).JT command	Class
RANGE (See note below)	1-2147483647	J1-2147483647	N/A	\$T OFF(n).JT command	Class
Routecde	N/A	Null	N/A	\$T OFF(n).JT command	Class
START	N/A	YES	\$\$ OFFLOAD	\$\$ OFF(n).JT command to start \$P OFF(n).JT command to stop	Class
SYSaff	1-7 affinities	Null	N/A	\$T OFF(n).JT command	Class
Volume	5-6 characters	Null	N/A	\$T OFF(n).JT command	Class
WS	(See note below.)	(CLASS/)	N/A	\$T OFF(n).JT command	Class
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 50. Initialization Statement - OFF(n).SR

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - OFF(n).SR</b>					
n	1-8	None. Must specify.	OFFLOAD(n)	Single-member warm start	228

Table 50. Initialization Statement - OFF(n).SR (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
Burst	N/A	Null	N/A	\$T OFF(n).SR command	233
CREator	1-8 characters	Null	WS	\$T OFF(n).SR command	233
FCB   C	1-4 characters	Null	N/A	\$T OFF(n).SR command	233
FLash   O	1-4 characters	Null	N/A	\$T OFF(n).SR command	233
Forms	1-8 characters	Null	N/A	\$T OFF(n).SR command	233
HOLD	N/A	Null	N/A	\$T OFF(n).SR command	234
JOBname	1-8 characters	Null	N/A	\$T OFF(n).SR command	234
MOD	N/A	Null	N/A	\$T OFF(n).SR command	234
NOTify	N/A	NO	N/A	\$T OFF(n).SR command	235
OUTDisp	N/A	Any disposition	N/A	\$T OFF(n).SR command	235
PRMode	1-8 characters	Null	N/A	\$T OFF(n).SR command	236
Queue	1-15 classes	null	N/A	\$T OFF(n).SR command	236
RANGE (See note below)	1-2147483647	J1-2147483647	N/A	\$T OFF(n).SR command	236
Routecde	(See note below)	1-4 route codes	Null	\$T OFF(n).SR command	236
START	N/A	YES	N/A	\$S OFF(n).SR command to start  \$P OFF(n).SR command to stop	239
UCS   T	1-4 characters	Null	N/A	\$T OFF(n).SR command	239
Writer	1-8 characters	Null	N/A	\$T OFF(n).SR command	239
WS	(See note below)	(Q,OUTDisp)	N/A	\$T OFF(n).SR command	239

**Note:** See the full description of this parameter in the parameter definition with this initialization statement.



Table 51. Initialization Statement - OFF(n).ST

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - OFF(n).ST</b>					
n	1-8	None. Must specify.	OFFLOAD(n)	Single-member warm start	240
Burst	N/A	Null	N/A	\$T OFF(n).ST command	243
CReator	1-8 characters	Null	WS	\$T OFF(n).ST command	244
DISP	N/A	DELETE	N/A	\$T OFF(n).ST command	244
FCB   C	1-4 characters	Null	N/A	\$T OFF(n).ST command	244
FLash   O	1-4 characters	Null	N/A	\$T OFF(n).ST command	244
Forms	1-8 characters	Null	N/A	\$T OFF(n).ST command	244
HOLD	N/A	Null	N/A	\$T OFF(n).ST command	245
JOBname	1-8 characters	Null	N/A	\$T OFF(n).ST command	245
LIMIT (See note below)	0-4294967295	0-4294967295	N/A	\$T OFF(n).ST command	245
NOTify	N/A	NO	N/A	\$T OFF(n).ST command	245
OUTDisp	N/A	WRITE and KEEP	N/A	\$T OFF(n).ST command	245
PLIM (See note below)	0-4294967295	0-4294967295	N/A	\$T OFF(n).ST command	246
PRMode	1-8 characters	Null	N/A	\$T OFF(n).ST command	246
Queue	1-15 classes	null	N/A	\$T OFF(n).ST command	246
RANGE (See note below)	1-65534	J1-65534	N/A	\$T OFF(n).ST command	246
Routecde	(See note below)	1-4 route codes	Null	\$T OFF(n).ST command	247
START	N/A	YES	N/A	\$S OFF(n).ST command to start  \$P OFF(n).ST command to stop	249
UCS   T	1-4 characters	Null	N/A	\$T OFF(n).ST command	249

Table 51. Initialization Statement - OFF(n).ST (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
Volume (See note below)	5-6 characters	Null	N/A	\$T OFF(n).ST command	249
Writer	1-8 characters	Null	N/A	\$T OFF(n).ST command	249
WS	(See note below)	(Q.OUTDisp)	N/A	\$T OFF(n).ST command	249
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 52. Initialization Statement - OFFLOAD(n)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - OFFLOAD(n)</b>					
n	1-8	None. Must specify.	OFF(n).Jx, OFF(n).Sx	Single-member warm start	"OFFLOAD(n) - Offload Device" on page 251
ARCHIVE	N/A	ONE	N/A	\$T OFFLOAD(n) command	253
DSN (See note below)	1-44 characters	None. Must specify.	N/A	\$T OFFLOAD(n) command	253
LABEL (See note below)	N/A	SL	N/A	\$T OFFLOAD(n) command	253
PROTECT (See note below)	N/A	NO	N/A	\$T OFFLOAD(n) command	254
RETPD (See note below)	1-9999	None	N/A	\$T OFFLOAD(n) command	254
UNIT (See note below)	1-59	1	N/A	\$T OFFLOAD(n) command	254
VALIDATE	N/A	NO	N/A	\$T OFFLOAD(n) command	255
VOLS	1-255	255	N/A	\$T OFFLOAD(n) command	255
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 53. Initialization Statement - OPTsdef

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - OPTsdef</b>					
CKPTOPT	N/A	(See note below)	CKPTDEF	Hot start	256

Table 53. Initialization Statement - OPTsdef (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
COLD_START_MODE	N/A	z11	UNACT	Hot start	256
CONSOLE (See note below)	N/A	NO	CONSOLE start option	Hot start	257
LIST	N/A	(See note below)	LISTOPT	Hot start	257
LISTOPT	N/A	(See note below)	LISTOPT start option	Hot start	257
LOG	N/A	(See note below)	LOGOPT	Hot start	257
LOGOPT	N/A	(See note below)	LOGOPT start option	Hot start	257
RECONFIG	N/A	(See note below)	RECONFIG start option	Hot start	257
REQMSG	N/A	(See note below)	REQ start option	Hot start	257
SPOOL (See note below)	N/A	NOVALIDATE	SPOOL start option	All-member warm start	257
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 54. Initialization Statement - OUTCLASS(v)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - OUTCLASS(v)</b>					
v (See note 2)	A-Z, 0-9	None. Must specify.	SYSOUT	Single-member warm start	258
BLNKTRNC	N/A	YES	N/A	Single-member warm start	259
OUTDisp	N/A	(See notes 1 and 2)	N/A	\$T OUTCLASS(v) command  (See notes below)	260
OUTPUT	N/A	PRINT	N/A	Single-member warm start	260
TRKCELL	N/A	YES	N/A	Single-member warm start	261
<b>Note:</b>					
1. See the full description of this parameter in the parameter definition with this initialization statement.					
2. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.					

Table 55. Initialization Statement - OUTDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - OUTDEF</b>					
COPIES	1-255	255	/*JOBPARM (See note 2.)	\$T OUTDEF command	"Parameter Description for OUTDEF" on page 262
DMNDSET	N/A	NO	USERSET	Single-member warm start	"Parameter Description for OUTDEF" on page 262
JOENUM	10-1000000 (See note 6)	2.5 x (JOBNUM on JOBDEF)	JOBDEF	\$T OUTDEF command  (See note 5)	"Parameter Description for OUTDEF" on page 262
JOEWARN	1-99	80	N/A	\$T OUTDEF command  (See note 5)	"Parameter Description for OUTDEF" on page 262
OUTTIME	N/A	CREATE	N/A	\$T OUTDEF command	"Parameter Description for OUTDEF" on page 262
PRTYHIGH	0-255	255	N/A	\$T OUTDEF command  (See note 5)	"Parameter Description for OUTDEF" on page 262
PRTYLOW	0-255	0	PRTYRATE on JOBDEF	\$T OUTDEF command  (See note 5)	"Parameter Description for OUTDEF" on page 262
PRTYOUT	N/A	NO	PRTY(JCL)* (See note 3)	\$T OUTDEF command	"Parameter Description for OUTDEF" on page 262
PRYORATE	0-1440	0	PRTY(JCL) (See note 3)	\$T OUTDEF command  (See note 5)	"Parameter Description for OUTDEF" on page 262
SAPI_OPT	N/A	NO	N/A	\$T OUTDEF command  (See notes below)	"Parameter Description for OUTDEF" on page 262
SEGLIM	1-99999	100	N/A	\$T OUTDEF command  (See notes below)	"Parameter Description for OUTDEF" on page 262
STDFORM	1-8 characters	STD	N/A	Single-member warm start	"Parameter Description for OUTDEF" on page 262
USERSET	N/A	NO	PRTY(JCL) (See note 3)	Single-member warm start	"Parameter Description for OUTDEF" on page 262

Table 55. Initialization Statement - OUTDEF (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Note:</b>					
1. See the full description of this parameter in the parameter definition with this initialization statement.					
2. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.					
3. This refers to the PRTY parameter on the JCL OUTPUT statement.					
4. If you modify this parameter value and then restart JES2 with any type of warm or hot start, the parameter value in effect before termination will be used.					
5. This parameter cannot be modified through a hot start, quick start or single-member warm start.					
6. This parameter can be increased by using a \$T OUTDEF command after an \$ACTIVATE command is issued in the MAS.					

Table 56. Initialization Statement - OUTPRTY(n)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - OUTPRTY(n)</b>					
n	1-9	None. Must specify.	N/A	Single-member warm start	265
PAGE	1-16777215	(See note below)	TIME on JOBDEF	\$T OUTPRTY(n) command	266
PRIORITY	0-255	(See note below)	PAGE, RECORD	\$T OUTPRTY(n) command	266
RECORD	1-16777215	(See note below)	PRIORITY	\$T OUTPRTY(n) command	267
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 57. Initialization Statement - PCEDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - PCEDEF</b>					
CNVTNUM	1-25	10	N/A	Hot start	268
OUTNUM	1-25	10	N/A	Hot start	268
PSONUM	1-10	2	N/A	Hot start	268
PURGENUM	1-25	10	N/A	Hot start	268
SPINNUM	3-10	3	N/A	Hot start	268
STACNUM	1-10	2	TSO/E STATUS and CANCEL	Hot start	268

Table 58. Initialization Statement - PRINTDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - PRINTDEF</b>					
CCWNUM	1-233	BUFSIZE / 80	SPOOLDEF	Single-member warm start	269
DBLBUFR	N/A	YES	N/A	Single-member warm start	270
FCB	1-4 characters	6	PRT(nnnn)	Single-member warm start	270
LINECT	0-254	61	/*JOBPARM, /*OUTPUT, JCL JOB, JCL OUTPUT	\$T PRINTDEF command	270
NEWPAGE	N/A	ALL	PRT(nnnn) R(nnnn).PR(m)	\$T PRINTDEF command	271
NIFCB	1-4 characters	****	PRT(nnnn)	Single-member warm start	271
NIFLASH	1-4 characters	****	PRT(nnnn)	Single-member warm start	271
NIUCS	1-8 characters	GF10	PRT(nnnn)	Single-member warm start	271
RDBLBUFR	N/A	NO	R(nnnn).PR(m)	Single-member warm start	272
SEPPAGE	N/A	(See note below)	N/A	\$T PRINTDEF command	272
TRANS	N/A	YES	N/A	Single-member warm start	272
UCS	1-4 characters	0	N/A	Single-member warm start	273
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 59. Initialization Statement - PROCLib

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - PROCLib</b>					
xxxxxxx	1-8	(See note below)	N/A	Operator command	275
DD(nnn)	N/A	(See note below)	N/A	Operator command	276
DSName	1-44,1-8	(See note below)	N/A	Operator command	276
UNIT	N/A	(See note below)	N/A	Operator command	276
VOLser	1-6 characters	(See note below)	N/A	Operator command	276

Table 59. Initialization Statement - PROClib (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
UNCONDitional   CONDitional	N/A	(See note below)	N/A	Operator command	277
NAME	N/A	(See note below)	N/A	Operator command	277
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 60. Initialization Statement - PRT(nnnn)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - PRT(nnnn)</b>					
nnnn (See note 1)	1-32767	None	PRINTDEF	Single-member warm start (See note 3)	"PRT(nnnnn) - Local Printer" on page 277
BURST	N/A	NO	SYSOUT	\$T PRTnnnnn command (See note 3)	295
CKPTLINE	0-32767	0	/*JOBPARM	\$T PRTnnnnn command	281
CKPTPAGE	0-32767	0	CKPTLINE	\$T PRTnnnnn command	282
Class   Queue	1-15 classes	AJ	SYSOUT	\$T PRTnnnnn command	282
CRreator	1-8 characters	Null	N/A	\$T PRTnnnnn command	282
DEVFCB	1-4 characters	None	N/A	\$T PRTnnnnn command	282
FCB   C	1-4 characters	FCB   NIFCB on PRINTDEF	PRINTDEF, DEVFCB	\$T PRTnnnnn command (See note 3)	283
FLASH   O	1-4 characters	NIFLASH on PRINTDEF	PRINTDEF	\$T PRTnnnnn command (See note 3)	295
Forms	1-8 characters	STDFORM on OUTDEF	OUTDEF	\$T PRTnnnnn command (See note 3)	283
JOBname	1-8 characters	Null	N/A	\$T PRTnnnnn command	284
LIMit	0-4294967295	0-4294967295	N/A	\$T PRTnnnnn command	284

Table 60. Initialization Statement - PRT(nnnn) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
MARK	N/A	NO	MODE	\$T PRTnnnnn command  (See note 3)	296
MODE	N/A	(See note 1)	FSS, UNIT	\$T PRTnnnnn command	284
NEWPAGE	N/A	DEFAULT	PRINTDEF	\$T PRTnnnnn command	284
Pause	N/A	NO	N/A	\$T PRTnnnnn command	284
PRMode	1-8 characters	LINE	PRTY(JCL)  (See note 2)	\$T PRTnnnnn command	285
Range (See notes below)	1-65534	J1-65534	N/A	\$T PRTnnnnn command	285
Routecde	1-4 route codes	LOCAL	/*ROUTE, /*OUTPUT, JCL OUTPUT	\$T PRTnnnnn command	285
Sep	N/A	YES	PRINTDEF	\$T PRTnnnnn command  (See note 3)	287
SEPCHARS	N/A	DEFAULT	PRINTDEF	\$T PRTnnnnn command	296
SEPDS	N/A	NO	N/A	\$T PRTnnnnn command  (See note 3)	287
SETUP	N/A	HALT	N/A	\$T PRTnnnnn command  (See note 3)	287
START	N/A	YES	FSS, UNIT	\$S PRT(nnnnn) command  -- or -- \$P PRT(nnnnn) command	287
TRACE	N/A	NO	TRACEDEF	\$T PRTnnnnn command  (See note 3)	288
TRANS	N/A	DEFAULT	PRINTDEF	\$T PRTnnnnn command	288
TRKCELL	N/A	NO	PRINTDEF	\$T PRTnnnnn command  (See note 3)	288



Table 60. Initialization Statement - PRT(nnnn) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
UCS   T	1-4 characters	UCS   NIUCS on PRINTDEF	PRINTDEF	\$T PRTnnnnn command (See note 3)	289
UCSVerify	N/A	NO	N/A	\$T PRTnnnnn command	289
UNIT	device addresses	Null	N/A	\$T PRTnnnnn command (See note 3)	289
Volume	5-6 characters	Null	N/A	\$T PRTnnnnn command	290
Writer	1-8 characters	None	N/A	\$T PRTnnnnn command	290
WS	N/A (See note 1)	(W,R,Q,PRM, LIM/F,T,C)	N/A	\$T PRTnnnnn command	290
<b>Note:</b>					
1. See the full description of this parameter in the parameter definition with this initialization statement.					
2. This refers to the PRTY parameter on the JCL OUTPUT statement.					
3. For FSS-controlled printers only, if you modify this parameter value and then reconnect the printer on a hot start, the value in effect before termination will be used.					

Table 61. Initialization Statement - PRT(nnnn) (FSS-only parameters)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - PRT(nnnn) (FSS-only parameters)</b>					
nnnnn	1-32767	None (See note 2)	PRINTDEF	Single-member warm start	"PRT(nnnnn) - Local Printer" on page 277
CKPTMODE	N/A	SEC	CKPTPAGE, CKPTSEC	\$T PRTnnnnn command	293
CKPTSEC	0-32767	None	TIMECKPT	\$T PRTnnnnn command	293
COPYMARK	N/A	DATASET	MODE	\$T PRTnnnnn command (See note 2)	293
FSS	1-8 characters	None	MODE	\$T PRTnnnnn command	293
MODE	N/A	(See note 2)	FSS	\$T PRTnnnnn command	294
NPRO	0-3600	300	FSS (See note below.)	\$T PRTnnnnn command	294

Table 61. Initialization Statement - PRT(nnnn) (FSS-only parameters) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
PLIM	0-4294967295	0-4294967295	N/A	\$T PRTnnnnn command	294
PRESELECT	N/A	YES	N/A	\$T PRTnnnnn command (See note 2)	295
<b>Note:</b>					
1. See the full description of this parameter in the parameter definition with this initialization statement.					
2. For FSS-controlled printers only, if you modify this parameter value and then reconnect the printer on a hot start, the value in effect before termination will be used.					

Table 62. Initialization Statement - PUN(nn)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - PUN(nn)</b>					
nn	1-99	N/A (See note 3.)	N/A	Single-member warm start	296
Class   Queue	1-15 classes	BK	N/A	\$T PUNnn command	299
CKPTLINE	0-32767	100	CKPTPAGE	\$T PUNnn command	299
CKPTPAGE	1-32767	1	CKPTLINE	\$T PUNnn command	299
CReator	1-8 characters	Null	N/A	\$T PUNnn command	300
Forms	1-8 characters	STDFORM on OUTDEF	OUTDEF	\$T PUNnn command	300
JOBname	1-8 characters	Null	N/A	\$T PUNnn command	300
LIMit	0-4294967295	0-4294967295	N/A	\$T PUNnn command	300
Pause	N/A	NO	N/A	\$T PUNnn command	300
PRMode	1-8 characters	LINE	PRTY(JCL) (See note 2)	\$T PUNnn command	300
RANGE	1-65534	J1-65534	N/A	\$T PUNnn command	301
Routeode	1-4 route codes	LOCAL	/*OUTPUT, /*ROUTE, JCL OUTPUT	\$T PUNnn command	301
Sep	N/A	YES	N/A	\$T PUNnn command	302
SETUP	N/A	HALT	N/A	\$T PUNnn command	303

Table 62. Initialization Statement - PUN(nn) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
SEPDS	N/A	NO	N/A	\$T PUNnn command	302
START	N/A	NO	UNIT	\$S PUNnnnn command  -- or -- \$P PUNnnnn command	303
TRACE	N/A	YES	TRACEDEF	\$T PUNnn command	303
UNIT	device addresses	Null	N/A	\$T PUNnn command	303
Volume	5-6 characters	None	N/A	\$T PUNnn command	304
Writer	1-8 characters	None	N/A	\$T PUNnn command	304
WS	N/A	(W,R,Q,PRM, LIM/F)	N/A	\$T PUNnn command	304
<b>Note:</b>					
1. See the full description of this parameter in the parameter definition with this initialization statement.					
2. This refers to the PRTY parameter on the JCL OUTPUT statement.					

Table 63. Initialization Statement - PUNCHDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - PUNCHDEF</b>					
CCWNUM	1-235	BUFSIZE on SPOOLDEF / 80	SPOOLDEF	Single-member warm start	306
DBLBUFR	N/A	NO	N/A	Single-member warm start	307
RDBLBUFR	N/A	NO	R(nnnnn).PU(m)	Single-member warm start	307

Table 64. Initialization Statement - R(nnnn).PR(m)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - R(nnnn).PR(m)</b>					
nnnnn	1-RMT(nnnnn)	None	RMT(nnnnn)	Single-member warm start	311
m	1-7	None	RMT(nnnnn)	Single-member warm start	311
ASIS	1-7	NO	RMT(nnnnn)	\$T Rnnnnn.PRm command	311

Table 64. Initialization Statement - R(nnnn).PR(m) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
CCTL	N/A	YES	SELECT	\$T Rnnnnn.PRm command	311
CKPTLINE	0-32767	0	/*JOBPARM, /*OUTPUT, JCL OUTPUT	\$T Rnnnnn.PRm command	311
CKPTPAGE	1-32767	1	CKPTLINE	\$T Rnnnnn.PRm command	311
Class   Queue	1-15 classes	AJ	N/A	\$T Rnnnnn.PRm command	312
CMPCT	N/A	Value on RMT(nnnnn)	RMT(nnnnn)	\$T Rnnnnn.PRm command	312
COMPACT	0-99	0	RMT(nnnnn)	\$T Rnnnnn.PRm command	312
COMPRESS	N/A	Value on RMT(nnnnn)	RMT(nnnnn)	\$T Rnnnnn.PRm command	312
CREATOR	1-8 characters	Null	N/A	\$T Rnnnnn.PRm command	313
DEVFCB	1-4 characters	None	N/A	\$T Rnnnnn.PRm command	313
EJECT	N/A	YES	N/A	\$T Rnnnnn.PRm command	313
FCB   C	1-4 characters	FCB   NIFCB on PRINTDEF	PRINTDEF	\$T Rnnnnn.PRm command	313
FCBLOAD	N/A	NO	RMT(nnnnn)	\$T Rnnnnn.PRm command	313
Forms	1-8 characters	STDFORM on OUTDEF	OUTDEF	\$T Rnnnnn.PRm command	314
JOBNAME	1-8 characters	Null	N/A	\$T Rnnnnn.PRm command	314
LIMIT	0-4294967295	0-4294967295	N/A	\$T Rnnnnn.PRm command	314
LRECL	1-255	120	PRWIDTH	\$T Rnnnnn.PRm command	314
NEWPAGE	N/A	DEFAULT	PRINTDEF	\$T Rnnnnn.PRm command	314
PRMODE	1-8 characters	LINE (See note 1)	PRTY(JCL) (See note 2)	\$T Rnnnnn.PRm command	315
PRWIDTH	1-255	120	LRECL	\$T Rnnnnn.PRm command	316
RANGE	1-65534	J1-65534	N/A	\$T Rnnnnn.PRm command	316
RouteCode	1-4 route codes	Rnnnn	RMT(nnnnn)	\$T Rnnnnn.PRm command	316
SELECT	N/A	PRINTnn	LRECL, CCTL	\$T Rnnnnn.PRm command	317

Table 64. Initialization Statement - R(nnnn).PR(m) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
Sep	N/A	YES	PRINTDEF	\$T Rnnnnn.PRm command	317
SEPDS	N/A	NO	N/A	\$T Rnnnnn.PRm command	318
SETUP	N/A	HALT	N/A	\$T Rnnnnn.PRm command	318
START	N/A	NO	N/A	\$S Rnnnnn.PRTm command  -- or -- \$P Rnnnnn.PRTm command	318
SUSPEND	N/A	YES	N/A	\$T Rnnnnn.PRm command	318
TRACE	N/A	YES	TRACEDEF	\$T Rnnnnn.PRm command	319
TRANS	N/A	DEFAULT	PRINTDEF	\$T Rnnnnn.PRm command (inactive only)	319
UCS   T	1-4 characters	UCS on PRINTDEF	PRINTDEF	\$T Rnnnnn.PRm command	319
Volume	5-6 characters	Null	N/A	\$T Rnnnnn.PRm command	319
Writer	1-8 characters	None	N/A	\$T Rnnnnn.PRm command	320
WS	N/A	(W,R,Q,PRM, LIM/F)	N/A	\$T Rnnnnn.PRm command	320
<b>Note:</b>					
1. See the full description of this parameter in the parameter definition with this initialization statement.					
2. This refers to the PRTY parameter on the JCL OUTPUT statement.					

Table 65. Initialization Statement - R(nnnn).PU(m)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - R(nnnn).PU(m)</b>					
nnnnn	1-RMT(nnnnn)	None	RMT(nnnnn)	Single-member warm start	322
m	1-7	None	RMT(nnnnn)	Single-member warm start	325
CCTL	N/A	YES	SELECT	\$T Rnnnnn.PUm command	325
CKPTLINE	1-32767	100	N/A	\$T Rnnnnn.PUm command	326
CKPTPAGE	1-32767	1	N/A	\$T Rnnnnn.PUm command	326

Table 65. Initialization Statement - R(nnnn).PU(m) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
Class   Queue	1-15 classes	BK	N/A	\$T Rnnnnn.PUm command	326
CMPCT	N/A	Value on RMT(nnnnn)	RMT(nnnnn)	\$T Rnnnnn.PUm command	326
COMPACT	0-99	0	RMT(nnnnn)	\$T Rnnnnn.PUm command	326
COMPRESS	N/A	Value on RMT(nnnnn)	RMT(nnnnn)	\$T Rnnnnn.PUm command	327
CREATOR	1-8 characters	Null	N/A	\$T Rnnnnn.PUm command	327
FLUSH	YES   NO	YES	YES	\$T Rnnnnn.PUm command	327
Forms	1-8 characters	STDFORM on OUTDEF	OUTDEF	\$T Rnnnnn.PUm command	327
JOBname	1-8 characters	Null	N/A	\$T Rnnnnn.PUm command	327
LIMit	1-4294967295	1-4294967295	N/A	\$T Rnnnnn.PUm command	327
LRECL	1-255	80	N/A	\$T Rnnnnn.PUm command	328
PRMode	1-8 characters	LINE (See notes below)	PRTY(JCL)* (See note 2)	\$T Rnnnnn.PUm command	328
RANGE	1-65534	J1-65534	N/A	\$T Rnnnnn.PUm command	328
Routecde	1-4 route codes	Rnnnn	RMT(nnnnn)	\$T Rnnnnn.PUm command	329
SELECT	N/A	PUNCHnn	CCTL, LRECL	\$T Rnnnnn.PUm command	330
Sep	N/A	YES	N/A	\$T Rnnnnn.PUm command	330
SEPDS	N/A	NO	N/A	\$T Rnnnnn.PUm command	331
SETUP	N/A	HALT	N/A	\$T Rnnnnn.PUm command	331
START	N/A	NO	N/A	\$S Rnnnnn.PUm command  -- or -- \$P Rnnnnn.PUm command	331
SUSPEND	N/A	YES	N/A	\$T Rnnnnn.PUm command	331
TRACE	N/A	YES	TRACEDEF	\$T Rnnnnn.PUm command	331

Table 65. Initialization Statement - R(nnnn).PU(m) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
Volume	5-6 characters	Null	N/A	\$T Rnnnnn.PUm command	332
Writer	1-8 characters	None	N/A	\$T Rnnnnn.PUm command	332
WS	N/A	(W,R,Q,PRM, LIM/F)	N/A	\$T Rnnnnn.PUm command	332
<b>Note:</b>					
1. See the full description of this parameter in the parameter definition with this initialization statement.					
2. This refers to the PRTY parameter on the JCL OUTPUT statement.					

Table 66. Initialization Statement - R(nnnn).RD(m)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - R(nnnn).RD(m)</b>					
nnnnn	1-RMT(nnnnn)	None	RMT(nnnnn)	Single-member warm start	334
m	1-7	None	N/A	Single-member warm start	334
Class	1-15 classes	A	N/A	\$T Rnnnnn.RDm command	335
HOLD	N/A	NO	N/A	\$T Rnnnnn.RDm command	335
MSGCLASS	A-Z, 0-9	A	JOB	\$T Rnnnnn.RDm command	335
PRIINC	0-15	0	PRIOLIM	Command	336
PRIOLIM	0-15	15	PRIINC	\$T Rnnnnn.RDm command	336
PRTDEST	N/A	Route code on RMT	/*ROUTE	\$T Rnnnnn.RDm command	336
PUNDEST	N/A	Route code on RMT	/*ROUTE	\$T Rnnnnn.RDm command	336
START	N/A	YES	N/A	\$S Rnnnnn.RDm command  -- or -- \$P Rnnnnn.RDm command	336
TRACE	N/A	YES	TRACEDEF	\$T Rnnnnn.RDm command	336
XEQDEST	N/A	LOCAL	N/A	\$T Rnnnnn.RDm command	337

Table 67. Initialization Statement - RDRnn

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - RDRnn</b>					
nn	1-99	None. Must specify.	N/A	Single-member warm start	"RDR(nn) - Local Card Reader" on page 337
Auth	N/A	NO/NO/NO	N/A	\$T RDRnn command	"RDR(nn) - Local Card Reader" on page 337
Class	1-8 character execution class name	A	JOB	\$T RDRnn command	"RDR(nn) - Local Card Reader" on page 337
HOLD	N/A	NO	N/A	\$T RDRnn command	"RDR(nn) - Local Card Reader" on page 337
MSGCLASS	A-Z, 0-9	A	JOB	\$T RDRnn command	"RDR(nn) - Local Card Reader" on page 337
PRIINC	0-15	0	PRIOLIM	\$T RDRnn command	"RDR(nn) - Local Card Reader" on page 337
PRIOLIM	0-15	15	PRIINC	\$T RDRnn command	"RDR(nn) - Local Card Reader" on page 337
PRTDEST	N/A	LOCAL	/*ROUTE	\$T RDRnn command	"RDR(nn) - Local Card Reader" on page 337
PUNDEST	N/A	LOCAL	/*ROUTE	\$T RDRnn command	"RDR(nn) - Local Card Reader" on page 337
START	N/A	NO	\$S RDR	\$S RDRnn command  -- or -- \$P RDRnn command	"RDR(nn) - Local Card Reader" on page 337
TRACE	N/A	YES	TRACEDEF	\$T RDRnn command	"RDR(nn) - Local Card Reader" on page 337
UNIT	device addresses	Null	N/A	\$T RDRnn command	"RDR(nn) - Local Card Reader" on page 337
XEQDEST	N/A	LOCAL	N/A	\$T RDRnn command	"RDR(nn) - Local Card Reader" on page 337

Table 68. Initialization Statement - RECVOpts(type)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - RECVOpts(type)</b>					
type	(See note below.)	ALL	N/A	Single-member warm start	"Parameter Description for RECVOPTS" on page 342
COUNT	1-99	(See note below)	INTERVAL	\$T RECVOpts command	"Parameter Description for RECVOPTS" on page 342



Table 68. Initialization Statement - RECVopts(type) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
INTERVAL	1-9999	(See note below)	COUNT	\$T RECVopts command	"Parameter Description for RECVOPTS" on page 342
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 69. Initialization Statement - REDIRect

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - REDIRect</b>					
vvvvvvvv	(See note below)	N/A	N/A	Single-member warm start	"REDIRect(vvvvvvvv) - Direct Output of Display Commands" on page 344
command	N/A	N/A	N/A	\$T REDIRect command	"REDIRect(vvvvvvvv) - Direct Output of Display Commands" on page 344
consolid	N/A	entry console	N/A	\$T REDIRect command	"REDIRect(vvvvvvvv) - Direct Output of Display Commands" on page 344
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 70. Initialization Statement - REP

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - REP</b>					
csect   *	1-8 characters	None	NAME, VER	N/A	"Parameter Description for REP" on page 348
address   *	1-8 digits	None	NAME, VER	N/A	"Parameter Description for REP" on page 348
data	up to 71 bytes	None, must specify.	NAME, VER	N/A	"Parameter Description for REP" on page 348

Table 71. Initialization Statement - REQJOBID

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - REQJOBID</b>					
JESLOG	N/A	(See note below)	N/A	Operator command	"Parameter Description for REQJOBID" on page 354
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 72. Initialization Statement - RMT(nnnnn) - BSC

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - RMT(nnnnn) - BSC</b>					
nnnnn	1-32767	None. Must specify	R(nnnnn).PR(m) R(nnnnn).PU(m) R(nnnnn).RD(m)	\$ADD RMT(nnnnn) command	"RMT(nnnnn) - SNA RJE Workstation" on page 363
BLOCK	N/A	YES	N/A	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
BUFEXPAN	N/A	0	PRWIDTH on R(nnnnn).PR(m)	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
BUFSIZE	127-3960	(See note below)	/*SIGNON	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
COMPRESS	N/A	NO	HTABS, LINE(nnnnn)	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
CONDEST	1-32767 (See note below)	nnnnn	N/A	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
CONS	NO	NO	N/A	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
DEVTYPE	(See note below)	2770	N/A	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
Discintv	0-8160	0	N/A	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
HTABS	N/A	NO	COMPRESS	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
LINE	0-32767	0 (non-dedicated)	LINE(nnnnn)	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
LOCAL190	N/A	ACTION	N/A	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
MFORM	N/A	T	N/A	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
MRF2780	N/A	NO	N/A	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
MSGPRT	N/A	YES	N/A	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358

Table 72. Initialization Statement - RMT(nnnnn) - BSC (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
MULTILV	N/A	NO	N/A	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
NUMPRT	0-7	1	R(nnnnn).PR(m)	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
NUMPUN	0-7	0	R(nnnnn).PU(m)	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
NUMRDR	0-7	1	R(nnnnn).RD(m)	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
Password	1-8 characters	None	N/A	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
RECFM	N/A	VARIABLE	N/A	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
RMT150	N/A	NO	N/A	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
Routecde	1-32767	nnnn	N/A	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
SHARABLE	N/A	DEFAULT (See note below)	LINE=	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
TRANSPAR	N/A	NO	LINE(nnnnn)	\$T RMT(nnnnn) command	"Parameter Description for RMT(nnnnn) (BSC)" on page 358
WAITIME	0-30	1	N/A	\$T RMT(nnnnn) command	363
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 73. Initialization Statement - RMT(nnnnn) - SNA

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - RMT(nnnnn) - SNA</b>					
nnnnn	1-32767	None. Must specify	R(nnnnn).PR(m) R(nnnnn).PU(m) R(nnnnn).RD(m)	\$ADD RMT(nnnnn) command	"RMT(nnnnn) - SNA RJE Workstation" on page 363
Autolog	N/A	NO	N/A	\$T RMT(nnnnn) command	366

Table 73. Initialization Statement - RMT(nnnnn) - SNA (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
BUFSIZE	256-3840	256	/*SIGNON	\$T RMT(nnnnn) command	366
COMPACT	N/A	NO	N/A	\$T RMT(nnnnn) command	366
COMPRESS	N/A	NO	HTABS, LINE(nnnnn)	\$T RMT(nnnnn) command	366
CONDEST	1-32767 (See note below)	nnnnn	N/A	\$T RMT(nnnnn) command	367
CONS	NO	NO	N/A	\$T RMT(nnnnn) command	367
DEVTYPE	(See note below)	N/A	N/A	\$T RMT(nnnnn) command	367
Discintv	0-8160	0	N/A	\$T RMT(nnnnn) command	367
LINE	0-32767	0 (non- dedicated)	LINE(nnnnn)	\$T RMT(nnnnn) command	367
LOCAL190	N/A	ACTION	N/A	\$T RMT(nnnnn) command	367
LUNAME	1-8 characters	None	N/A	\$T RMT(nnnnn) command	367
MFORM	N/A	T	N/A	\$T RMT(nnnnn) command	367
MSGPRT	N/A	YES	N/A	\$T RMT(nnnnn) command	367
NUMPRT	0-7	1	R(nnnnn).PR(m)	\$T RMT(nnnnn) command	367
NUMPUN	0-7	0	R(nnnnn).PU(m)	\$T RMT(nnnnn) command	367
NUMRDR	0-7	1	R(nnnnn).RD(m)	\$T RMT(nnnnn) command	367
Password	1-8 characters	None	N/A	\$T RMT(nnnnn) command	367

Table 73. Initialization Statement - RMT(nnnnn) - SNA (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
RMT150	N/A	NO	N/A	\$T RMT(nnnnn) command	367
Routecde	1-32767	nnnnn	N/A	\$T RMT(nnnnn) command	367
START	N/A	NO	LUNAME	\$S RMTnnnnn command  -- or -- \$P RMTnnnnn command	367
SETUP	N/A	MSG	N/A	\$T RMT(nnnnn) command	367
WAITIME	0-30	1	N/A	\$T RMT(nnnnn) command	367
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 74. Initialization Statement - SMFDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - SMFDEF</b>					
BUFNUM	0-1000	5	PRT, OFFLOAD(n), PCEDEF	Single-member warm start	"Parameter Description for SMFDEF" on page 370
BUFWARN	0-100	80	N/A	\$T SMFDEF command	"Parameter Description for SMFDEF" on page 370

Table 75. Initialization Statement - SOCKET(xxxxxxxx)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - SOCKET(xxxxxxxx)</b>					
CONNECT	0-1440	DEFAULT/0	NJEDEF, NODE	\$T SOCKET command	372
IPADDR	1-255 characters	*LOCAL	N/A	\$T SOCKET command	372
LINE	0-65535	0	NJEDEF	\$T SOCKET command	373
NODE	1-8 characters	0	N/A	\$T SOCKET command	373
NETSRV	1-999	0	N/A	\$T SOCKET command	373

Table 75. Initialization Statement - SOCKET(xxxxxxxx) (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
PORT	0-32767	175 or 2252	SECURE	\$T SOCKET command	373
SECURE	N/A	NO	N/A	\$T SOCKET command	373

Table 76. Initialization Statement - SPOOL

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - SPOOL</b>					
<i>volser</i>	N/A	None. Must specify.	\$T SPOOLDEF	Single-member warm start	"Parameter description for SPOOL" on page 374
Sysaff	ANY, memname, ()	None.	N/A	Cold start	"Parameter description for SPOOL" on page 374
DSNAME	1-44 characters	None.	N/A	Cold start	"Parameter description for SPOOL" on page 374

Table 77. Initialization Statement - SPOOLDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - SPOOLDEF</b>					
BUFSIZE	1944-3992	3992	N/A	Cold start	375
DSNAME	1-44 characters	SYS1. HASPACE	N/A	Cold start	375
FENCE	N/A	NO	N/A	\$T SPOOLDEF command (not on a warm start)	376
LARGEDS	N/A	FAIL	N/A	\$T SPOOLDEF command (not on a warm start)	376
SPOOLNUM	1-253	32	N/A	Cold start (See note 5)	376
SPOOLNUM	\$T SPOOLDEF command  (See notes 1 and 3)	376			
TGSPACE (MAX=)	1-16581184	16288	TGSPACE= (MAX=)	\$T SPOOLDEF command	377
TGSIZE	1-255	30	N/A	\$T SPOOLDEF command	377

Table 77. Initialization Statement - SPOOLDEF (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
TGSPACE (WARN=)	0-100	80	N/A	\$T SPOOLDEF command  (See note 4)	378
TRKCELL	1-120	3	OUTCLASS(v)	Cold start	379
Volume	4-5 characters	SPOOL	N/A	Cold start  (See note 2)	379
<b>Note:</b>					
<ol style="list-style-type: none"> <li>1. See the full description of this parameter in the parameter definition with this initialization statement.</li> <li>2. This parameter value can only be set on a cold start.</li> <li>3. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.</li> <li>4. This parameter cannot be modified through a hot start, quick start or single member warm start.</li> <li>5. This parameter can be increased with a \$T SPOOLDEF command after an \$ACTIVATE command has been issued in the MAS.</li> </ol>					

Table 78. Initialization Statement - SSI(nnn)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - SSI(nnn)</b>					
nnn (See note 1)	1-255	None.  Must specify.	N/A	\$T SSI(nnn) command	380
TRACE (See note 1)	N/A	NO	N/A	\$T SSI(nnn) command  (See note 2)	380
<b>Note:</b>					
<ol style="list-style-type: none"> <li>1. See the full description of this parameter in the parameter definition with this initialization statement.</li> <li>2. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.</li> </ol>					

Table 79. Initialization Statement - SUBTDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - SUBTDEF</b>					
GSUBNUM	1-50	10	N/A	Hot start	381

Table 80. Initialization Statement - TPDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - TPDEF</b>					

Table 80. Initialization Statement - TPDEF (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
AUTOINTV	10-600	32	N/A	\$T TPDEF command	382
BSCBUF	(See note below)	(See note below)	BSCBUF	\$T TPDEF command (to increase LIMIT)  Hot start (to decrease LIMIT for WARN)	382
SBABUF	(See note below)	(See note below)	SNABUF	\$T TPDEF command (to increase LIMIT)  Hot start (to decrease LIMIT) (for WARN)	383
MBUFSIZE	128-3960	400	RMT(nnnnn)	Hot start	384
RMTMSG	1-255	100	BUFNUM on CONDEF	\$T TPDEF command	384
RMTNUM	0-32767	(See note below)	RMT(nnnnn)	Hot start	385
SESSIONS= (LIMIT=)	1-32767	(See note below)	LINE(nnnnn)	Hot start	385
SESSIONS= (WARN=)	0-100	80	LINE(nnnnn)	Hot start	385
<b>Note:</b> See the full description of this parameter in the parameter definition with this initialization statement.					

Table 81. Initialization Statement - TRACE(nnn)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - TRACE(nnn)</b>					
nnn	1-255	None.  Must specify.	N/A	Single-member warm start	386
START	N/A	NO	TRACEDEF	\$T TRACE command	387

Table 82. Initialization Statement - TRACEDEF

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - TRACEDEF</b>					



Table 82. Initialization Statement - TRACEDEF (continued)

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
ACTIVE	N/A	NO	TRACE(n)	\$T TRACEDEF command  (See notes 1 and 2)	388
LOG	(See notes below)	(CLASS=A, SIZE=500, START=NO)	N/A	\$T TRACEDEF command  (See notes 1 and 2)	388
PAGES	1-1250	2  (See notes below)	N/A	Single-member warm start  (See notes 1 and 2)	389
TABLES	0-2500	3	PAGES	\$T TRACEDEF command  (See notes 1 and 2)	389
TABWARN	0-100	80	TABLES	\$T TRACEDEF command  (See notes 1 and 2)	389
<b>Note:</b>					
1. See the full description of this parameter in the parameter definition with this initialization statement.					
2. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.					

Table 83. Initialization Statement - VER

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - VER</b>					
csect   *	1-8 characters	None	REP, NAME	N/A	390
address   *	1-8 digits	None	REP, NAME	N/A	393
data	71 characters	None	REP, NAME	N/A	393

Table 84. Initialization Statement - ZAPJOB

Parameter	Range	Default	Related Parameter or Statement	Minimum Action to Modify	Location
<b>Initialization Statement - ZAPJOB</b>					
JOBNAME	1-8 characters	None	N/A	N/A	396
JOBID	1-8 characters	None	N/A	N/A	396
JOBKEY	1-8 characters	None	N/A	N/A	396
JQEINDEX	1-4 characters	None	N/A	N/A	396
JQEOFF	1-6 characters	None	N/A	N/A	396



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## Chapter 3. JES2 Initialization Statement Descriptions

This section contains the descriptions of all JES2 initialization statements, including a syntax diagram, and details about the parameters on each initialization statement.

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### APPL(jxxxxxxx) - Application Characteristics Specification

The APPL initialization statement specifies the characteristics of the JES2 applications known to VTAM® at a given JES2 node. In the case of a multi-access spool node, each member of the JES2 node which is connected to the same SNA network (through VTAM by an SDLC link) must be uniquely defined as an application to VTAM despite the fact that a shared-spool configuration is considered a single node by JES2. For a more complete discussion of application definition, see *z/OS JES2 Initialization and Tuning Guide*.

The subscript (jxxxxxxx) specifies a 1- to 8-character application name by which JES2-NJE is known to VTAM at the indicated NJE node. Symbolic application names must be unique and must be known at all JES2 nodes participating in the same SNA network. For APPL initialization statements defining a JES2 application at the local node (OWNNODE parameter on the NJEDEF statement), the subscript specification (jxxxxxxx) defining the local JES2 must match the APPLID specified on the LOGON(n) initialization statement. This relationship is checked to ensure that the information supplied to VTAM is consistent with information supplied to JES2.

When it has been (initially) defined, the subscript can be a specific application name (for example, MYNODE1) or a more generic form such as MYNODE\* or \*.

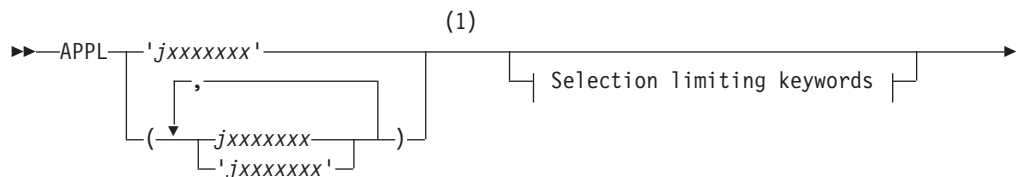
#### Note:

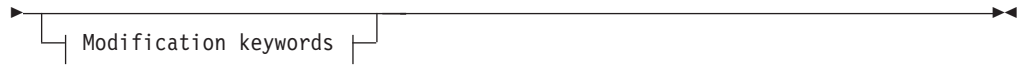
1. All parameters can be modified by operator commands. To modify both LINE= and LOGMODE=, the application must be inactive.
2. Starting a node (using the \$S N command) that does not have an APPL defined causes an APPL to be dynamically added.

### Adding JES2 as a VTAM Application

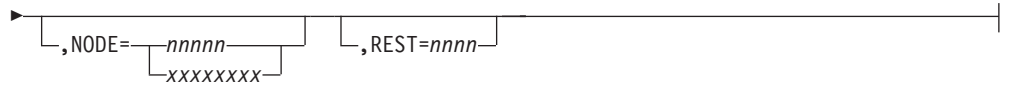
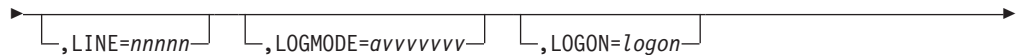
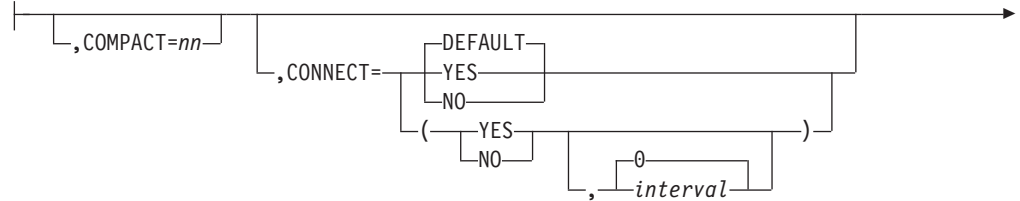
This statement and all its parameters can be added after initialization with the \$ADD APPL operator command.

### Format Description for APPL(jxxxxxxx)

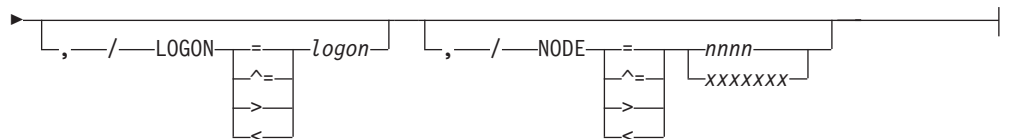
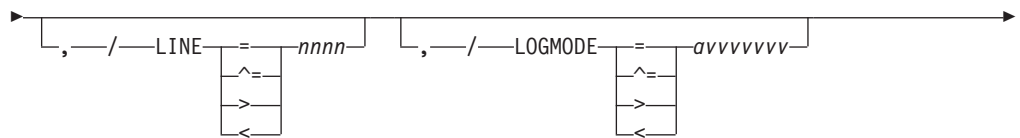
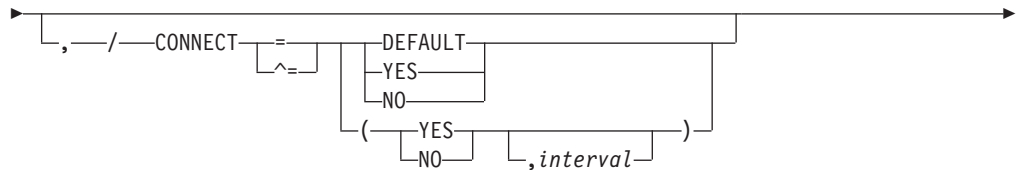




**Modification keywords:**



**Selection limiting keywords:**



**Notes:**

- 1 Omit the comma between initialization statement and first keyword.

**Parameter Description for APPL(jxxxxxx)**

**COMPACT=nn**

Specifies the compaction table number (0-99) to be used for outbound compaction in communicating with this application at the specified node. Zero denotes no compaction.

If you do not specify this parameter, it defaults to the value for COMPACT specified on the NODE(xxxxxxx) initialization statement, which defines the node indicated by the NODE=nnnn parameter on this statement.

**CONNECT= (Yes|No|DEFAULT, *interval*)**

Specifies whether an NJE connection should be automatically attempted for this APPL statement. If DEFAULT is specified, processing defers to the CONNECT=(YES|NO) value that is specified on the associated NODE statement. The *interval* is the approximate time (in minutes) between attempted connections. The valid range for *interval* is 0 to 1440. A value of 0 indicates that the default interval (from NJEDEF CONNECT=) should be used. The default CONNECT value is DEFAULT, and the default *interval* is 0.

**LINE=nnnnn**

A dedicated line used for the SNA NJE session associated with this application. Range is 0–65535.

**Default:** 0 (No line is dedicated)

**LOGMODE=avvvvvvv**

Specifies the logon mode table entry name for this application. This name will determine which entry in the VTAM application logon mode table is to be used to provide a set of session parameters for the application program if the program participates as the secondary end of a session. This parameter is valid only for NJE applications. The name specified should follow the VTAM naming conventions for a logon mode table entry name. See *z/OS Communications Server: SNA Programming* for more information about the logon mode table.

The name defaults to blanks, and VTAM uses the logon mode table entry referenced by the application (jxxxxxxx).

**LOGON=logon**

Specifies the device control table (DCT) to which this application is to be connected.

**NODE=nnnnn | xxxxxxxx**

Specifies the node number (1 to 32767) or the symbolic node name of the node at which this JES2 application is defined to VTAM. If you code the symbolic name:

- The symbolic name must also be defined on the NAME= parameter of the NODE initialization statement for the referenced node, or defined on a DESTID initialization statement.
- The NODE statement where the name is defined or the DESTID statement where the name is defined must be placed before the APPL statement in the initialization stream.

This parameter is required.

**REST=nnnn**

Specifies an integer (0-2000), which represents the resistance rating of the connection as viewed by the installation manager and coordinated with other installations. See *z/OS JES2 Initialization and Tuning Guide* for details concerning selecting a resistance value.

If you do not specify this parameter, it defaults to the value for REST=, specified on the NODE(xxxxxxx) initialization statement, which defines the node indicated by the NODE=xxxxxxx parameter on this statement.

## BADTRACK - Defective Track Specification

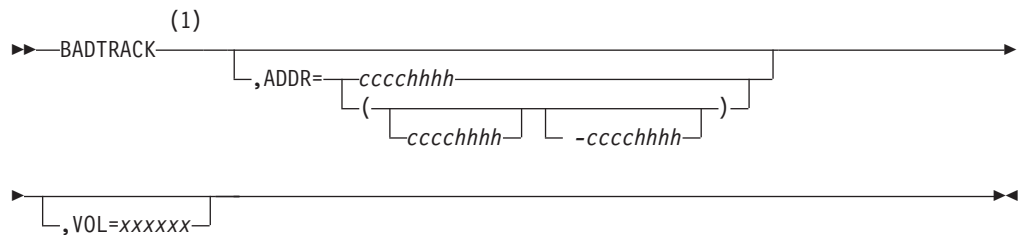
Use the BADTRACK initialization statement to specify a range of track addresses of defective tracks on a specific spool volume. This definition should be specified identically on each member in the MAS. JES2 will not attempt to use tracks identified as defective. As a result of listing track groups on this initialization statement, JES2:

- Places the corresponding track group in a pool of permanently defective track groups. The entire track group is considered defective if one of its tracks is specified as defective.
- Does not issue messages for these track groups that it normally issues during an all-member warm start to inform the operator of the defective tracks.

You can add or remove the specification of defective tracks during any JES2 start. Removal of a BADTRACK statement will allow JES2 to attempt recovery of the track group.

**Note:** If a BADTRACK statement is removed, JES2 reformats the track group and puts it back into service at the next all-member JES2 warm start or within 1 week, whichever occurs first.

### Format Description for BADTRACK



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

### Parameter Description for BADTRACK

**VOL=xxxxxx**

Specifies the 5- to 6-character volume serial number on which the defective tracks are. If you specify a volume that has not yet been formatted by JES2, the entire volume will be formatted and then the associated track group will be removed from availability.

This parameter has no default. This parameter must be specified.

**Modification:** Hot start.

**ADDR=(cccchhhh[-cccchhhh])**

Specifies a track address or a range of track addresses of defective tracks where cccc is the hexadecimal cylinder identifier and hhhh is the hexadecimal head identifier. The starting and ending track addresses are in the same format as in the \$HASPO94 message, which is issued when the I/O error occurs. Because the track group is the basic unit of allocation, the member is unable to allocate tracks within a defective track group. This means that the actual range of tracks removed may be larger than that specified by this parameter.

This parameter has no default and must be specified. If you specify a range of addresses, the starting address must be smaller than the ending address.

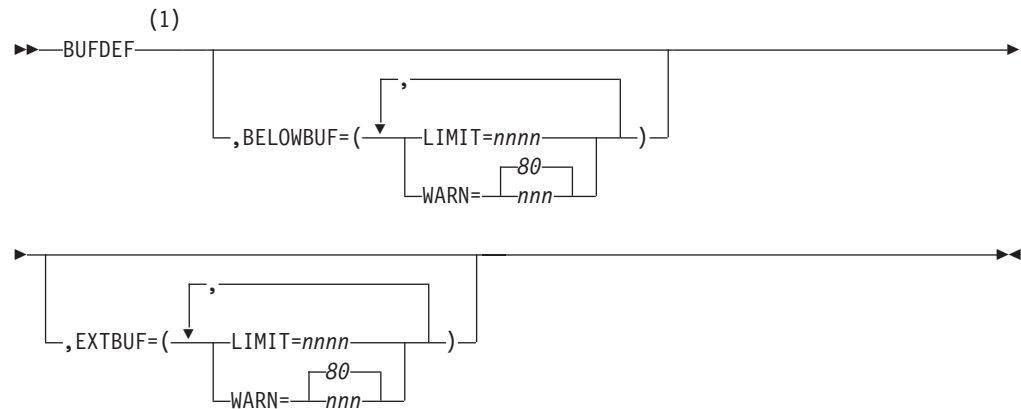
**Modification:** Hot start.

---

## BUFDEF - Local JES2 Buffer Definition

The BUFDEF statement defines the local buffers to JES2.

### Format Description for BUFDEF



#### Notes:

- 1 Omit the comma between initialization statement and first keyword

### Parameter Description for BUFDEF

#### BELOWBUF=

Specifies the maximum number of buffers that JES2 allocates **below** 16 megabytes in virtual storage and a usage warning level for those buffers. JES2 uses these buffers to store data records read in from spool.

#### LIMIT=nnnn

Specifies the maximum number of buffers (10-2000) JES2 allocates below 16 megabytes in virtual storage.

If the BELOWBUF parameter is not specified, the following formula is used to calculate initial value for BELOWBUF:

```

BELOWBUF=LIMIT=
20
+ 1 * (number of RDRnn statements)
+ N2 * (number PRTnn statements - N1)
+ N1 * N2 * (nnn from TRKCELL=nnn on SPOOLDEF)
+ N3 * (number PUNnn statements)
+ (1 + N4 + N5) * (number of LINEnnn statements)

```

WHERE

```

N1 = Number of printers specifying TRKCELL=YES
N2 = 2 if DBLBUFR=YES on PRINTDEF, else 1
N3 = 2 if DBLBUFR=YES on PUNCHDEF, else 1
N4 = 2 if RDBLBUFR=YES on PRINTDEF, else 1
N5 = 2 if RDBLBUFR=YES on PUNCHDEF, else 1

```

**Note:** Most of the input values to this formula are for active devices at peak load periods on a single member of your multi-access spool complex.

**Note:** Use this parameter to increase the limit for the JNUM resource that is reported on the HASP050 message.

**Performance Considerations:** Because all JES2 buffers are maintained in a dynamic pool until required by an active function, the appropriate number of buffers should be based on the predicted coincident occurrence of the various functions at your installation. This can vary considerably from the value determined by the formula above. If you have calculated a reasonable value for LIMIT= based on past system usage, you can continue to use that value.

If, however, you have no such past data upon which to base this value, the following guidelines and formula above provides a basis upon which to initially set this value.

- JES2 normally requires at least 100 spool buffers. Even if your estimate of required buffers is less than 100, it should prove to be a good initial value unless your use of virtual storage is constrained.
- Normally 450 spool buffers are required for normal JES2 operations for installations with up to 150 remote workstations that are active during peak load periods.

**Modification:** \$T BUFDEF operator command to increase the limit. Hot start to decrease the limit.

**WARN=nnn | 80**

Specifies a threshold percentage (0-100) of the maximum buffer use at which JES2 issues the \$HASP050 message to warn the operator of a resource shortage. If you do not want JES2 to issue a message, specify zero for this parameter.

**Modification:** \$T BUFDEF operator command.

**EXTBUF=**

Specifies information about the control block buffers. JES2 allocates these buffers **above** 16 megabytes in virtual storage; JES2 control blocks read in from spool reside here.

**LIMIT=nnnn**

Specifies the maximum number of buffers (10-9999) JES2 allocates above 16



megabytes in virtual storage. The "Performance Considerations" listed under BELOWBUF=LIMIT=nnnn also apply for this parameter.

If the EXTBUF parameter is not specified, the following formula is used to calculate initial value for EXTBUF:

```

EXTBUF=LIMIT=
20
+ 4 * (number of RDRnn statements)
+ N2 * (number PRTnn statements - N1)
+ N1 * N2 * (nnn from TRKCELL=nnn on SPOOLDEF)
+ N3 * (number PUNnn statements)
+ (4 + N4 + N5) * (number of LINEnn statements)
+ 2 * MIN(50,nnn/1024 from JOBNUM=nnn on JOBDEF)

WHERE
N1 = Number of printers specifying TRKCELL=YES
N2 = 2 if DBLBUFR=YES on PRINTDEF, else 1
N3 = 2 if DBLBUFR=YES on PUNCHDEF, else 1
N4 = 2 if RDBLBUFR=YES on PRINTDEF, else 1
N5 = 2 if RDBLBUFR=YES on PUNCHDEF, else 1

```

**Note:** Most of the input values to this formula are for active devices at peak load periods on a single member of your multi-access spool complex.

**Modification:** \$T BUFDEF operator command to increase the limit. Hot start to decrease the limit.

**WARN=nnn|80**

Specifies a threshold percentage (0-100) of the maximum buffer use at which JES2 issues the \$HASP050 message to warn the operator of a resource shortage. If you do not want JES2 to issue a message, specify zero for this parameter.

---

## CKPTDEF - JES2 Checkpoint Definition

The CKPTDEF statement defines the JES2 checkpoint data sets, their respective backup data sets, and the mode of the checkpoint configuration.

Follow these coding rules when specifying the checkpoint data sets:

- Specify CKPT1= and CKPT2= or both, and include INUSE=Yes along with one of the following:
  - DSName= and VOLume= (if the checkpoint resides on DASD)
  - STRname= (if the checkpoint resides on a coupling facility structure)
- Naming restrictions for the DSName= and VOLume= specifications (if the checkpoint is on DASD) and the STRname= specification (if the checkpoint is on coupling facility) are as follows:
  - CKPTn (STRname) cannot be the same as NEWCKPTn (STRname).
  - CKPT1 (DSName and VOLser or STRname) cannot be the same as CKPT2 or NEWCKPT2 (DSName and VOLser or STRname).
  - NEWCKPT1 (DSName and VOLser or STRname) ) cannot be the same as NEWCKPT2 (DSName and VOLser or STRname) or CKPT2 (DSName and VOLser or STRname).

## Defining Checkpoint Data Sets

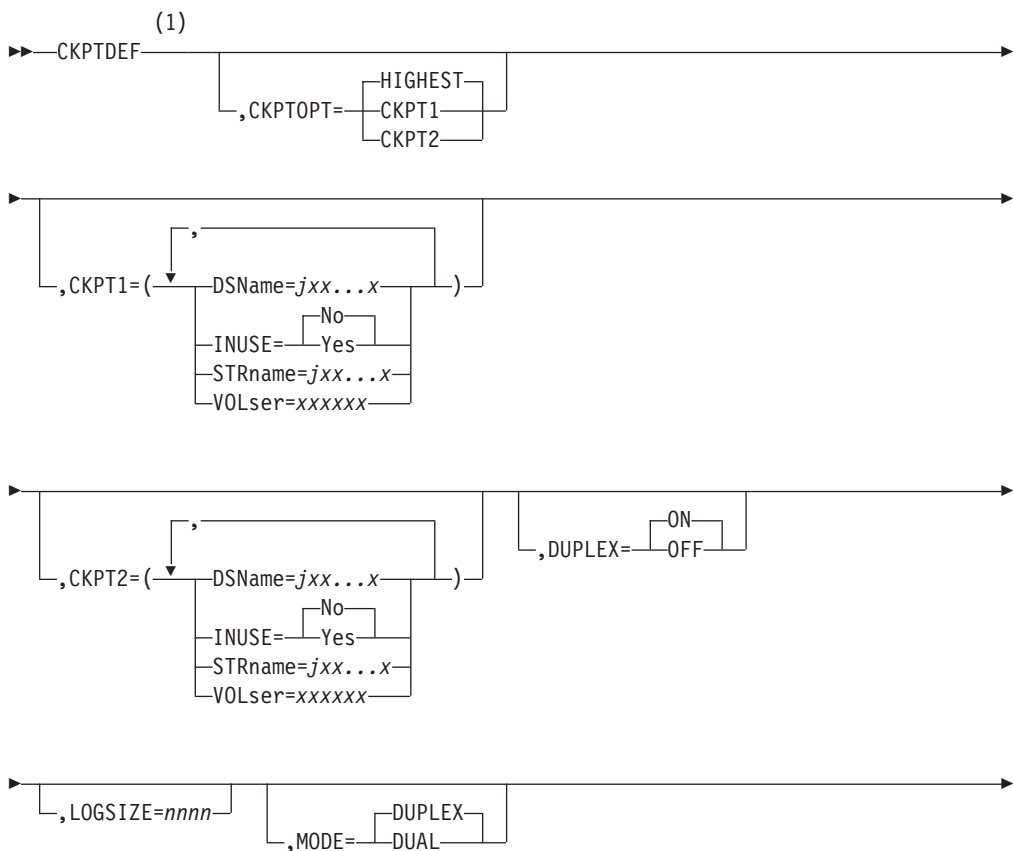
The values specified on this statement are initial values only. If any are changed after initialization by operator command, or by use of the checkpoint reconfiguration dialog, many of these initial values will be ignored on a hot or warm start as shown in the following list. However, JES2 honors all new values if you specify the RECONFIG option.

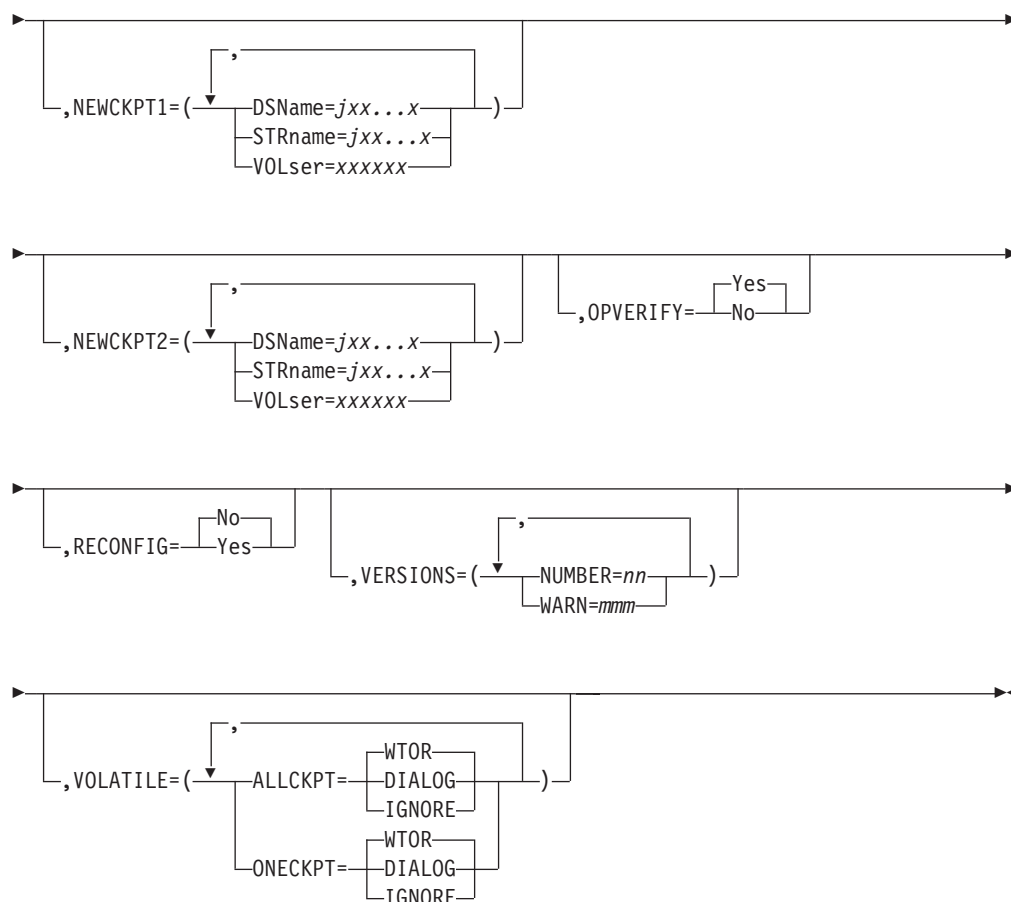
**Use the RECONFIG option with caution, because severe queue damage can result if you use the incorrect checkpoint data set(s) on a restart.** (See *z/OS JES2 Initialization and Tuning Guide* for further explanation of the start options.)

Note that JES2:

- Ignores CKPT1= and CKPT2= specifications on a hot start.
- Ignores NEWCKPT1= and NEWCKPT2= specifications except on a cold start or if RECONFIG is added to the warm start command.
- Ignores MODE= and LOGSIZE= specifications on a warm start unless RECONFIG is added to the warm start command.
- Preserves respecification of NEWCKPT1= and NEWCKPT2= by \$T across a warm start unless RECONFIG is also added to the warm start command.

## Format Description for CKPTDEF



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter Description for CKPTDEF****CKPT1=**

Specifies the status of the primary checkpoint data set (in DUPLEX mode) or the alternately-used primary data set (in DUAL mode) from which JES2 reads and writes the checkpoint record. If this data set resides on DASD, specify its name and volume serial number. If this data set resides on a coupling facility, specify its structure name.

This data set can be:

- The only checkpoint data set defined (MODE=DUPLEX and DUPLEX=OFF) or (MODE=DUAL, INUSE=Yes, and CKPT2 INUSE=No)
- Used as the primary data set backed up by a duplex data set (MODE=DUPLEX and DUPLEX=ON)
- Used as one of two-alternately used checkpoint data sets (MODE=DUAL).

If neither data set (CKPT1 or CKPT2) is defined at initialization, **the operator will be prompted for name and device information** following initialization processing.

**DSName=jxx...x**

Specifies a 1- to 44-character name (hyphens (-) may be included for any

## CKPTDEF

character except the first) which is used as the name of the primary checkpoint data set. This data set is normally named SYS1.JESCKPT1, but you can provide another name if you prefer. For example, you would be naming it TESTING.HASPCCKPT if you specified the following initialization statement:

```
CKPTDEF    CKPT1=(DSN=TESTING.HASPCCKPT,...)
```

The DSNNAME= parameter and the VOLSER= subparameter are mutually exclusive with the STRname= parameter.

If you do not define a structure on the coupling facility to contain the checkpoint data sets, you must specify a data set name for either CKPT1 or CKPT2 or both. If you do not, JES2 enters the checkpoint reconfiguration dialog.

**Modification:** Operator response to reconfiguration dialog messages only if the data set is specified as not in use (INUSE=No).

**Note:** To avoid potential confusion, IBM suggests that the name specified here not match the DSNNAME= parameter specification on the SPOOLDEF initialization statement.

### **STRname=jxx...x**

Specifies the 1- to 16-character name of the coupling facility structure to be used for a checkpoint data set. This structure must have been defined in the coupling facility policy. The name can contain numeric, uppercase alphabetic, dollar sign (\$), at sign (@), pound sign (#), or underscore (\_) characters.

This subparameter is mutually exclusive with the DSNNAME= and VOLSER= subparameters.

The STRname= parameter has no default; you must specify it to place a checkpoint data set in a structure on the coupling facility.

### **VOLser=xxxxxx**

Specifies the volume serial number on which the data set specified by the DSName= parameter resides.

The DSNNAME= parameter and the VOLSER= subparameter are mutually exclusive with the STRname= parameter.

**Modification:** Operator response to reconfiguration dialog messages only if the data set is specified as not in use (INUSE=No).

**Performance Considerations:** Because the checkpoint data set is frequently referenced, particularly in multi-access spool configurations, it should not be on any volume containing high-usage data sets. For example, performance can be seriously degraded if you allow all or part of SYS1.HASPACE (or the data set name specified on the DSNNAME= parameter on the SPOOLDEF statement) to also reside on the volume containing SYS1.JESCKPTn (or the data set name specified on the DSName= parameter). Only low-usage data sets (if any) should be allocated on the same volume as the checkpoint data set.

Also, IBM suggests that you do not issue a RESERVE against a designated VOLser volume; this too will degrade system performance.

### **INUSE=Yes|No**

Specifies whether this data set is defined to a JES2 multi-access spool configuration as a checkpoint data set.

**Modification:** Operator response to reconfiguration dialog messages.

**Note:**

1. At least one checkpoint data set (CKPT1 or CKPT2) must be designated as INUSE=Yes in order that JES2 has a checkpoint data set to use.
2. Operating in DUAL mode (with alternating primary data sets) (MODE=DUAL) requires both CKPT1 and CKPT2 be specified as INUSE=Yes
3. Operating in DUAL mode (with only one primary data set) (MODE=DUAL) requires either CKPT1 or CKPT2 be specified as INUSE=Yes
4. Operating in DUPLEX mode (with a backup data set) (MODE=DUPLEX,DUPLEX=ON) requires both CKPT1 and CKPT2 be specified as INUSE=Yes
5. Operating in DUPLEX mode (without a backup data set) (MODE=DUPLEX,DUPLEX=OFF) requires either CKPT1 or CKPT2 be specified as INUSE=Yes

**CKPT2=**

Specifies the status of the duplex or alternately-used checkpoint data set for either:

- The data set used as the back-up copy of the primary data set defined by CKPT1 (MODE=DUPLEX and DUPLEX=ON)
- The second of two alternately-used checkpoint data sets (MODE=DUAL).

If this data set resides on DASD, specify its name and volume serial number. If this data set resides on a coupling facility, specify its structure name.

If CKPT2 is not defined at initialization, JES2 assumes that no backup checkpoint data set is required; the operator is not prompted to supply this information.

**DSName=jxx...x**

Specifies a 1- to 44-character name (hyphens (-) may be included for any character except the first) which is used as the name of the primary checkpoint data set.

If you do not define a structure on the coupling facility to contain the checkpoint data set(s), you must specify this data set name if the data set is required; JES2 will prompt the operator to supply a name only if this data set is in use.

The DSNAME= subparameter and the VOLSER= subparameter are mutually exclusive with the STRname= subparameter.

**Modification:** Operator response to reconfiguration dialog messages only if this data set is specified as not in use (INUSE=No).

**Note:**

1. If MODE=DUPLEX, CKPT2 is not used as a backup (duplex) data set to CKPT1 unless DUPLEX=ON is also specified or defaulted.
2. To avoid potential confusion, IBM suggests that the name specified here not match the DSNAME= parameter specification on the SPOOLDEF initialization statement.

**STRname=jxx...x**

Specifies the 1- to 16-character name of the coupling facility structure to be used for a checkpoint data set. This structure must have been defined in

the coupling facility policy. The name can contain numeric, uppercase alphabetic, dollar sign (\$), at sign (@), pound sign (#), or underscore (\_) characters.

This subparameter is mutually exclusive with the DSNAME= and VOLSER= subparameters.

The STRname= parameter has no default; you must specify it to place a checkpoint data set in a structure on the coupling facility.

**VOLser=xxxxxx**

Specifies the volume serial number on which the data set specified by the DSName= parameter resides.

You must specify this volume serial if it is required; however, JES2 will prompt the operator to supply this information if this data set is in use.

**Modification:** Operator response to reconfiguration dialog messages only if the data set is specified as not in use (INUSE=No).

**Note:** The volume serial number specified for CKPT2 need not be different from that specified for CKPT1.

**INUSE=Yes|No**

Specifies whether this data set is defined to a JES2 multi-access spool configuration as a checkpoint data set.

**Modification:** Operator response to reconfiguration dialog messages.

**Note:** At least one checkpoint data set (CKPT2 or CKPT1) must be designated as INUSE=Yes in order that JES2 has a checkpoint data set to use.

**CKPTOPT=HIGHEST|CKPT1|CKPT2**

Specifies which checkpoint data set is to be used when JES2 is restarted.

**CKPT1**

Specifies that JES2 is to use the CKPT1 data set as the source of the checkpoint for building the JES2 work queues.

**CKPT2**

Specifies that JES2 is to use the CKPT2 data set as the source of the checkpoint for building the JES2 work queues.

**HIGHEST**

Specifies that JES2 is to determine which checkpoint data set contains the most recent checkpoint, and use that data set for building the JES2 work queues.

**Modification:** Hot start. This parameter will use the option specified when JES2 is started.

**Note:** This parameter **must never** be specified in the PARMLIB member where your installation's initialization statements are defined. It can only be entered during JES2 initialization while in CONSOLE mode. See *z/OS JES2 Initialization and Tuning Guide* for more details on CONSOLE mode.

**DUPLEX=ON|OFF**

Specifies whether duplexing is turned on (ON) or off (OFF). If DUPLEX=ON is specified or defaulted, you will be able to use the CKPT2 data set to replace the primary (CKPT1) checkpoint data set if that data set becomes unavailable.

If a checkpoint resides on a coupling facility structure, JES2 forces this parameter to MODE=DUPLEX.

**Note:**

1. DUPLEX=ON only has meaning if MODE=DUPLEX is also specified. That is, the entire multi-access spool configuration must be operating in DUPLEX mode, then you can set duplexing on or off for each individual member.
2. DUPLEX=ON need not be defined on each member of a multi-access spool configuration; however, it is recommended that you do so when operating in duplex mode. Those members that have turned duplexing off (DUPLEX=OFF) will not write to the backup checkpoint data set.
3. The DUPLEX value does not affect the CKPT1 or CKPT2 INUSE setting of the multi-access spool configuration.

**Attention:** If you specify MODE=DUPLEX and DUPLEX=OFF you have turned off checkpoint data set duplexing for this particular multi-access spool member; a backup copy of the checkpoint data set will not be maintained for this member. If you set DUPLEX=OFF on all members of the multi-access spool configuration, an I/O error occurring on CKPT1 can prove rather disastrous to the single-member or multi-access spool configuration if JES2 also fails.

**Modification:** \$T CKPTDEF operator command.

**LOGSIZE=nnnn**

The LOGSIZE parameter specifies the number (1-4000) of 4K-blocks of storage used for the change log portion of the checkpoint data set.

Although JES2 allocates a change log for both DUPLEX or DUAL mode, the change log is only used in DUAL mode. JES2 computes a default value by the following algorithm:

If MODE=DUPLEX:

```
LOGSIZE=1
```

**Note:** Although JES2 allocates space for the change log when operating in DUPLEX mode, the change log is not actually used. If MODE=DUAL:

```

If number of 4K-blocks that fit on TRACK1
of CKPT1>=1
    and
    number of 4K-blocks that fit on TRACK1 of CKPT2>=1
    then
LOGSIZE= lesser of the number of 4K blocks that fit on
          CKPT1 and CKPT2

    -- OR --

If the number of 4K-blocks that fit on CKPT1<1
    or
    number of 4K-blocks that fit on CKPT2<1
    then
LOGSIZE=1

```

**Modification:** Cold start or all-member warm start if RECONFIG is specified as an start option.

**Performance Considerations:** For increased performance, prevent the updates from overflowing the change log. If the used portion of the change log can be



contained on the first track, it can be read at the same time as all the other records on track 1 during the READ1 portion of the checkpoint cycle. Trace ID 17 can provide data on the size of the active portion of the change log and assist your tuning of the size specification required here. See *z/OS JES2 Diagnosis* for more information on Trace ID 17.

### **MODE=DUAL | DUPLEX**

Specifies whether the multi-access spool configuration will use the data set defined by CKPT2= as the alternate primary checkpoint data set (DUAL) or as the backup to the CKPT1 data set (DUPLEX).

#### **DUAL**

Specifies that the data set specified by CKPT2 be used as the alternate primary checkpoint data set. The two data sets, specified by CKPT1= and CKPT2= are used in a “flip-flop” alternating scheme. (See *z/OS JES2 Initialization and Tuning Guide* for a further discussion of DUAL mode processing.)

If any checkpoint data set resides on a coupling facility (STRname= is coded for CKPT1, CKPT2, NEWCKPT1, or NEWCKPT2), JES2 forces the MODE= parameter to DUPLEX.

#### **DUPLEX**

Specifies that the data set specified by CKPT2 be used as the backup to the primary checkpoint data set. The data set specified by CKPT1= is the primary checkpoint data set and the data set specified by CKPT2= is the backup (duplex) checkpoint data set. (See *z/OS JES2 Initialization and Tuning Guide* for a further discussion of DUPLEX mode processing.)

#### **Note:**

1. If you specify MODE=DUAL, the DUPLEX= specification is ignored.
2. If you specify MODE=DUPLEX and DUPLEX=OFF for a specific member of the multi-access spool configuration, that member will neither use nor allocate a backup (CKPT2=) checkpoint data set.
3. If you specify MODE=DUPLEX and DUPLEX=ON for a specific member of the multi-access spool configuration, that member **will** use the data set defined by CKPT2= as the backup checkpoint data set.
4. The MODE= parameter must be specified the same for all members of the multi-access spool configuration.
5. The MODE= parameter can be changed through Operator Command.

**Performance Considerations:** If you specify MODE=DUAL on CKPTDEF, also specifying HOLD=99999999 on the MASDEF statement causes performance degradation. If you must use HOLD=99999999 on MASDEF, be certain to also specify MODE=DUPLEX on CKPTDEF.

**Modification:** Operator command.

### **NEWCKPT1=**

Specifies the checkpoint data set that can be used to replace the data set defined by CKPT1= should that data set experience an I/O error or otherwise be unavailable. If this data set resides on DASD, specify its name and volume serial number. If this data set resides on a coupling facility, specify its structure name.

If this data set is not defined, the operator can define it at the time it is needed either within the checkpoint reconfiguration dialog or by a \$T CKPTDEF,NEWCKPT1={(DSName=,VOLser=) | (STRname=)} command.



**Note:** IBM highly recommends that you define this data set in your initialization data set. It is only defined by this statement; it is not allocated and therefore does not require any storage space until it is used.

If you do not specify a value for this parameter, a \$D CKPTDEF,NEWCKPT1 operator command displays the following:

```
$HASP829 CKPTDEF NEWCKPT1=(DSNAME=,VOLSER=)
```

#### **DSName=jxx...x**

Specifies a 1- to 44-character name (hyphens (-) may be included for any character except the first) which is to be used as the name of the backup checkpoint data set to the data set defined by CKPT1=.

You must specify that this checkpoint resides on either a coupling facility structure (STRname=) or on DASD (DSName= and VOLser=). If you do not specify either STR= or DSN= and VOL=, the operator will be prompted to supply a data set name, by the \$HASP273/\$HASP272 message pair.

The DSNAME= subparameter and the VOLSER= subparameter are mutually exclusive with the STRname= subparameter.

**Modification:** \$T CKPTDEF operator command or cold start.

#### **STRname=jxx...x**

Specifies the 1-to 16-character name of the coupling facility structure to be used as a checkpoint data set. This structure must have been defined in the coupling facility policy. The name can contain numeric, uppercase alphabetic, dollar sign (\$), at sign (@), pound sign (#), or underscore (\_) characters.

This subparameter is mutually exclusive with the DSNAME= and VOLSER= subparameters.

The STRname= parameter has no default; you must specify it to place a checkpoint data set in a structure on the coupling facility.

**Modification:** \$T CKPTDEF operator command or cold start.

#### **VOLser=xxxxxx**

Specifies the volume serial number on which the data set specified by the DSName= parameter resides.

If you do not define a structure on the coupling facility to contain the checkpoint data set(s), you must specify this volume name if you require a NEWCKPT1 data set. If you do not specify a volume name, when this data set is needed, **the operator will be prompted to supply a serial number**, by the \$HASP273/\$HASP272 message pair.

The DSNAME= parameter and the VOLSER= parameter are mutually exclusive with the STRname= parameter.

**Modification:** \$T CKPTDEF operator command or cold start.

**Note:** The volume serial number specified for NEWCKPT1 need not be different from that specified for CKPT1, CKPT2, or NEWCKPT2 although if more than one checkpoint data set resides on the same volume your member may suffer performance degradation. (See *z/OS JES2 Initialization and Tuning Guide* for further data set placement information.) However, it is recommended that this volume be different from those volumes defined for either of the primary checkpoint (CKPT1 and CKPT2) data sets.

**NEWCKPT2=**

Specifies the checkpoint data set that can be used to replace the data set defined by CKPT2= should that data set experience an I/O error or otherwise be unavailable. If this data set resides on DASD, specify its name and volume serial number. If this data set resides on a coupling facility, specify its structure name.

If this data set is not defined, the operator can define it at the time it is needed either within the checkpoint reconfiguration dialog or by a \$T CKPTDEF,NEWCKPT2=[(DSName=,VOLser=) | (STRname=)] command.

**Note:** IBM highly recommends that you define this data set in your initialization data set. It is only defined by this statement; it is not allocated and therefore does not require any storage space until it is used.

**DSName=jxx...x**

Specifies a 1- to 44-character name (hyphens (-) may be included for any character except the first) which is to be used as the name of the backup checkpoint data set to the data set defined by CKPT2=.

You must specify that this checkpoint resides on either a coupling facility structure (STRname=) or on DASD (DSName= and VOLser=). If you do not specify either STR= or DSN= and VOL=, **the operator will be prompted to supply a data set name**, by the \$HASP273/\$HASP272 message pair.

**Modification:** \$T CKPTDEF operator command or cold start.

**STRname=jxx...x**

Specifies the 1-to 16-character name of the coupling facility structure to be used as a checkpoint data set. This structure must have been defined in the coupling facility policy. The name can contain numeric, uppercase alphabetic, dollar sign (\$), at sign (@), pound sign (#), or underscore (\_) characters

This subparameter is mutually exclusive with the DSNNAME= and VOLSER= subparameters.

The STRname= parameter has no default; you must specify it to place a checkpoint data set in a structure on the coupling facility.

**Modification:** \$T CKPTDEF operator command or cold start.

**VOLser=xxxxxx**

Specifies the volume serial number on which the data set specified by the DSName= parameter resides.

You must specify this volume name if you require a NEWCKPT2 data set. If you do not specify a volume name, when this data set is needed, **the operator will be prompted to supply a serial number**; which can then be done by responding to the \$HASP273/\$HASP272 message pair.

This subparameter is mutually exclusive with the STRname= subparameter.

**Modification:** \$T CKPTDEF operator command or cold start.

**Note:** The volume serial number specified for NEWCKPT2 need not be different from that specified for CKPT1, CKPT2, or NEWCKPT1. However, it is recommended it be different from those volumes defined for either of the primary checkpoint (CKPT1 and CKPT2) data sets.

**OPVERIFY=Yes|No**

Specifies whether (Yes) or not (No) JES2 prompts the operator during the checkpoint reconfiguration to verify or alter the default reconfiguration action. This parameter only applies to I/O error conditions when a NEWCKPT $n$  value is defined. The operator is not consulted if JES2 can connect (coupling facility) or allocate (DASD) the NEWCKPT $n$  data set.

If you enable operator verification (OPVERIFY=Yes), JES2 prompts the operator during the checkpoint reconfiguration dialog **entered by JES2 for I/O errors only** to respond to message pairs \$HASP273 and \$HASP272 or \$HASP278 and \$HASP272.

```
$HASP273 JES2 CKPTn DATA SET WILL BE ASSIGNED TO NEWCKPTn dsname ON
        VOLUME volser
$HASP272 ENTER RESPONSE
```

-or-

```
$HASP278 UNABLE TO LOCATE OR UNABLE TO USE CKPTn|NEWCKPTn dsname ON
        VOLUME volser DOES NOT EXIST OR IS NOT USABLE
$HASP272 ENTER RESPONSE
```

If the original member driving the checkpoint reconfiguration failed and a new member replaces it as the driving member, the OPVERIFY parameter no longer applies. JES2 notifies the operator and does not automatically forward members. Not forwarding members automatically can prevent cascading member failure, which would result in the loss of all checkpoint data in the MAS and require a JES2 cold start.

If you suppress operator verification (that is, if you specify OPVERIFY=NO), JES2:

- Replaces the checkpoint data set with its replacement data set defined on the NEWCKPT $n$  parameter of the CKPTDEF statement.
- Creates a replacement checkpoint data set automatically when a NEWCKPT $n$  setting cannot be located.

This new checkpoint data set is always defined on DASD. JES2 dynamically allocates a new coupling facility structure only if a structure policy has been defined; JES2 cannot create a structure policy even if the original checkpoint was defined as a coupling facility structure.

**Note:** If JES2 determines that the new checkpoint will reside upon a volatile coupling facility (regardless of the OPVERIFY=No and VOLATILE=(ALLCKPT=IGNORE) or VOLATILE=(ONECKPT=IGNORE) settings), the operator will be prompted to respond to message \$HASP237.

**Modification:** \$T CKPTDEF operator command or cold start.

**RECONFIG=Yes|No**

RECONFIG= Yes specifies that JES2 uses the checkpoint data sets defined in CKPT1 and CKPT2, regardless of what checkpoints had been used previously. You should specify Yes only for the following conditions:

- A previously unavailable checkpoint data set becomes available.
- A previously available checkpoint data set becomes unavailable.
- Both checkpoint data sets become unavailable so that you must restart JES2 from an emergency checkpoint data set.

RECONFIG= NO instructs JES2 to use the checkpoint data sets specified in CKPT1 and CKPT2 to start checkpoint processing. If JES2 detects that CKPT1

## CKPTDEF

and CKPT2 are not the most recent checkpoint data sets, JES2 uses the data sets specified in these two parameters to locate the most recent checkpoint data sets.

### Note:

1. RECONFIG=Yes is only valid on an all-member restart.
2. This parameter **must never** be specified in the PARMLIB member where your installation's initialization statements are defined; it can only be specified in console mode.

### VERSIONS=(NUMBER=nn [, WARN=mmm])

Provides information JES2 uses to create and manage copies, or versions, of the checkpoint data set to be made available to application programs.

#### NUMBER=nn

Specifies the maximum number of copies that JES2 will maintain. In Z2 mode, the number can be between 2 and 17 (inclusive). After Z11 mode is activated, it can be between 2 and 50 (inclusive). A number that is too low can result in an application program deciding to use a copy that does not contain the most recent checkpoint data.

**Note:** Use this parameter to increase the limit for the JNUM resource that is reported on the HASP050 message.

This parameter defaults to 0, indicating that JES2 will determine the maximum number of versions to maintain.

**Modification:** \$T CKPTDEF operator command.

#### WARN=mmm

Specifies a threshold percentage (0-100) of the maximum number of copies (versions) that are in use. When the specified percentage is reached, JES2 alerts the operator through the \$HASP050 message. If you do not want JES2 to issue a message, specify zero for this parameter.

This parameter defaults to 80.

**Modification:** \$T CKPTDEF operator command

### VOLATILE=

Specifies how JES2 should respond when a checkpoint data set that resides on a coupling facility enters the state where, if power to the coupling facility is lost, all data on the coupling facility is lost.

This parameter does not apply when a coupling facility structure becomes volatile during the checkpoint reconfiguration dialog.

Before modifying this parameter see *z/OS JES2 Initialization and Tuning Guide*.

### ONECKPT={WTOR | DIALOG | IGNORE}

Specifies the action that should be taken if the coupling facility on which a checkpoint data set resides becomes volatile (unstable). JES2 uses the ONECKPT= subparameter settings if:

- Only one of the two checkpoint data sets resides on a coupling facility structure, and that coupling facility has become volatile.
- Both checkpoint data sets reside on a coupling facility, but only one becomes volatile.

#### WTOR

Specifies that JES2 issues a WTOR so the operator can determine

whether to suspend or continue the use of the checkpoint data set that resides on a coupling facility structure.

**DIALOG**

Specifies that JES2 enters the checkpoint reconfiguration dialog if a coupling facility becomes volatile.

**IGNORE**

Specifies that JES2 ignores the volatile status of the coupling facility.

**ALLCKPT={WTOR|DIALOG|IGNORE}**

Specifies the action that should be taken if all available checkpoint data sets (INUSE=Yes) that reside on a coupling facility become volatile (unstable). If you have only one checkpoint residing on a coupling facility, JES2 uses the ALLCKPT subparameter settings.

**WTOR**

Specifies that JES2 issues a WTOR when all available checkpoints residing on coupling facilities become volatile, so the operator can determine whether to suspend or continue the use of the checkpoint(s).

**DIALOG**

Specifies that JES2 enters the checkpoint reconfiguration dialog if all available checkpoints residing on coupling facilities become volatile.

**IGNORE**

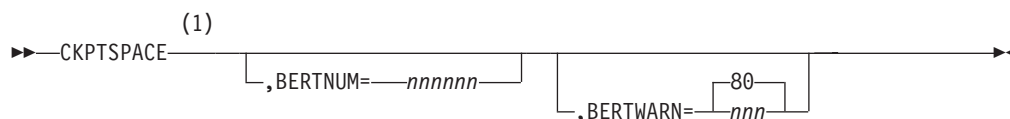
Specifies that JES2 ignores the volatile status of the coupling facility. JES2 ignores this action setting if ONECKPT=WTOR|DIALOG. Instead, JES2 uses the ONECKPT setting.

**Modification:** \$T CKPTDEF operator command or cold start.

## CKPTSPACE - Checkpoint space definition

The CKPTSPACE statement defines how much space JES2 allocates to the checkpoint for block extension reuse tables.

### Format description for CKPTSPACE

**Notes:**

- 1 Omit the comma between initialization statement and first keyword

### Parameter description for CKPTSPACE

**BERTNUM=nnnnnn**

Specifies the number (must be no greater than 1000000) of 64-byte block extension reuse tables (BERTs) records that JES2 adds to the checkpoint record. This additional space is a general-purpose checkpointed area to be used to store and extend JOEs and JQEs, CATs, workload management (WLM) queues, and other block extension workspace. JES2 calculates the default as the greater of  $(JOBNUM + JOENUM/4 + 100)$  or 399.

## CKPTSPACE

If the value specified is too small relative to the number of JOEs and JQEs, JES2 will assign a larger value to reduce the chance of a shortage of BERTs. However, installations should monitor BERT usage (using \$D CKPTSPACE,BERTUSE and the \$HASP050 message) to ensure they do not run out of BERTs.

**Modification:** \$T CKPTSPACE command to increase or decrease the number of BERTs.

### BERTWARN=nnn|80

Specifies the percentage (1–99) of use of BERTs at which the operator will be alerted by message \$HASP050. A value of zero will cause the default value (80) to be set if no value has been specified on a previous start or through \$T CKPTSPACE,BERTWARN= command.

**Modification:** \$T CKPTSPACE operator command, JES2 cold start, or All-member warm start.

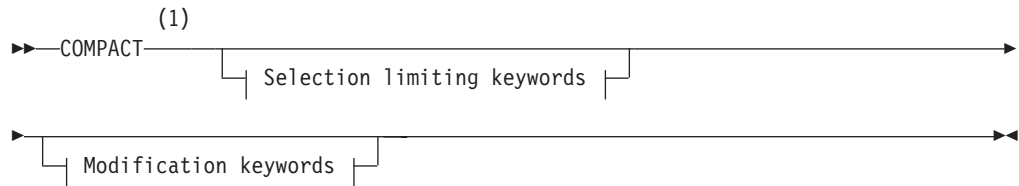
**Note:** This parameter cannot be modified through a hot start, quick start, or single-member warm start.

---

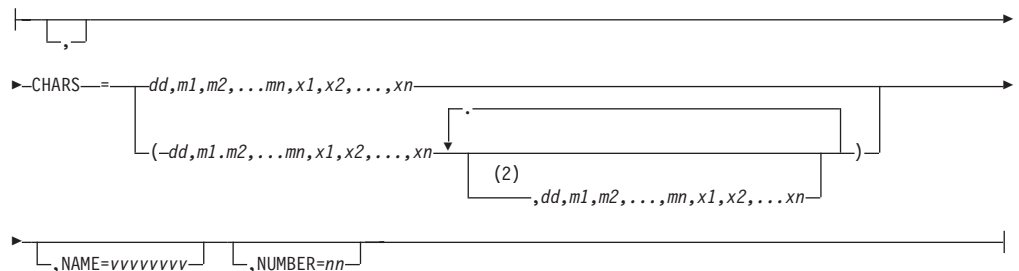
## COMPACT - Compaction Table Definition

The COMPACT statement defines a compaction table to be used by JES2 in SNA remote terminal communications or in SNA NJE communications. One to 99 compaction tables can be defined; 0 is not a valid compaction table number.

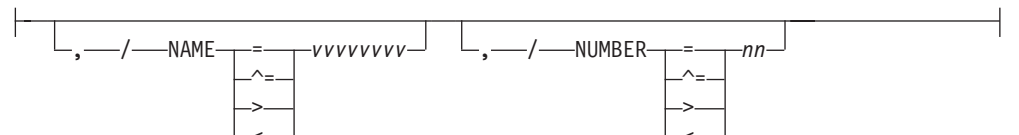
### Format Description for COMPACT



#### Modification keywords:



#### Selection limiting keywords:



**Notes:**

- 1 Omit the comma between initialization statement and first keyword
- 2 CHARS can be coded up to 247 times

**Parameter Description for COMPACT****NAME=vvvvvvvv**

Specifies the 1- to 8-character table name which can be used in the JCL to reference the compaction table.

This parameter defaults to the table number specified by the NUMBER= parameter on this statement.

**Modification:** Hot start.

**CHARS=(dd,m1,m2,...mn,x1,x2,...xn)**

Defines the compaction table as follows:

**dd** A decimal number (3-16) that specifies the number of master characters in this COMPACT statement.

**m1,m2,...,mn**

Specifies master characters to be compacted. Master characters can be compacted when they occur as pairs, in any combination, such that each pair is transmitted in 8 binary bits (rather than 16).

**x1,x2,...,xn**

Represents nonmaster characters which are not compacted. When the compaction processing routines encounter nonmaster characters, the characters are not compacted, but they do not cause JES2 to exit the compaction routines. When characters not specified in the COMPACT statement are encountered, the compaction routines are exited and are reentered only when again encountering master or nonmaster characters.

The number of master characters specified determines the number of nonmaster characters required as follows:

Number of Master Characters	Required Number of Nonmaster Characters
3	244
4	236
5	226
6	214
7	200
8	184
9	166
10	146
11	124
12	100
13	74
14	46
15	16
16	0

Each m (master) or x (nonmaster) value is a single character or a hexadecimal value representing a single EBCDIC character. However, the five special characters (right parenthesis, left parenthesis, blank, comma, and hyphen) and all lower case alphabetic characters must be represented in hexadecimal form. The length of the m and x list must equal the number of master and nonmaster characters shown in the list above. For



## COMPACT

example, if 14 master characters are specified, then 46 nonmaster characters must be specified. If the number of master and nonmaster characters does not match the list, the compaction statement is ignored.

This parameter has no default.

**Modification:** Hot start.

### NUMBER=nn

Specifies the number (1-99) assigned to this compaction table for reference by the user and JES2. If more than one compaction table is specified with the same identification (nn), the last valid table processed is used. Referencing a nonexistent compaction table causes compaction for the device or data set involved to be suppressed; the \$HASP211 error message is issued.

An example of specifying a compaction table follows:

```
COMPACT NAME=DATASET2,          /* comp tab name */
        CHARS=(15,             /* no. master chars */
              0,1,2,3,4,5,6,7,8,9,A,E,I,O,U, /* master chars */
              B,C,D,F,G,H,K,L,M,N,P,      /* non-master char */
              $,40,6B,5D,4D),           /*
        NUMBER=2                    /* compact table no. */
```

This example specifies the compaction table DATASET2 (that is, table number 2) with 15 master characters (0-9 and the vowels A,E,I,O,U) and 16 nonmaster characters (B,C,D,F,G,H,K,L,M,N,P, a dollar sign, a blank (X'40'), a comma (X'6B'), a right parenthesis (X'5D'), and a left parenthesis (X'4D')).

The four special characters noted above in the example (that is, a blank, a comma, a right parenthesis, and a left parenthesis), hyphens and all lower case alphabetic characters must be coded in hexadecimal notation. Hexadecimal values for other than these five special characters may be coded in the compaction statement by putting the hexadecimal representation in the character string; they may be intermixed with EBCDIC values. For example:

```
COMPACT NAME=DATASET3,          /* comp table name */
        CHARS=(16,             /* no. mast chars */
              F1,F2,3,4,5,F6,F7,8,F9,
              A,E,I,D6,E4,40,X),      /* master chars */
        NUMBER=3                /* compact table number */
```

This example specifies the compaction table DATASET3 (that is, table number 3) with 16 master characters (both hexadecimal and EBCDIC representations) and no nonmaster characters.

**Note:** Hexadecimal 00 (NULL) is reserved and not accepted as either a master or nonmaster character.

This parameter value must be specified.

**Modification:** Hot start.

For more details, see *z/OS JES2 Initialization and Tuning Guide*.

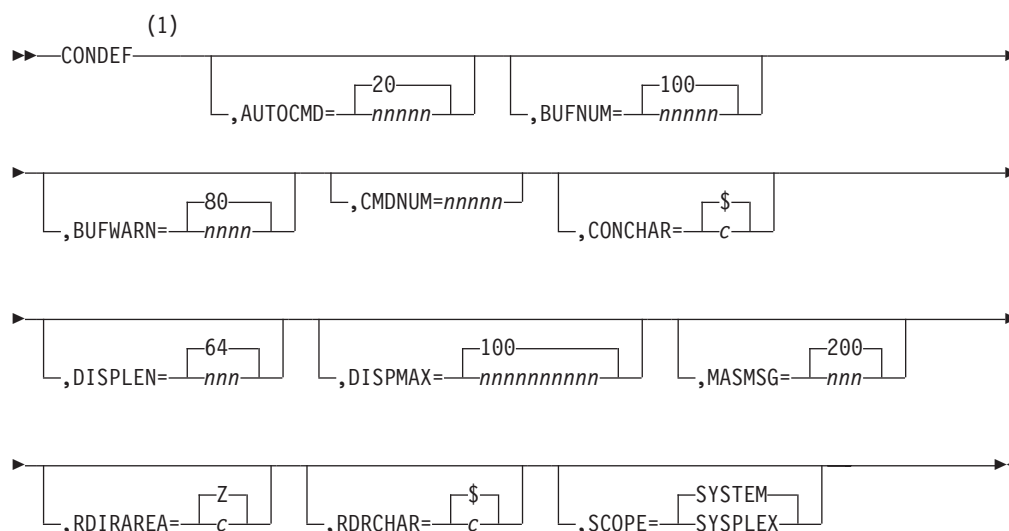
---

## CONDEF - JES2 Console Communication Definition

The CONDEF statement defines the JES2 console communication environment.



## Format Description for CONDEF



### Notes:

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for CONDEF

### **AUTOCMD=nnnnn | 20**

Specifies the number (2-9999) of automatic commands that can be active concurrently in JES2. The value should be large enough to permit operators to leave a JES2 dynamic display in each user defined ("out of line") area of all graphic display consoles and one on each printer console controlled by MVS.

For additional information, see the description of the \$T A command in *z/OS JES2 Commands*.

**Modification:** Hot start.

### **BUFNUM=nnnnn | 100**

Specifies the maximum number (4-9999) of console message buffers to be provided for JES2 from private storage (above 16-megabytes in virtual storage). The value specified for BUFNUM will be rounded up to the next page boundary to take advantage of available storage.

You must specify enough buffers to accommodate all message processing. When using NJE or RJE, you need more message buffers, especially for console support for multileaving terminals. If you do not specify BUFNUM= large enough, JES2 will fail during initialization.

If there is a large amount of console activity and buffers are unavailable, JES2 discards certain noncritical messages to avoid any delay in processing. These messages include: RJE-oriented messages, execution-time job overflow messages, and certain I/O error messages on JES2-controlled devices.

For multileaving terminal consoles, if the number of messages received exceeds the number of buffers specified by BUFNUM=, JES2 spools the excess messages and prints them later. Normal message processing resumes when the console accepts the messages queued before exceeding the BUFNUM= limit.

## CONDEF

**Note:** Use this parameter to increase the limit for the JNUM resource that is reported on the HASP050 message.

**Performance Considerations:** Use BUFNUM=1000 as a minimum starting value and increase the value using the \$T CONDEF command if the \$HASP050 message indicates a shortage. Because console messages must wait for buffers, too small a value slows the system.

As a rough approximation, estimate the BUFNUM= value as follows:

```
BUFNUM=  
  (PARTNUM= on INITDEF statement) x 2  
  + number of typically active readers (i.e., local, remote, internal)  
  + number of typically active printers (i.e., local, remote)  
  + number of typically active punches (i.e., local, remote)
```

Use the larger of the two values: either 1000 or the value specified above.

**Modification:** \$T CONDEF operator command to increase the limit. Hot start to decrease the limit.

### **BUFWARN=nnn | 80**

Specifies the percentage (0-100) of use of console message buffers at which the operator will be alerted by message \$HASP050. If you specify 0, no alert will be given.

**Modification:** \$T CONDEF operator command.

### **CMDNUM=nnnnn**

Specifies the maximum number (4-9999) of console message buffers to be allocated for command processing for JES2 from common storage.

JES2 refuses any commands entered after the command that exceeds the CMDNUM= limit. If you queue a large number of commands to JES2, too large a value may lead to an excessively large allocation of ECSA virtual storage.

**Note:** Use this parameter to increase the limit for the JNUM resource that is reported on the HASP050 message.

**Default:** BUFNUM parameter

**Modification:** \$T CONDEF operator command to increase or decrease the limit.

### **CONCHAR=c | \$**

Specifies the character that will be used to identify JES2 commands from local consoles. If a command from a local console begins with the character specified for CONCHAR, JES2 assumes that the command is a JES2 command and attempts to process it.

The value you specify should be a special character that is not used as the first character of any command of any other subsystem that may be operated concurrently with JES2. The character should be one of the following:

1/2 | ( % : . & + \_ # < ! - > @ " / ? = ~ \*

If the CONCHAR parameter is changed to a character other than its default (\$), the commands will vary from their documented format in *z/OS JES2 Commands*, the messages will vary from the format in *z/OS JES2 Messages*, and the character chosen will be on the consoles and hardcopy log.

You must use the default CONCHAR= character (\$) on JES2 commands imbedded in the JES2 initialization data set regardless of what you specify for CONCHAR=.

**Note:** To use the MVS ROUTE \*ALL command to expand the scope of a command (so that a command can be routed to all the members of the MAS), each member of the MAS must have the same CONCHAR character. See *z/OS JES2 Commands* for more information about the scope of each command, and about using JES2 and MVS commands together.

**Modification:** \$T CONDEF operator command. You cannot modify this parameter on a hot start.

**DISPLEN =nnn|64**

Specifies the length (50-70 characters) of output lines for most multi-line display and diagnostic messages. If you specify too low a number, single-line command responses can wrap around your console. If you enter the \$N nnn,Mn command, the node and specific multi-access spool (MAS) member appear at the start of each line. If you specify DISPLEN=70 and the node and specific MAS member total eight characters, your console only displays the first 62 characters of the message.

**Modification:** \$T CONDEF operator command.

**DISPMAX=nnnnnn|100**

Specifies the maximum (10-9999999) lines of output that JES2 allows before the \$SCAN facility ends the output because of excessive output. This option does not affect all the JES2 commands. Commands that use a range of values as an operand, could cause an enormous amount of output. DISPMAX= will limit the output without limiting the range of objects the command will affect. For example, if you enter \$T NODE(\*),RECEIVE=JOBS, the command will change all nodes, and then start to display them. DISPMAX= will stop the display after the number of lines specified, but all nodes will be changed.

**Modification:** \$T CONDEF operator command.

**The DISPMAX= parameter is not honored when:**

1. Output is displayed for error conditions.
2. Output is destined for an out-of-line area on the MCS console, or a command is issued with the explicit L= parameter that specifies an out-of-line area or L=Z. In this case, the output will still be ended at the maximum of 9999999 lines.

**MASMSG=nnn|200**

Specifies the maximum number (10-999) of messages or commands that will be queued between any two members of a multi-access spool configuration before messages are discarded. This count also applies to the number of input messages or commands queued for the system.

**Modification:** \$T CONDEF operator command.

**RDIRAREA=c|Z**

Specifies a character representing the default console out-of-line area JES2 uses to direct display responses for commands subject to redirection. Redirectable commands that do not include an L= and are not named on a REDIRect initialization statement, or a \$ADD or \$T statement, will have their responses directed to the RDIRAREA specification. See *z/OS MVS Planning: Operations* for information on out-of-line display areas and how to define them.

This parameter defaults to Z, which specifies that the response will be in-line.

## CONDEF

**Modification:** Hot Start or \$T CONDEF operator command.

**RDRCHAR=c|\$\_**

Specifies the character that will be used to identify all JES2 operator commands entered from a local or remote card reader. If a JES2 control card is read (/ \* in columns 1 and 2) that contains this character in column 3, JES2 will assume that the card is a JES2 command statement and will attempt to process the command.

The specification should be one of the following characters:

1/2 | ( % : . & + \_ # < ! - > @ " / ? = ~ \*

If this parameter is changed to a value other than its default, the command control statement will vary from the format given in *z/OS MVS JCL Reference*. You can use the same character as that specified for the CONCHAR parameter on this initialization statement.

**Modification:** \$T CONDEF operator command.

**SCOPE=SYSTEM | SYSPLEX**

Specifies whether the command prefix specified on the CONCHAR parameter is recognized by this MVS system only, or by all MVS systems in the sysplex.

SCOPE=SYSTEM specifies that the prefix is recognized by this MVS system, but if the command was entered on a different MVS system, that system would not recognize or send the command to this system.

SCOPE=SYSPLEX specifies that the prefix is recognized as belonging to this system no matter which MVS system in the sysplex the command was entered on, and, if necessary, is routed to the correct MVS system for processing by this subsystem.

See *z/OS JES2 Initialization and Tuning Guide* for a discussion of how to correctly specify SCOPE= in a sysplex to provide unique CONCHAR= character definitions for multiple JES2 images.

**Modification:** Single-member warm start.

---

## CONNect - Static NJE Connections

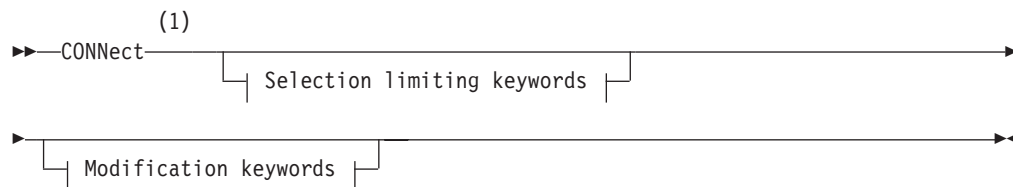
Use the CONNect statement to define a permanent connection between two nodes, each of which is defined by a related NODE initialization statement. The NodeA= parameter provides a means of describing a job entry subsystem as being connected to another job entry subsystem described by the NodeB= parameter. The connection must be defined among the initialization parameters of both members involved in the connection, and among the initialization parameters of any other members in the network which are to know that the connection exists.

**Note:** Incorrect use of the CONNect statement may adversely affect the network. The CONNect statement has to appear after the NODE(xxxxxxxx) statements in the initialization deck if the NodeA/NodeB parameters on the CONNect statement are specified using the symbolic node name. Before using the CONNect statement, see *z/OS JES2 Initialization and Tuning Guide* for more information on static connections.

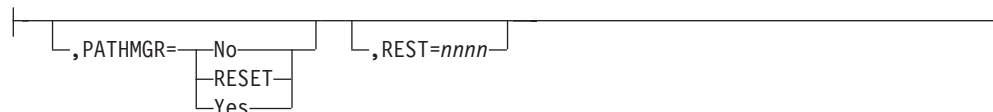
### Adding Static Connections

This statement and all its parameters can be added after initialization with the \$ADD CONNect operator command.

## Format Description for CONNect



### Modification keywords:



### Selection limiting keywords:



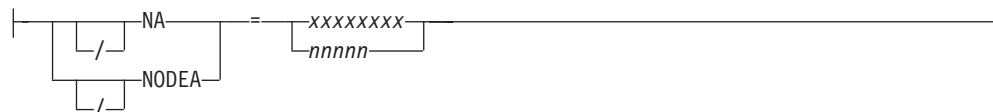
### MEMBERA:



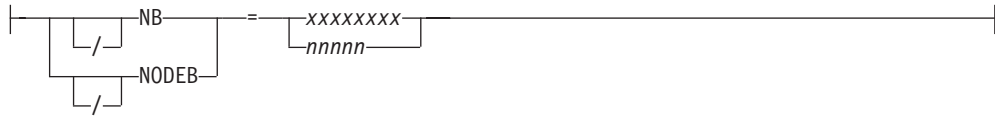
### MEMBERB:



### NODEA:



**NODEB:**



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter Description CONNECT**

**NodeA=xxxxxxx | nnnnn**

Specifies the symbolic node name (xxxxxxx) or node number (nnnnn) of the node at the NodeA end of the connection. The name must be specified on the NAME= parameter of the NODE initialization statement for the referenced node.

**Note:**

1. If coding the symbolic node name for this parameter, the NODE(xxxxxxx) statement where the node name is defined must be placed before the CONNECT statement in the initialization stream.
2. NODEA and NODEB may appear in any order when defining a static connection, that is NODEA does not have to be your node or the other end. When JES2 resolves the static connection, the order may be different than what was entered on the command when you issue a \$DCONNECT. This is because the node with the smallest number will always be assigned to NODEA. The end result is the same.

This parameter must be specified.

**Modification:** \$ADD CONNECT operator command or \$DEL CONNECT operator command.

**MemberA=n | 1**

This value is 1; it specifies the member number of NodeA.

**Note:** Most supported NJE nodes require this parameter to be defaulted or set to 1. This parameter should only be used if the documentation for the NJE product on the node specified by NodeA= requires it. Improper specification of this field can cause portions of your NJE network to be unreachable. IBM suggests that you do not specify this parameter and allow it to default.

**Modification:** \$ADD CONNECT operator command or \$DEL CONNECT operator command.

**NodeB=xxxxxxx | nnnnn**

Specifies the symbolic node name (xxxxxxx) or node number (nnnnn) of the node at the NodeB end of the connection. The name must be specified on the NAME= parameter of the NODE(xxxxxxx) initialization statement for the referenced node.

**Note:**

1. If coding the symbolic node name for this parameter, the NODE(xxxxxxx) statement where the node name is defined must be placed before the CONNECT statement in the initialization stream.

2. NODEA and NODEB may appear in any order when defining a static connection, that is NODEA does not have to be your node or the other end. When JES2 resolves the static connection, the order may be different than what was entered on the command when you issue a \$DCONNECT. This is because the node with the smallest number will always be assigned to NODEA. The end result is the same.

This parameter must be specified, even for non-JES2 nodes.

**Modification:** \$ADD CONNect operator command or \$DEL CONNect operator command.

**MemberB=n|1**

This value is 1; it specifies the member number of NodeB.

**Note:** Most supported NJE nodes require this parameter to be defaulted or set to 1. This parameter should only be used if the documentation for the NJE product on the node specified by NodeB= requires it. Improper specification of this field can cause portions of your NJE network to be unreachable. IBM suggests that you do not specify this parameter and allow it to default.

**Modification:** \$ADD CONNect operator command or \$DEL CONNect operator command.

**PATHMGR= Yes | No | RESET**

Specifies whether or not this connection supports path manager protocols. PATHMGR=RESET specifies that the value of PATHMGR= should be reset to the default.

If PATHMGR=Yes was specified on both of the related NODE(xxxxxxx) initialization statements, then this parameter defaults to PATHMGR=Yes. Otherwise, this parameter defaults to PATHMGR=No.

**Modification:** \$T CONNect operator command.

**REST=nnnn**

For connections between subsystems of different nodes, an integer between 2 and 8000 that specifies the total path resistance of the connection (see *z/OS JES2 Initialization and Tuning Guide* for more information). This value will be set to zero for connections between subsystems of the same node.

This parameter defaults to 0; however, neither 0 nor 1 is valid if explicitly specified.

**Modification:** \$T CONNect operator command.

## D INITINFO - Display initialization information

The D INITINFO statement displays JES2 initialization information. It displays the command used to start JES2, the initialization decks used with a count of cards read, and the list of data sets included in the STEPLIB concatenation in the JES2 PROC.

### Format description for D INITINFO



## D INITINFO

### Notes:

- 1 Omit the comma between initialization statement and first keyword

## Parameter description for D INITINFO

### STARTCMD

Displays the command, if applicable, that was used to start this instance of the JES2 address space.

**Modification:** Hot start.

### HASPPARM

Displays the data sets that have been read thus far for the JES2 initialization statements, and the number of cards that have been read from each data set. Up to 256 data sets can be displayed.

**Modification:** Hot start.

### STEPLIB

Displays the STEPLIB DD concatenation that is currently set for JES2.

**Modification:** Hot start.

## Example of D INITINFO

The following command displays JES2 initialization information:

```
$HASP825 INITINFO --- Command used to start JES2
$HASP825          S JES2,M=SPOOLZ21,PARM=(WARM,NOREQ)
$HASP825          --- HASPPARM data sets read
$HASP825          DSN=SYS1.PARMLIB(SPOOLZ21),VOLSER=J2SHR2,
$HASP825          CARDS=458,
$HASP825          DSN=SYS1.PARMLIB(DYNEXITD),CARDS=121,
$HASP825          DSN=CONSOLE,CARDS=1
$HASP825          --- STEPLIB Concatenation
$HASP825          DSN=NULL.JES2000.LINKLPA,VOLSER=J2SPA1,
$HASP825          DSN=SYS1.SRVLIB.JES2000.LINKLPA,
$HASP825          VOLSER=J2SPA1,
$HASP825          DSN=SYS2.LINKLIB,VOLSER=ZDR21,
$HASP825          DSN=SYS1.MIGLIB,VOLSER=ZDR21
```

---

## D LOADMOD(jxxxxxxx) - Display Load Module Definitions

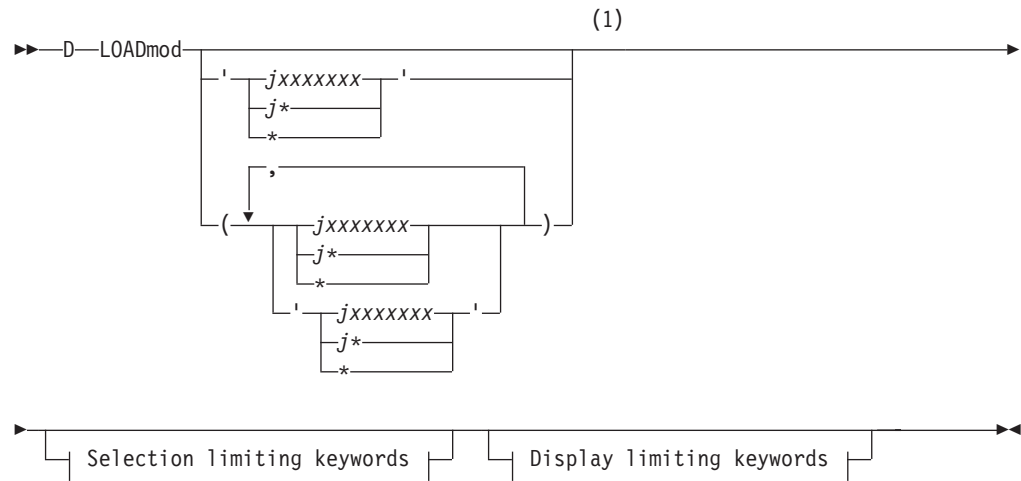
To display information that would be useful for diagnosing JES2 problems. Use this command to get the virtual address where a load module has been loaded in storage, exit routines included in the load module, its length, the RMODE, and the area of storage where the load module is located.

This command has parameters you can use as a filtering technique to limit the type of information to search, or the amount of information to display.

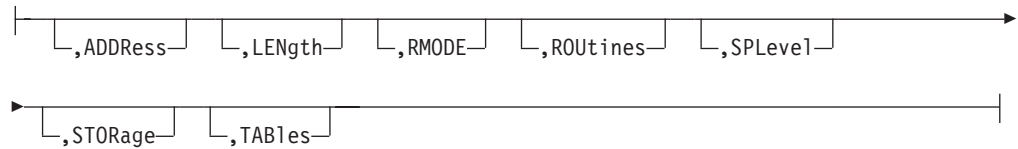
One or more parameters on this command accepts wild cards. Parameter descriptions will note that.

## Format Description for D LOADMOD(jxxxxxxx)

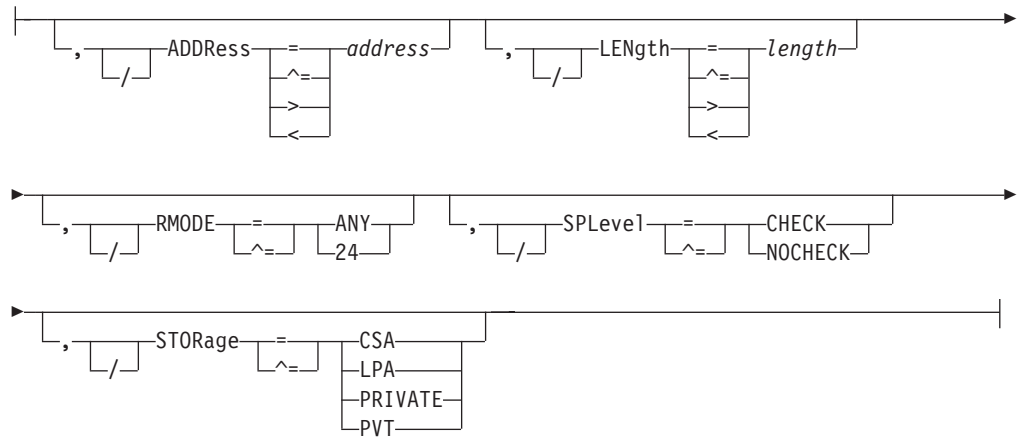




**Display limiting keywords:**



**Selection limiting keywords:**



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter Description for D LOADMOD(jxxxxxxx)**

**jxxxxxxx**

Specifies the JES2 load module name for which information is to be displayed. Specify the load module name (for example, HASCLINK) to obtain specific load module information, or an asterisk ( \* ) to obtain information for **all** load modules. You can also specify wild cards for the load module name. The following load modules cannot be displayed:

- HASPFSSM

## D LOADMOD(jxxxxxxx)

- HASJES20
- Load modules beginning with the characters HASM.

### ADDRESS

Displays the hexadecimal address of the load module in storage.

### LENGTH

Displays the load module's exact hexadecimal length.

### RMODE [=24|ANY]

Displays the link-edit attributes of the load module. Optionally, you can specify one of the following keywords to display load modules that reside in a particular area:

#### Value Meaning

- |            |  |
|------------|--|
| <b>24</b>  | Display only those load modules that reside below 16 megabytes of virtual storage. |
| <b>ANY</b> | Display only those load modules that reside above 16 megabytes of virtual storage. |

### ROUTINES

Displays the routines that are defined using the \$ENTRY macros in a module. These routines are available for use through the EXIT(nnn) initialization statement.

Only routine names in installation-provided modules or in IBM-provided sample exit modules will be included.

### SPLEVEL [=CHECK|NOCHECK]

Displays the value the module assigned to the SPLEVEL= parameter on the \$MODULE macro. Optionally, you can display only those modules that have assigned a specific value to the \$MODULE SPLEVEL= parameter by coding one of the following keywords:

#### Value Meaning

##### CHECK

Display only those modules that specified CHECK on the \$MODULE SPLEVEL= parameter.

##### NOCHECK

Display only those modules that specified NOCHECK on the \$MODULE SPLEVEL= parameter.

### STORAGE [=CSA|PVT|LPA|PRIVATE]

Displays the type of storage in which the load module resides. Optionally, you can specify an area of storage.

Code one of the following keywords:

#### Value Meaning

**CSA** Display only those load modules that are loaded into common storage.

##### PVT|PRIVATE

Display only those load modules that are loaded into the private storage of the JES2 address space.

**LPA** Display only those load modules that are loaded into link pack area storage.

**TABLES**

Displays any DYNAMIC tables which are defined in this module, along with the type of table.

**D MODule(jxxxxxxx) - Display Module Information**

This is a display-only statement that displays information about loaded assembly modules, including installation-written exit routines.

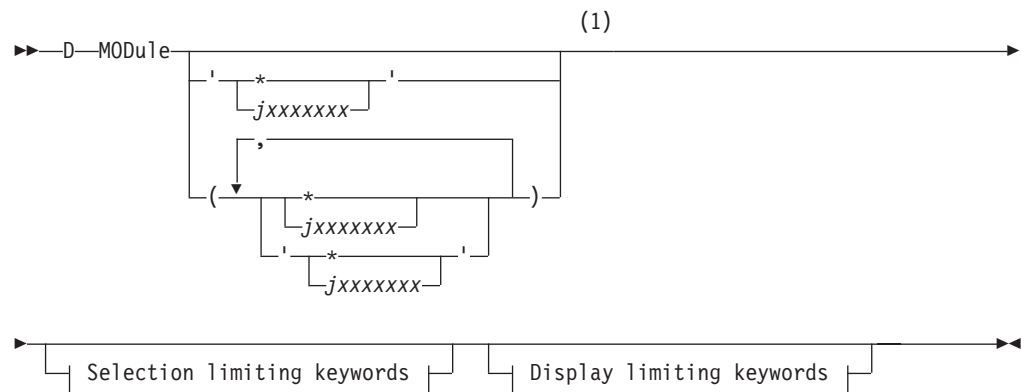
The display for each module includes the module name and any of the following information:

- The storage address where the module is loaded and the module length.
- The module's assembly environment.
- Any exit points defined within the module.
- The number of the last APAR applied to the module.
- The name of the load module that contains the assembly module.
- The level of the MVS macro library used during assembly of the module.
- The names of any exit routines that are included in the module.
- The value that the module assigned to the \$MODULE SPLEVEL= parameter.
- For IBM-provided JES2 modules, the display can also include an indication of the module type.

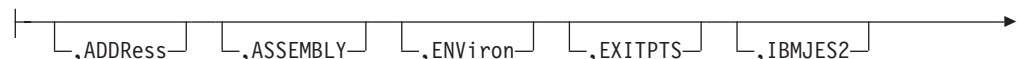
The information is displayed in message \$HASP468 on the master console.

This statement displays information similar to that displayed by the \$D MODule command. In addition, this statement can provide information about modules that are in storage during JES2 initialization but are no longer in storage when the \$D MODule command can be issued.

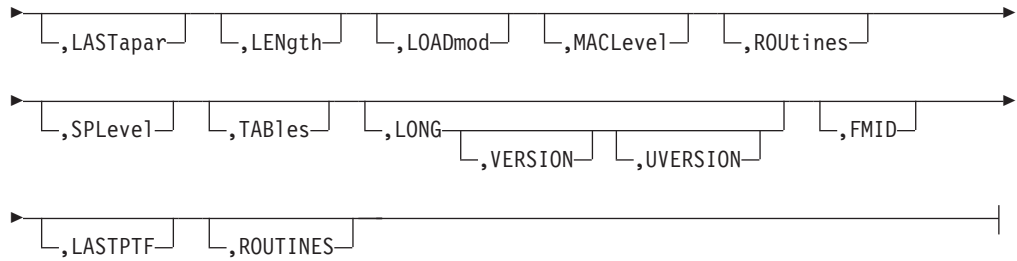
**Format Description for D MODule(jxxxxxxx)**



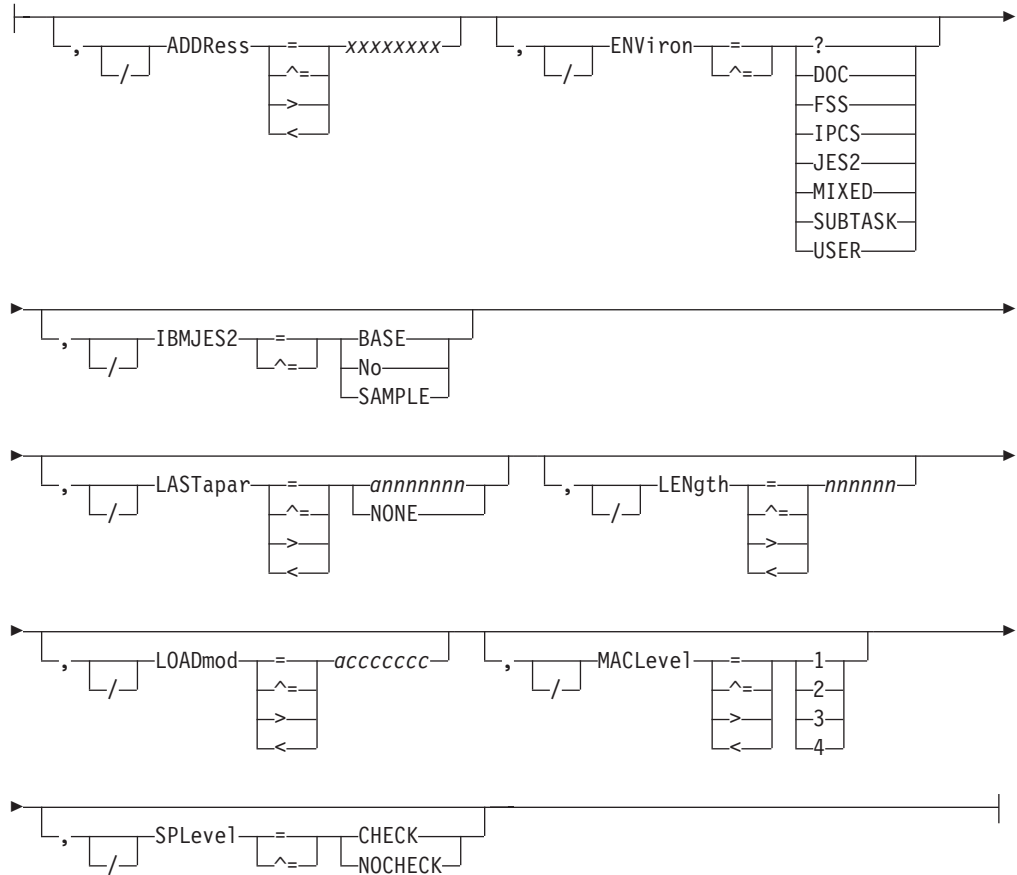
**Display limiting keywords:**



## D MODule(jxxxxxxx)



### Selection limiting keywords:



### Notes:

- 1 Omit the comma between initialization statement and first keyword

## Parameter Descriptions for D MODule(jxxxxxxx)

### MODule{(jxxxxxxx|\*)}

Identifies the JES2 module for which information is to be displayed.

- To display information about a specific module, code `jxxxxxxx` where `jxxxxxxx` is the module name. For example, to display information about module `HASPNUC`, code:

**D MODule(HASPNUC)**

- To display information about a specific group of modules, code a portion of the module name followed by an asterisk. For example, to display information about all modules whose name begins with `HASPN`, code:

**D MODule(HASPN\*)**

- To display information about all modules, code

**D MODule(\*)****ADDR**

The display is to include the hexadecimal address where the module is loaded into storage. If a module is not in storage, an address of 00000000 is displayed.

**ASSEMBLY**

The display is to include the date and time the module was assembled.

**ENViron[=FSS|JES2|MIXED|SUBTASK |USER|DOC|IPCS|?]**

This parameter either requests that the display for each module include the value of the module's \$MODule ENVIRON= parameter or it filters on the value of each module's \$MODule ENVIRON= parameter to limit the set of modules for which information is displayed.

- To request that the display for each module include the value of the \$MODule ENVIRON= parameter on the D MODule statement, code ENV without the equal sign and a keyword value.
- To request that the parameter act as a filter, on the D MODule statement code ENV= followed by a keyword value.

When this parameter acts as a filter, information for each module is displayed only if the value you code on the D MODule ENV= parameter matches the value on the module's \$MODule ENVIRON= parameter.

Valid key-word values for the D MODule ENV= parameter and their meanings are:

**Value    Meaning**

?        Display all modules.

**DOC**    Display only those modules assembled with an environment of DOC.

**FSS**     Display only those modules that are assembled for the FSS address space environment.

**IPCS**    Display only those modules that were assembled for the JES2 IPCS command.

**JES2**    Display only those modules that are assembled for the JES2 address space main task environment.

**MIXED**

Display only those modules that are assembled for multiple environments.

**SUBTASK**

Display only those modules that are assembled for the JES2 address space subtask environment.

**USER**    Display only those modules that are assembled for the multi-address-space user environment.

The following examples show how you might code this parameter:

- If you code:

**D MODule(\*) ENV**

information is displayed for all modules and includes the value of the module's \$MODule ENVIRON= parameter.

## D MODule(jxxxxxxx)

- If you code:  
**D MODule(\*) ENV=JES2**

the display includes only those modules that were assembled for the JES2 environment: that is, the modules whose \$MODule macro specifies ENVIRON=JES2.

### EXITPTS

The display is to include the exit points defined in the module. If the module being displayed issued the \$EXIT macro, the display includes the exit points defined by that macro. An exit point is a number from 0 through 255. For example, if the module defined exit point 31, the display shows **EXITPTS=(31)**.

If the module did not issue the \$EXIT macro, the display shows

**EXITPTS=( )**.

### FMID

Displays the FMID of the release of JES2.

### IBMJES2 [=BASE|No|SAMPLE]

This parameter requests that the display for each module include a field that indicates the category of the module. The categories are: a base module in the JES2 product, a JES2-provided sample exit routine, or any other JES2 module that's not provided as part of the JES2 product.

Alternately, this parameter acts as a filter. As a filter, the parameter limits the display to only those modules that fall into one of the three module categories just mentioned.

- To request that the display include the category of each module, code IBMJES2 omitting the equal sign and the keyword values.
- To request that the parameter act as a filter, code IBMJES2= followed by a keyword value. The keyword values and their meanings are:

#### Value Meaning

**BASE** Limit the display to only base modules in the JES2 product.

#### SAMPLE

Limit the display to JES2-provided sample exit routines.

**NO** Limit the display to JES2 modules that are not base modules or JES2-provided sample exit routines.

### LASTapar [=aannnn|NONE]

This parameter requests that the display for each module include the number of the last APAR applied to the module.

Alternately, this parameter acts as a filter. As a filter, the parameter limits the display to only those modules that have a specific APAR applied as the last APAR or to those modules that have no APARs applied.

- To request that the display include the number of the last APAR applied to each module, code LASTAPAR without coding the equal sign and a keyword value. For IBM-provided modules, the display includes the APAR number, or if no APAR has been applied, the display is the string NONE. For non-IBM modules that contain a character constant with the label APARNUM, the display includes the value of the character constant. For non-IBM modules that do not contain this constant, the display includes the value of the &UVERS global variable.
- To request that the parameter act as a filter, code LASTAPAR= followed by a keyword value. The keyword values and their meanings are:

**Value Meaning****aannnnn**

Limit the display to only those modules that have APAR *aannnnn* applied as their last APAR.

**NONE**

Limit the display to only those modules that have no APARs applied.

**LASTPTF**

Displays the latest PTF maintenance applied to this module.

**LENgth=nnnnn**

This parameter displays the module hexadecimal length. The length that is displayed is the module's approximate length within 8 bytes of the accurate length. The display is to include the module length. The length that's displayed is the module's approximate length and is generally within 8 bytes of the actual module length.

**LOADmod [=accccc]**

This parameter requests that the display for each module include the name of the load module that contains the assembly module.

Alternately, this parameter acts as a filter. As a filter, the parameter limits the display to only those assembly modules that are contained within a specific load module.

- To request that the display for each assembly module include the name of the containing load module, code LOAD without coding the equal sign and the name of a load module.
- To request that the parameter act as a filter, code LOAD= followed by a load module name. The display will include only those assembly modules that are contained within the named load module.

**LONG**

Displays additional information:

**VERSION**

Displays the version of JES2.

**UVERSION**

Displays the user version of JES2.

**MACLevel [=1|2|3|4|5|6]**

This parameter requests that the display for each module include the level of the MVS macro library used during assembly of the module.

Alternately, this parameter acts as a filter. As a filter, the parameter limits the display to only those modules that used a specific MVS macro library during assembly.

- To request that the display for each module include the level of the MVS macro library used during assembly, code MACL without coding the equal sign and a numerical value.
- To request that the parameter act as a filter, code MACL= followed by a numerical value. The numerical values and their meanings are:

**Value Meaning****1**

Display only those modules that used the level 1 MVS macro library, MVS/SP Version 1, Release 3.

## D MODule(jxxxxxxx)

- 2 Display only those modules that used the level 2 MVS macro library, MVS/SP Version 2.
- 3 Display only those modules that used the level 3 MVS macro library, MVS/SP Version 3.
- 4 Display only those modules that used the level 4 MVS macro library, MVS/ESA Version 4.
- 5 Display only those modules that used the level 5 MVS macro library, OS/390<sup>®</sup> Release 1 and MVS/ESA SP Version 5.
- 6 Display only those modules that used the level 6 MVS macro library, OS/390 Release 2.

### ROutines

Displays routines and their addresses within the module. Only routines defined through \$ENTRY are displayed. When used as a filter, displays only the module containing the routine, and only the specified routine address unless LONG is also specified.

### SPLevel [=CHECK|NOCHECK]

This parameter requests that the display for each module include the value the module assigned to the SPLEVEL= parameter on the \$MODule macro.

Alternately, this parameter acts as a filter. As a filter, the parameter limits the display to only those modules that have assigned a specific value to the \$MODule SPLEVEL= parameter.

- To request that the display for each module include the value assigned to the \$MODule SPLEVEL= parameter, code SPLEVEL without coding the equal sign and a keyword value.
- To request that the parameter act as a filter, code SPLEVEL= followed by one of the following keywords:

#### Value Meaning

##### CHECK

Display only those modules that specified CHECK on the \$MODule SPLEVEL= parameter.

##### NOCHECK

Display only those modules that specified NOCHECK on the \$MODule SPLEVEL= parameter.

### TABles

Displays any DYNAMIC tables which are defined in this module, along with the type of table.

## Usage Note for D MODule(jxxxxxxx)

You can place this statement anywhere within the initialization stream.

## Examples of D MODule(jxxxxxxx)

1. For all JES2 modules, display all applicable information.

#### D MODule(\*)

```
$HASP468 MODule(HASCDAU) ADDRESS=02FF7000,ASSEMBLY=(09/12/92,
$HASP468 16.07),ENVIRON=USER,EXITPTS=(),
$HASP468 IBMJES2=BASE, LASTAPAR=NONE,
$HASP468 LENGTH=0002D0,LOADMOD=HASCDAU,
$HASP468 MACLEVEL=4,SPLEVEL=CHECK
$HASP468 MODule(HASCDALS) ADDRESS=02FF2000,ASSEMBLY=(09/12/92,
$HASP468 16.07),ENVIRON=USER,
```



```

$HASP468          EXITPTS=(31,34,48),IBMJES2=BASE,
$HASP468          LASTAPAR=NONE,LENGTH=004CA0,
$HASP468          LOADMOD=HASCDSAL,MACLEVEL=4,
$HASP468          SPLEVEL=CHECK
$HASP468 MODu1e(HASCDSOC) ADDRESS=02FEF000,ASSEMBLY=(09/12/92,
$HASP468          16.07),ENVIRON=USER,EXITPTS=(30,33),
$HASP468          IBMJES2=BASE,LASTAPAR=NONE,
$HASP468          LENGTH=002A68,LOADMOD=HASCDSOC,
$HASP468          MACLEVEL=4,SPLEVEL=CHECK
$HASP468 MODu1e(HASCDS)  ADDRESS=02FED000,ASSEMBLY=(09/12/92,
$HASP468          16.07),ENVIRON=USER,EXITPTS=(),
$HASP468          IBMJES2=BASE,LASTAPAR=NONE,
$HASP468          LENGTH=001190,LOADMOD=HASCDS,
$HASP468          MACLEVEL=4,SPLEVEL=CHECK

```

⋮

2. For all JES2 modules whose last applied service was APAR OY52946, display all applicable information.

**D MODu1e(\*) LASTAPAR=OY52946**

```

$HASP468 MODu1e(HASPMMSG) ADDRESS=00051000,ASSEMBLY=(09/12/92,
$HASP468          16.15),ENVIRON=JES2,EXITPTS=(),
$HASP468          IBMJES2=BASE,LASTAPAR=OY52946,
$HASP468          LENGTH=009E40,LOADMOD=HASJES20,
$HASP468          MACLEVEL=4,SPLEVEL=CHECK
$HASP468 MODu1e(HASPNATS) ADDRESS=0005B000,ASSEMBLY=(10/02/92,
$HASP468          19.34),ENVIRON=JES2,EXITPTS=(),
$HASP468          IBMJES2=BASE,LASTAPAR=OY52946,
$HASP468          LENGTH=002830,LOADMOD=HASJES20,
$HASP468          MACLEVEL=4,SPLEVEL=CHECK
$HASP468 MODu1e(HASPNPM)  ADDRESS=00062000,ASSEMBLY=(10/02/92,
$HASP468          19.34),ENVIRON=JES2,EXITPTS=(),
$HASP468          IBMJES2=BASE,LASTAPAR=OY52946,
$HASP468          LENGTH=007F70,LOADMOD=HASJES20,
$HASP468          MACLEVEL=4,SPLEVEL=CHECK
$HASP468 MODu1e(HASPSTAB) ADDRESS=000B8000,ASSEMBLY=(10/02/92,
$HASP468          19.34),ENVIRON=JES2,EXITPTS=(),
$HASP468          IBMJES2=BASE,LASTAPAR=OY52946,
$HASP468          LENGTH=014A18,LOADMOD=HASJES20,
$HASP468          MACLEVEL=4,SPLEVEL=CHECK

```

3. For all JES2 modules, display the loaded address.

**D MODu1e(\*) ADDR**

```

$HASP468 MODu1e(HASCDU)   ADDRESS=02FF7000
$HASP468 MODu1e(HASCDSAL) ADDRESS=02FF2000
$HASP468 MODu1e(HASCDSOC) ADDRESS=02FEF000
$HASP468 MODu1e(HASCDS)  ADDRESS=02FED000
$HASP468 MODu1e(HASCGGKY) ADDRESS=02FEC000
$HASP468 MODu1e(HASCGGST) ADDRESS=02FEB000
$HASP468 MODu1e(HASCHAM) ADDRESS=00B67000
$HASP468 MODu1e(HASCJBST) ADDRESS=02FE7000
$HASP468 MODu1e(HASCJBTR) ADDRESS=02FE5000

```

⋮

4. For all JES2 modules for which APAR OY52964 was the last APAR applied, display the module name and loaded address.

**D MODu1e(\*) LASTAPAR=OY52946,ADDR**

```

$HASP468 MODu1e(HASPMMSG) ADDRESS=00051000
$HASP468 MODu1e(HASPNATS) ADDRESS=0005B000
$HASP468 MODu1e(HASPNPM)  ADDRESS=00062000
$HASP468 MODu1e(HASPSTAB) ADDRESS=000B8000

```

5. For all JES2 modules whose name begins with the string 'HASPI', display the module name and the number of the last APAR applied.

## D MODuLe(jxxxxxxx)

```
D MODuLe(HASPI*) LASTAPAR
$HASP468 MODuLe(HASPIRA) LASTAPAR=NONE
$HASP468 MODuLe(HASPIRDA) LASTAPAR=NONE
$HASP468 MODuLe(HASPIRMA) LASTAPAR=NONE
$HASP468 MODuLe(HASPIRPL) LASTAPAR=NONE
$HASP468 MODuLe(HASPIRRE) LASTAPAR=NONE
$HASP468 MODuLe(HASPIRSI) LASTAPAR=NONE
```

6. For all JES2 modules in load module HASPINIT, display module name, assembly date and time, and the macro level at which the module was assembled.

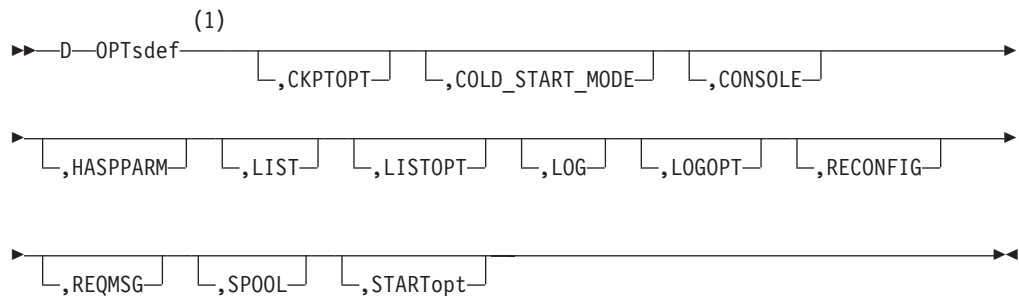
```
D MODuLe(*) LOADMOD=HASPINIT,MACLEVEL,ASSEMBLY
$HASP468 MODuLe(HASPIRA) MACLEVEL=4,ASSEMBLY=(09/12/92,16.14)
$HASP468 MODuLe(HASPIRDA) MACLEVEL=4,ASSEMBLY=(09/12/92,16.14)
$HASP468 MODuLe(HASPIRMA) MACLEVEL=4,ASSEMBLY=(09/24/92,16.24)
$HASP468 MODuLe(HASPIRPL) MACLEVEL=4,ASSEMBLY=(09/12/92,16.14)
$HASP468 MODuLe(HASPIRRE) MACLEVEL=4,ASSEMBLY=(09/12/92,16.14)
$HASP468 MODuLe(HASPIRSI) MACLEVEL=4,ASSEMBLY=(09/12/92,16.14)
```

---

## D OPTsdef - Display JES2 Start Options

Display JES2 start options.

### Format Description for D OPTsdef



#### Notes:

- 1 Omit the comma between initialization statement and first keyword

### Parameter Description for D OPTsdef

#### CKPTOPT

Displays which checkpoint data set JES2 read as the source for building the JES2 work queues during the last restart.

#### COLD\_START\_MODE

Specifies the checkpoint mode (\$ACTIVATE LEVEL) for JES2 to use for COLD starts (Z2, Z11, NULL).

#### CONSOLE

Displays the value of the CONSOLE option.

#### HASPPARM

Displays the name of the data definition (DD) statement that defines the data set containing the initialization statements that JES2 is to use for initialization.

#### LIST

Displays whether or not JES2 lists the current and subsequent initialization statements on the printer defined by the HASPLIST DD statement.

**LISTOPT**

Displays the value of the LISTOPT start option.

**LOG**

Displays whether or not JES2 copies subsequent initialization statements to the printer specified by the HASDCPY console.

**LOGOPT**

Displays the value of the LOGOPT start option which specifies whether or not JES2 logs the initialization statements to a device (if specified).

**RECONFIG**

Displays the value of the RECONFIG start option which specifies whether the operator can specify RECONFIG to override any/all previous checkpoint forwarding.

**REQMSG**

Displays the value of the REQ|NOREQ start option which specifies whether JES2 issues the \$HASP400 ENTER REQUESTS message.

**SPOOL**

Displays whether this member performed a spool validation on its last restart, and whether validation was forced.

**STARTOPT**

Displays the type of start that was specified in the initialization options (FORMAT, COLD, WARM).

**STARTYPE**

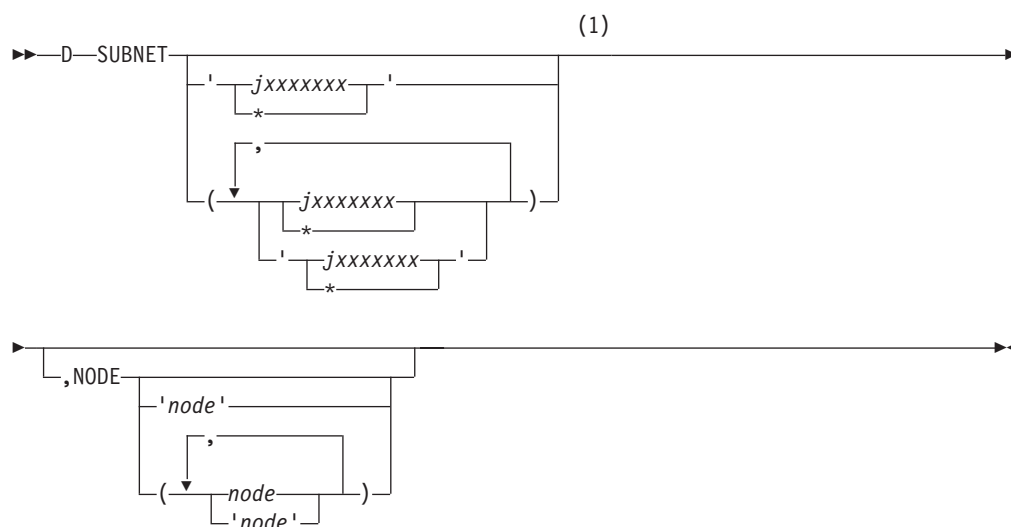
Displays the type of start that was actually performed (FORMAT, COLD, ALL-MEMBER WARM, SINGLE-MEMBER WARM, QUICK, HOT).

---

## D SUBNET(jxxxxxxx) - Display Subnet Connections

Display subnet connections.

### Format Description for D SUBNET(jxxxxxxx)



## D SUBNET(jxxxxxxx)

### Notes:

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for D SUBNET(jxxxxxxx)

(jxxxxxxx|\*)

Specify the 1- to 8-alphanumeric or special (\$, #, or @) character subnet name to obtain information for a specific subnet or specify an asterisk(\*) to obtain information for **all** subnets.

**NODE=nnnn**

Specifies the node number of the subnet connection.

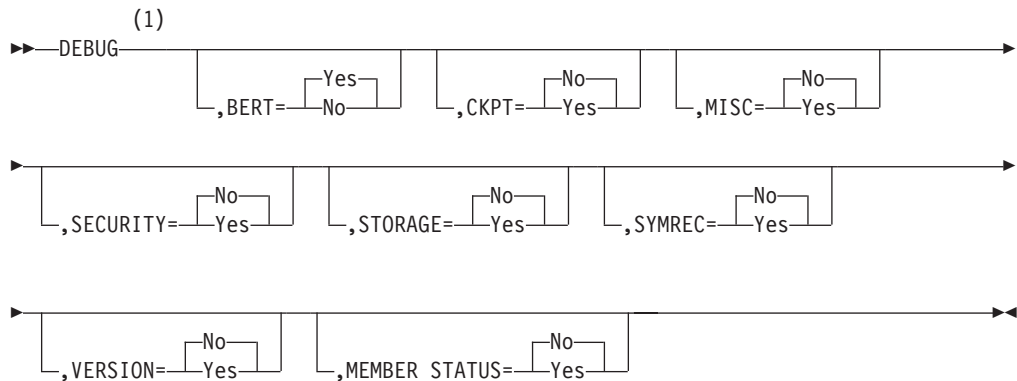
---

## DEBUG - JES2 Debug Option

The DEBUG statement defines whether JES2 will record and monitor specified JES2 activities. The information recorded as a result of selecting this option can only be made available through a dump of the JES2 address space.

**Performance Considerations:** Be aware that if you specify CKPT=, or VERSION= parameters, in a production environment, specifying Yes on these options will affect JES2 performance because it causes JES2 to use noticeably more processor cycles.

## Format Description for DEBUG



### Notes:

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description DEBUG

**DEBUG=Yes|No**

Specifies whether (Yes) or not (No) you require JES2 to record certain JES2 events and to monitor certain JES2 activities. Specifying DEBUG=Yes requests JES2 to record **all** events listed individually on this statement.

**Modification:** \$T DEBUG operator command.

**DEBUG**

Use this form of the DEBUG initialization statement to selectively request JES2 to record certain JES2 events and to monitor certain JES2 activities.

**Modification:** \$T DEBUG operator command.

**BERT=Yes|No**

Specifies whether (Yes) or not (No) JES2 provides error code \$BR3 to inform the operator that a data error has been detected in a chain of BERTs.

**Modification:** \$T DEBUG operator command.

**CKPT=Yes|No**

Specifies whether (Yes) or not (No) JES2 should verify the integrity of the checkpoint data set.

**Modification:** \$T DEBUG operator command.

**MEMBER\_STATUS=Yes|No**

Specifies whether (YES) or not (NO) JES2 issues the \$HASP1701 message when the status of a member has changed.

**Modification:** \$T DEBUG operator command.

**MISC=Yes|No**

Specifies whether (Yes) or not (No) JES2 provides occurrence counting of certain JES2 events.

**Modification:** \$T DEBUG operator command.

**SECURITY=Yes|No**

Specifies whether (Yes) or not (No) JES2 provides additional RACF® security logging related to the \$HASP186 error message. YES specifies that JES2 requests RACF to log access violations, including warning mode violations, for JES2 output work selection for:

- JES2 devices (such as local and remote printers and punches, and NJE and offload SYSOUT transmitters)
- External writer (XWTR) requests
- SYSOUT Application Program Interface (SAPI) requests (SSI function code 79).

If an access violation occurs, and you have DEBUG SECURITY=YES, JES2 issues message \$HASP186 after RACF issues message ICH408I. The LOGSTR that JES2 passes to RACF identifies the problem as one of the following:

- JES2 Work Selection Screening
- External Writer Work Selection Screening
- SYSOUT Application Program Interface (SAPI) requests (SSI function code 79).

**Modification:** \$T DEBUG operator command.

**STORAGE=Yes|No**

Specifies whether (Yes) or not (No) JES2 provides \$HASP095 error code GW3 to inform the operator that \$RETNWORK macro processing detected that the storage being returned was modified beyond the length specified by its associated \$GETWORK macro invocation.

**Modification:** \$T DEBUG operator command.

**SYMREC=Yes|No**

Specifies whether (Yes) or not (No) when JES2 requests that MVS write a symptom record to the logrec data set, JES2 will issue message \$HASP805 *jobname* SYMREC ISSUED FROM *module* WITH A DESCRIPTION OF *desc*. Although the message is useful to inform you of errors, some symptom records

## DEBUG

are informational and you might not want to receive this message whenever JES2 requests a symptom record. Symptom records are written to the logrec data set regardless of this specification.

**Note:** You can use the `DEBUGMSG=No` specification on the `$SYMTAB` macro to suppress the `$HASP805` message even when `SYMREC=Yes` is specified here.

**Modification:** `$T DEBUG` operator command.

### **VERSION=Yes|No**

Specifies whether (Yes) or not (No) JES2 should verify the integrity of a newly created checkpoint version.

**Modification:** `$T DEBUG` operator command.

---

## DESTDEF - Defining How Destinations Are Processed

`SYSOUT` and jobs can be directed to various devices and nodes by JES2 destination processing. How those destinations are interpreted and displayed is controlled by the `DESTDEF` initialization statement.

Some destination prefixes have special meanings to JES2, which can cause difficulties for installations that may want to define userids that use these prefixes. JES2 recognizes a special meaning for destinations of the form `'Nnnnn'`, `'Rmmmm'`, `'RMmmmm'`, `'RMTmmmm'`, `'Unnnn'`, `'NnnnnRmmmm'` (where `'nnnn'` and `'mmmm'` represent numbers from 0 to 32767 unless otherwise defined). Destinations of this form are called explicit destinations.

`DESTDEF` applies to all destinations that JES2 processes except those specified through the `DEST=` parameter of the `DESTID` initialization statement.

JES2 destinations are composed of two parts:

- A first-level destination indicating a particular node.
- A second-level destination indicating a remote workstation, special local route code, or userid.

An installation can remove the special meaning JES2 processing assumes for the prefixes `'N'`, `'R'`, `'RM'`, `'RMT'`, and `'U'` by specifying `'USER'` on the `Ndest=`, `Rdest=`, `RMdest=`, `RMTdest=` and `Udest=` parameters. If `'USER'` is specified for a particular prefix, it no longer has special meaning in JES2 processing and can be used as a user destination (including TSO/E userids).

The `Rdest=` and `Ndest=` parameters also apply to JES2 destinations that specify both a node and a remote (`NnnnnRmmmm`).

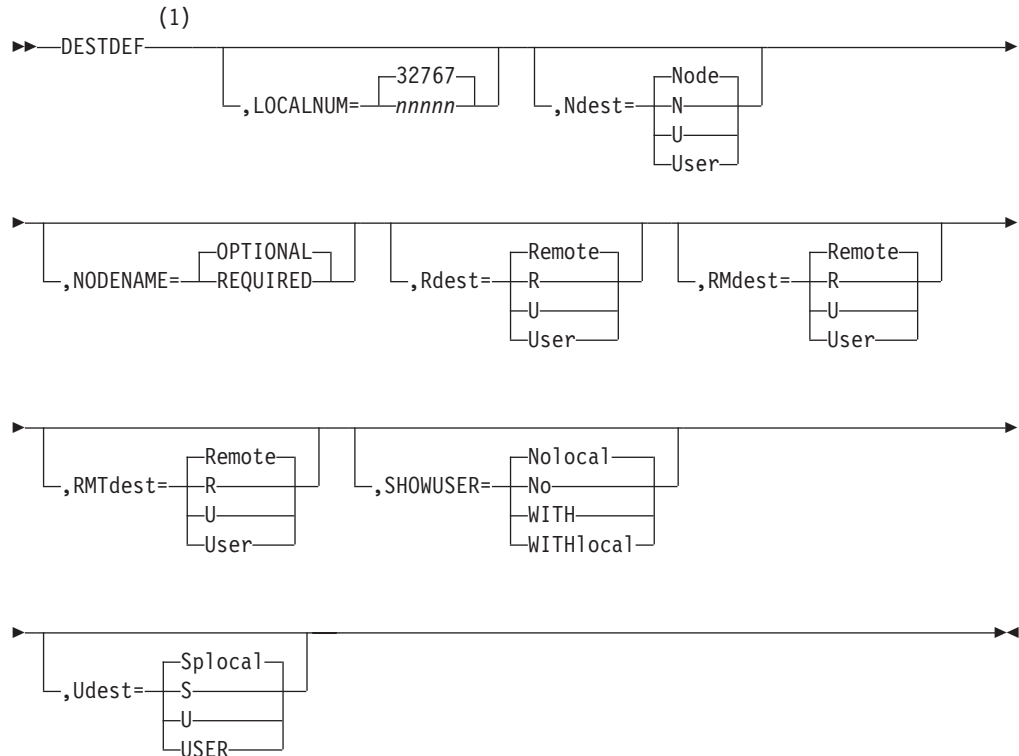
Destinations displayed for `SYSOUT` routed to a user routing at the local node can be confused with other destinations. To eliminate confusion, specify the `SHOWUSER=WITHlocal` parameter so that destinations with user routings are displayed with a `'LOCAL.'` prefix. For example, at the destination node, `'LOCAL.JOHN'` is displayed as the routing for `SYSOUT` with a user routing of `'JOHN'`.

If an installation is using RJE devices and has specified `Rdest=USER`, at least one `DESTID` statement must be defined for each RJE device. If more than one `destid` is defined with any particular RJE routing, at least one of the `destids` must be defined

with PRIMARY=YES. For example, if remote 5 is defined, then 'DESTID(xxxxxxx) DEST=N1.R5,PRIMARY=YES' must also be defined so that JES2 displays the route code 'N1.R5' consistently.

For more examples of how JES2 resolves the display of multiple destids with the same routing, see *z/OS JES2 Initialization and Tuning Guide*.

## Format Description for DESTDEF



### Notes:

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for DESTDEF

### LOCALNUM=nnnnn | 32767

Specifies the maximum special local routing allowed on this member.

Any destination that starts with a 'U' followed by a number that is less than or equal to the LOCALNUM parameter specification is converted to a special local route code. JES2 assumes that a destination greater than the LOCALNUM= parameter specification has no special meaning.

**Note:** If you also specify Udest=USER, this parameter is ignored.

**Modification:** Single-member warm start.

### Ndest=Node | User

Specifies whether JES2 interprets destinations of the form 'Nnnnn' and 'NnnnnRmmmm' as node 'nnnn'(Node) or as userid destinations (User).

## DESTDEF

'nnnn' is a number from 1 to the value specified on the NODENUM= parameter of the NJEDEF statement. Specifying Ndest=Node makes the destination 'Nnnnn' synonymous with the NAME= parameter of the NODE(xxxxxxx) initialization statement.

**Modification:** All-member warm start or JES2 cold start.

### **NODENAME=REQUIRED|OPTIONAL**

NODENAME=REQUIRED indicates that when specifying a userid for a destination, it must be prefixed with a node name. This applies to JES2 commands, JCL, and dynamic allocation (SVC 99) requests. The /\*NOTIFY JECL statement accepts just a userid. For example, if DESTDEF NODENAME=REQUIRED and a DEST= userid is coded on a DD statement, that statement will result in a JCL error. In order to route the SYSOUT data set to a userid, you must prefix the userid with a node name. For example, to route output to userid SMITH at node NEWYORK, even if NEWYORK is the local node, you would specify DEST=NEWYORK.SMITH.

NODENAME=OPTIONAL indicates that userids are allowed to be specified without a node specification. In order to route a data set to a userid on the local node, you do not have to specify the node name. For example, to route a data set to userid JONES at the local node, you can just code DEST=JONES.

**Note:** If you type in a destid for the destination incorrectly and this value conforms to the syntax rules for a userid on the local node, the value will be accepted as a userid.

**Modification:** All-member warm start or JES2 cold start.

### **Rdest=Remote|User**

Specifies whether JES2 interprets destinations of the form 'Rmmmm' and 'NnnnnRmmmm' as an RJE remote workstation 'mmmm' (Remote) or a userid (User).

**Note:** Remote destinations of the form R0xxxxxx are interpreted as userids when you specify RDEST=User or when xxxxxx is greater than 32767. If xxxxxx is between 9999 and 32767 and you specify RDEST=Remote, the "0" is truncated. (That is, your remote destinations take the form of R9999 to R32767.)

**Modification:** All-member warm start or JES2 cold start.

### **RMdest=Remote|User**

Specifies whether JES2 interprets destinations of the form 'RMmmmm' as an RJE remote workstation 'mmmm' (Remote) or a userid (User).

**Modification:** All-member warm start or JES2 cold start.

### **RMTdest=Remote|User**

Specifies whether JES2 interprets destinations of the form 'RMTmmmm' as remote RJE workstation 'mmmm' (Remote) or a userid (User).

**Modification:** All-member warm start or JES2 cold start.

### **SHOWUSER=No1ocal|WITH1ocal**

Specifies whether (WITH1ocal) JES2 destinations for the local node which have user routings are displayed with a 'LOCAL.' prefix or not (No1ocal).

SHOWUSER=WITH1ocal would have output routed to a TSO/E userid of TOM at the local node display as 'LOCAL.TOM'. For the same example, SHOWUSER=No1ocal would display only 'TOM'.



When RDEST, NDEST, or UDEST are specified as USER, SHOWUSER=WITHlocal should be specified to avoid possible confusion when user routings conflict with special local (U3), remote workstation (R5), and node (N1) explicit routings.

SHOWUSER affects how destinations are presented to SDSF. This parameter can affect their security profiles. To evaluate the impact of SHOWUSER, see the *z/OS SDSF Operation and Customization* before specifying the parameter.

**Modification:** \$T DESTDEF operator command.

#### **Udest=Splocal | User**

Specifies whether JES2 interprets destinations of the form 'Unnnn' as special local (Splocal) device routing 'nnnn' or a userid (User). 'nnnn' is a number from 1 to the value specified on the DESTDEF LOCALNUM= parameter.

#### **Note:**

1. When Udest=Splocal, DESTDEF LOCALNUM= specifies the maximum number JES2 allows for a special local routing. For example, if UDEST=Splocal and LOCALNUM=5, JES2 would interpret a destination of 'U3' as a special local route code, but a destination of 'U7' as a userid.
2. LOCALNUM= specifies the maximum number of **special local routing destinations only**, it is honored only if you also specify UDEST=Splocal.

**Modification:** All-member warm start or JES2 cold start.

---

## **DEStid(xxxxxxx) - Route Code Name**

The DEStid(xxxxxxx) statement specifies an installation-defined name for a JES2 route code. By defining DEStid names for route codes, the users and operators can refer to the DEStid names instead of the explicit names provided by JES2 (such as 'Nnnnnn' where 'nnnn' represents a number from 0 to 32767). If you modify this statement and then restart JES2 with a hot start, the parameter value in effect before termination will be used. This statement can be modified through the \$T DEStid command.

## **Adding Destination Identifiers**

This statement and all its parameters can be added after initialization with the \$ADD DEStid operator command.

A JES2 route code consists of a first-level destination that represents the target node for the job or SYSOUT and a second-level destination that represents a destination at a node. Installations can define DEStids for:

- First-level destinations that specify a node name as destination.  
DEStid(SANJOSE) DEST=N5
- Second-level destinations that specify a remote workstation, special local route code, or a userid.  
DEStid(REMOTE3) DEST=R3
- Identifiers that specify both a node and a remote workstation, special local route code, or a userid at that node.  
DEStid(PLOTTER) DEST=N3.U4

DEStids can be referred to in the DEST parameter of the JCL data definition (DD) statements or output statement for SYSOUT data set; in dynamic allocation of SYSOUT; or in the TSO/E OUTPUT command. Also, operators may use DEStids in many JES2 operator commands.

## Specifying the DESTid Subscript

The DESTid subscript (xxxxxxx) specifies the 1- to 8-character name that users and operators may use to refer to the JES2-defined destinations. The characters in the name must not be a valid explicit destination unless you specify USER on the corresponding DESTDEF initialization statement parameters. That is, the name must not be in a form that looks like a valid explicit destination. Consider the following example definition:

```
If you code:          DESTDEF RMTDEST=USER
then:                 DESTid(RMT5) DEST=R5
is valid and possibly useful.
```

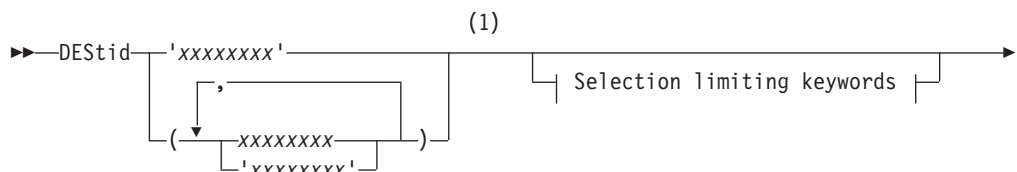
RMTDEF=USER defines destinations such as R5 as a userid rather than a remote workstation name of the form RMT5. DESTid(RMT5) points to R5, a route code defined by initialization statement RMT(5), ROUTECDE=5. RMT5 is then interpreted as remote number 5 instead of userid RMT5. All other destinations of the form RMTmmmmm would be considered as a userid, unless there was a DESTid statement of the form DESTid(RMTmmmmm) DEST=Rmmmmm to define RMTmmmmm as a remote workstation.

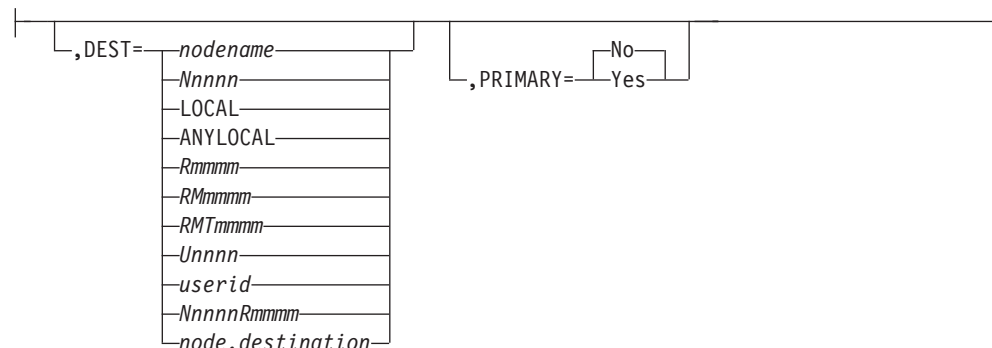
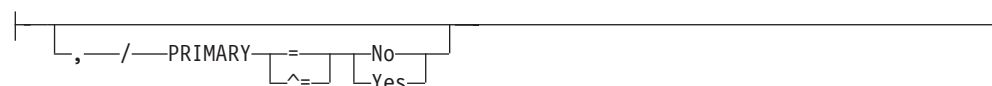
If you do not specify USER for the DESTDEF initialization statement parameters, IBM suggests that you avoid potential confusion when routing SYSOUT from one destination to another by **not** specifying the following forms of TSO/E userid names on a JES2 member:

- Nnnnn
- Rmmmm
- RMmmmm
- RMTmmmm
- NnnnnRmmmm
- Unnnn
- ANYLOCAL | LOCAL
- Any DESTid name defined on a DESTid(xxxxxxx) initialization statement
- Any DESTid name added through a \$ADD DESTid(xxxxxxx) operator command
- Any name specified on the NAME= parameter of the NODE(xxxxxxx) initialization statement
- Any name specified on the NAME= parameter of the \$T NODE(xxxxxxx) operator command.

The subscript can be either a specific destination name (MYDEST1) or a generic destination name (MYD\*). You **cannot** alter the DEST= parameter value with a generic request such as \$T DESTid(MYD\*),DEST=N3, but you can display the value through a generic request using the \$D DESTid(MYD\*) command. Using an asterisk as a filter can be useful when installations have used a particular set of characters (for example NYC) to create all their destination names.

## Format Description for DESTid(xxxxxxx)



**Modification keywords:****Selection limiting keywords:****Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter Description for DEStid(xxxxxxxx)****(xxxxxxxx)**

The 1-8 character symbolic destination name affected by this statement.

**DEST=**

Specifies a route code JES2 can use to route data.

*When specifying only the node (first-level destination):*

**nodename | Nnnnn**

References only the nodal portion (first-level destination) of a JES2 route code.

**nodename**

Specify a symbolic nodename. For example, if NODE(10) is defined with NAME=ALBANY, then an installation can create a DEStid(NYCAP) with DEST=ALBANY.

**Nnnnn**

Specify N followed by a numeric value (1-32767). For example, DEStid(NYCAP) DEST=N10.

*When specifying only the destination at a node (second-level destination):*

**LOCAL | ANYLOCAL | Rmmmm | RMmmmm | RMTmmmm | Unnnn | userid**

References only the destination at a node (second-level destinations).

When these DEStids are referenced, users must specify either an explicit first-level destination or allow JES2 to assign a default

first-level destination. JES2 determines the first-level portion of the destination from one of the following:

- /\*ROUTE PRT JES2 control statement
- /\*ROUTE PUN JES2 control statement
- The output route code associated with the device through which the job entered the member.

For example, DEStid(REMOTE5) DEST=R5 defines a second-level destination. Using the DEStids DEStid(NYCAP) DEST=ALBANY and DEStid(NYCAP) DEST=N10, JCL can route a data set to R5 at N10 by specifying DEST=NYCAP.REMOTE5.

However, if the JCL only specifies DEST=REMOTE5, the nodal portion of the destination is obtained from the default routing of the job. (A job submitted from N10 without any /\*ROUTE JES2 control statements has a default nodal routing of N10, regardless of where in the network it executes.)

Valid destinations:

**LOCAL | ANYLOCAL**

Data is not associated with any specific routing.

**Rmmmm | RMmmmm | RMTmmmm**

Specify R, RM, or RMT, followed by a numeric value (0 - 32767). For example, 'R17' represents remote workstation 17.

**Unnnn**

Specify U followed by a numeric value in the range of 1 through the value specified on the LOCALNUM= parameter of the DESTDEF statement. For example, 'U19' represents special local routing 19.

Use the LOCALNUM= parameter on the DESTDEF initialization statement to specify the highest number for a special local route code. JES2 assumes that numbers beyond this range are userids.

**userid** Specifies a 1- to 8-character string that is interpreted on the destination node. For example, the string 'TANYA' represents a userid (assuming that there are no DEStids that define TANYA at the destination node).

*When specifying both the node and a destination at that node (first- and second-level destinations):*

**NnnnnRmmmm | node.destination**

Allows an installation to define the complete JES2 route code (destination at a specified node). JES2 does not use information from the default routing.

**NnnnnRmmmm**

Specify N, followed by a numeric value (1 - 32767), then R followed by a numeric value (0 - 32767). For example, N5R7 indicates remote 7 at node 5.

**node.destination**

Specify a first-level destination, followed by a period; followed by either a second-level destination or a complete destination.

If 'destination' is a second-level destination, the routing associated with this DEStid is the composite of 'node' and 'destination'.

For the following examples, assume that node 1 is the local node:

- 'N1.R3' indicates data routed to remote 3 at the local node.
- 'N2.R5' indicates data routed to whatever 'R5' is at node 2.
- 'N5.BOB' indicates data is routed to whatever 'BOB' is at node 5.

If 'destination' is a complete destination, the final routing associated with this DEStid depends on 'node'.

For the following examples, assume that node 1 is the local node:

- 'N2.N2R3' indicates data routed to remote 3 at node 2 because the first-level destination of 'destination' matches 'node'.
- 'N5.N2R3' indicates data routed to 'N2R3' at node 5 because the first-level destination of 'destination' does not match 'node' and 'node' is not the local node. If node 5 has not explicitly defined 'N2R3', node 5 routes the data to destination 'R3' at node 2.
- 'N1.N5R3' results in an error because the first-level destination of 'destination' does not match 'node' and 'node' is the local node.

Note that you can use existing DEStids or node names (those previously defined in the initialization stream) to create new DEStids. However, if you create a DEStid using a symbolic DEST= parameter, and that name is used as:

- a subscript in a subsequent DEStid initialization statement or node name in a subsequent NODE initialization statement.

JES2 will consider the first DEStid statement specified to be in error. In general, whenever an initialization statement changes the destination that a previous DEStid statement would resolve to, JES2 marks the DEStid statement as an error.

For example, assume that the following DEStids are defined:

```
DEStid(ALBANY)  DEST=N10
DEStid(REMOTE5) DEST=R5
DEStid(BIGAPPLE) DEST=N7
DEStid(TWINTOWR) DEST=TALLBLDG
```

You can define:

```
DEStid(CAPITOL) DEST=ALBANY.REMOTE5
```

The routing associated with 'CAPITOL' is N10.R5.

You can define:

```
DEStid(NYC)  DEST=BIGAPPLE
```

The routing associated with 'NYC' is N7.

If you define:

```
DEStid(TALLBLDG) DEST=R10
or
NODE(5) NAME=TALLBLDG
```

## DEStid

JES2 treats the DEStid(TWINTOWR) statement as an error, and issues error message \$HASP512. To route TWINTOWR output to R10, place the DEStid(TALLBLDG) statement before the DEStid(TWINTOWR) statement in the initialization stream.

A DEStid pointing to itself does not change the status of the destination:

```
DEStid(PRT5) DEST=PRT5
```

This is considered redundant. The status of PRT5 is not changed.

### PRIMARY={Yes|No}

Specifies whether (Yes) or not (No) to display this DEStid for job and SYSOUT routing. Use this parameter if multiple DEStids have the same routing.

When searching for a DEStid to display for a job's or SYSOUT's routing, JES2 selects:

1. Node name (DEStid with STATUS=NODENAME) if routed to a node.
2. First DEStid found that specifies PRIMARY=YES.
3. If only one DEStid is found, that DEStid is used.
4. If multiple DEStids are found, no DEStid is used (and routing is displayed explicitly).

If USER is specified for either the Ndest=, Udest=, or R|RM|RMTdest= parameters on the DESTDEF initialization statement and multiple DEStids can match the routing of a job or SYSOUT data set, then at least one of these multiple DEStids must specify PRIMARY=Yes. If not, products such as SDSF may have problems altering the routing of a job or SYSOUT data set to any of these multiply defined DEStids.

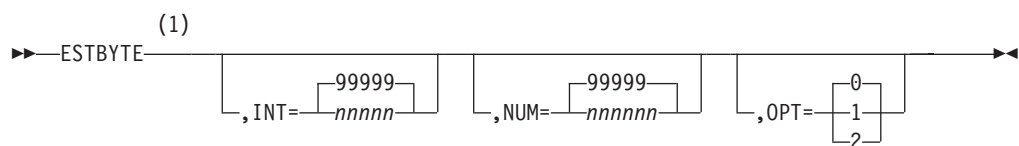
Because PRIMARY=Yes can affect SDSF's security procedures, consult the *z/OS SDSF Operation and Customization* before using this parameter.

---

## ESTBYTE - Estimated Spool Utilization for Output Exceeded

The ESTBYTE statement specifies the amount of spool space used before the \$HASP375 (ESTIMATED BYTES EXCEEDED) message is initially written to the operator, the interval at which it is repeated, and the action JES2 takes if the output exceeds the estimate. Your installation can provide an output overflow installation exit routine (Exit 9) to override this statement on a per-job basis.

### Format Description for ESTBYTE



#### Notes:

- 1 Omit the comma between initialization statement and first keyword

### Parameter Description for ESTBYTE

#### NUM=nnnnnn|99999

Specifies the number (1-999999), in thousands of bytes of spool space, after which message \$HASP375 is written to inform the operator that the job's estimated output has been exceeded. The user can override the spool

utilization value specified on this parameter by using the BYTES= keyword defined on the /\*JOBPARM control statement.

**Modification:** \$T ESTBYTE operator command or cold start. If you modify this parameter value and then restart JES2 with a warm or hot start, the parameter value in effect before termination will be used.

**INT=nnnn|99999**

Specifies the interval (1-99999), in thousands of bytes of spool space, at which message \$HASP375 is repeated. The message is first issued when the estimated bytes (NUM= value) is exceeded.

**Modification:** \$T ESTBYTE operator command or cold start. If you modify this parameter value and then restart JES2 with a warm or hot start, the parameter value in effect before termination will be used.

**OPT=0|1|2**

Specifies the action JES2 takes when a job exceeds the estimated spool utilization as specified by the NUM= parameter. The following are the options and subsequent action:

- 0 Job is allowed to continue execution
- 1 Job is canceled without a dump
- 2 Job is canceled with a dump (if a dump statement was coded for this job step)

**Modification:** \$T ESTBYTE operator command.

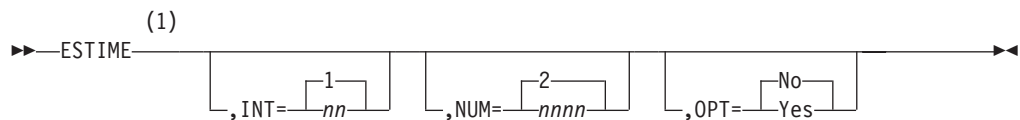
## ESTIME - Default Estimated Execution Time and Options

The ESTIME statement specifies the default elapsed wall clock time for a job, the interval at which the \$HASP308 (ESTIMATED TIME EXCEEDED) message is written to the operator and whether the JES2 elapsed time job monitor feature is supported.

**Note:** If changed by the \$T command after a job was submitted, the ESTIME parameters are affected as follows:

- the INT= and OPT= values are effected immediately and are reflected during job execution
- the NUM= value remains equal to the value when the job was submitted. It takes affect for only newly submitted jobs.

### Format Description for ESTIME



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

### Parameter Description for ESTIME

**NUM=nnnn|2**

Specifies the default estimated execution time (1-9999), in minutes after which

## ESTIME

\$HASP308 is written to inform the operator that the job's estimated execution time has been exceeded. This value is used if you do not specify a value for the estimated execution time in the accounting field of your JOB statement or on a /\*JOBPARM control statement.

**Modification:** \$T ESTIME operator command or cold start. If you modify this parameter value and then restart JES2 with a warm or hot start, the parameter value in effect before termination will be used.

### INT=nn|1

Specifies the interval (1-99), in minutes, at which message \$HASP308 is repeated. The message is first issued when the estimated execution time (NUM= value) is exceeded.

**Modification:** \$T ESTIME operator command or cold start. If you modify this parameter value and then restart JES2 with a warm or hot start, the parameter value in effect before termination will be used.

### OPT=Yes|No

Specifies whether the JES2 elapsed time job monitor feature is supported. **Yes** specifies that the \$HASP308 message be issued as specified on the NUM= and INT= keywords. **No** specifies that the \$HASP308 message not be issued.

**Modification:** \$T ESTIME operator command.

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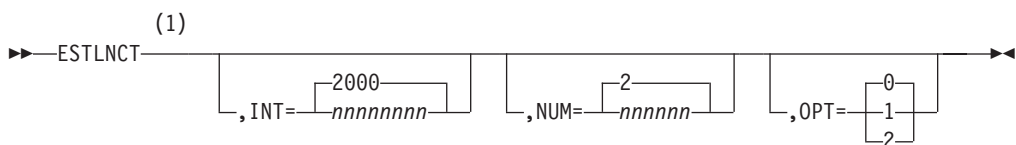
## ESTLNCT - Default Estimated Print Output and Options

The ESTLNCT statement specifies the default estimated print line count for a batch job, the interval at which the \$HASP375 (ESTIMATED LINES EXCEEDED) message is written to the operator, and the action JES2 takes if the output exceeds the estimate. Your installation can provide an output overflow installation exit routine (Exit 9) to override this statement for each batch job processed.

**Note:** If changed by the \$T command after a job was submitted, the ESTLNCT parameters are affected as follows:

- the INT= and OPT= values are effected immediately and are reflected during job execution
- the NUM= value remains equal to the value when the job was submitted. It takes affect for only newly submitted jobs.

## Format Description for ESTLNCT



### Notes:

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for ESTLNCT

### NUM=nnnnnn|2

Specifies the default estimated print line count (1-999999), in thousands of lines, for a job after which message \$HASP375 is written to inform the operator that the job's estimated line count has been exceeded. This value is





**Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter Description for ESTPAGE****NUM=nnnnnnnn|40**

Specifies the number of pages (1-99999999) following which message \$HASP375 is written to inform the operator that the job's estimated output has been exceeded. The user can override the spool utilization value specified on this parameter by using the PAGES= keyword defined on the /\*JOBPARM control statement.

**Modification:** \$T ESTPAGE operator command or cold start. If you modify this parameter value and then restart JES2 with a warm or hot start, the parameter value in effect before termination will be used.

**INT=nnnnnnnn|10**

Specifies the interval (1-99999999), in number of pages, at which message \$HASP375 is repeated. The message is first issued when the estimated number of pages (NUM= value) is exceeded.

**Modification:** \$T ESTPAGE operator command or cold start. If you modify this parameter value and then restart JES2 with a warm or hot start, the parameter value in effect before termination will be used.

**OPT=0|1|2**

Specifies the action JES2 takes when a job exceeds the estimated page output as specified by the NUM= parameter. The following are the options and subsequent action:

- 0 Job is allowed to continue execution.
- 1 Job is canceled without a dump.
- 2 Job is canceled with a dump (if a dump statement was coded for this job step).

**Modification:** \$T ESTPAGE operator command.

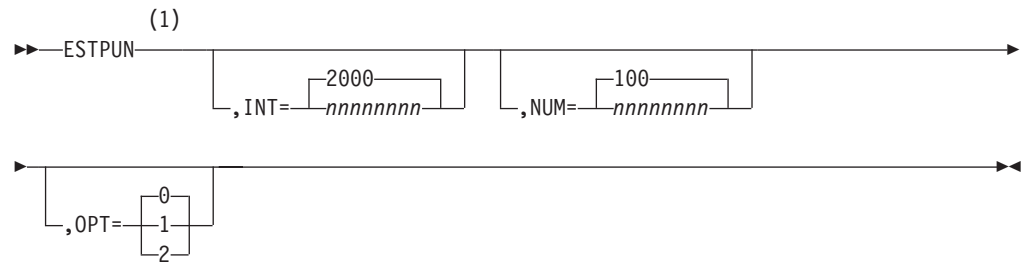
**ESTPUN - Default Estimated Punch Output and Options**

The ESTPUN statement specifies the default estimated punched card output for a job, the interval at which the \$HASP375 (ESTIMATED CARDS EXCEEDED) message is written to the operator, and the action JES2 takes when the output is exceeded. You can provide an output overflow installation exit routine (Exit 9) to override this statement on a per-job basis.

**Note:** If changed by the \$T command after a job was submitted, the ESTPUN parameters are affected as follows:

- the INT= and OPT= values are effected immediately and are reflected during job execution
- the NUM= value remains equal to the value when the job was submitted. It takes affect for only newly submitted jobs.

## Format Description for ESTPUN



### Notes:

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for ESTPUN

### NUM=nnnnnnnn|100

Specifies the default estimated punched card output (0-99999999) for a job after which the \$HASP375 message is written to inform the operator that the estimated punch card output has been exceeded. This value is used if you do not specify a value for the estimated punch card count in the accounting field of your JOB statement or by using the CARDS= keyword on the /\*JOBPARM control statement, or by using the CARDS= keyword on the JOB statement.

**Modification:** \$T ESTPUN operator command or cold start. If you modify this parameter value and then restart JES2 with a warm or hot start, the parameter value in effect before termination will be used.

### INT=nnnnnnnn|2000

Specifies the interval (1-99999999), in cards, at which message \$HASP375 is written to inform the operator that a job has exceeded its estimated output. The message is initially issued when the output estimate (NUM= value) for the job is exceeded.

**Modification:** \$T ESTPUN operator command or cold start. If you modify this parameter value and then restart JES2 with a warm or hot start, the parameter value in effect before termination will be used.

### OPT=0|1|2

Specifies the action JES2 takes when a job exceeds the estimated number of cards. The following are the options and subsequent action:

- 0 job is allowed to continue execution
- 1 job is canceled without a dump
- 2 job is canceled with a dump (if a dump statement was coded for this job step)

**Modification:** \$T ESTPUN operator command.

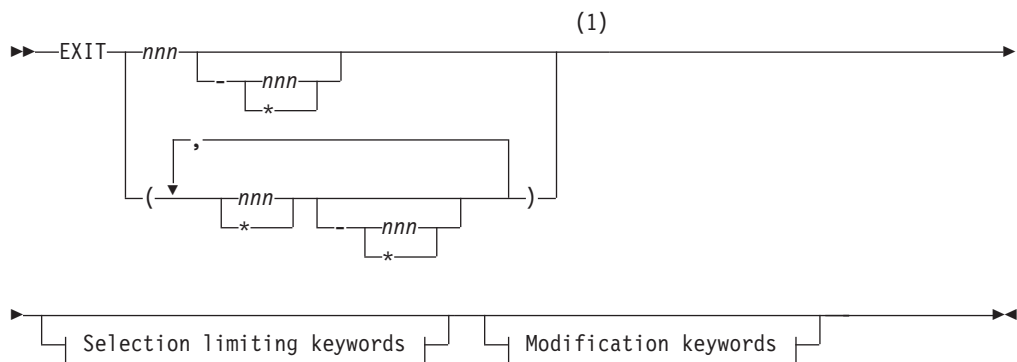
## EXIT(nnn) - Exit and Exit Routine Association

Use the EXIT(nnn) statement to associate a JES2 exit with one or more installation-supplied routines. You also use this statement to enable or disable the JES2 exit and to specify whether tracing is to be performed for the exit. (See *z/OS JES2 Installation Exits* for further information about JES2 exits and installation-supplied exit routines.)

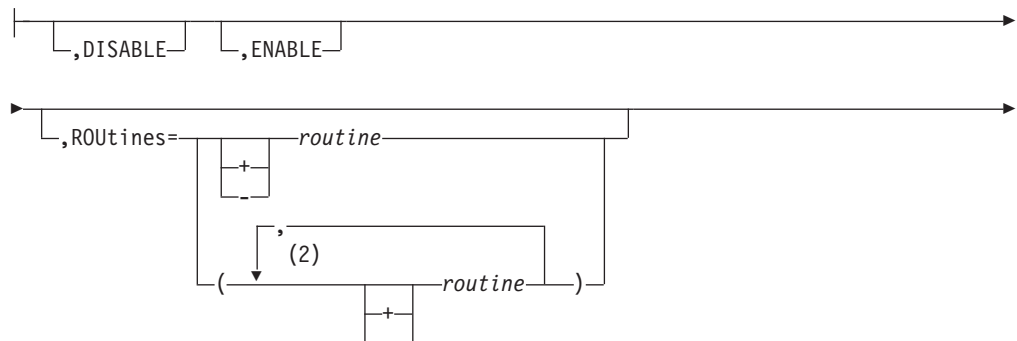
The exit number, nnn, is a value from 1 to 255 which identifies the JES2 exit. If the exit number supplied is not defined in the JES2 member, message \$HASP857 WARNING - EXIT(nnn) NOT DEFINED WITHIN CURRENTLY LOADED JES2 MODULES will be issued. (Exit 0, pre-initialization, does not require or use an EXIT(nnn) statement.) The subscript (nnn) specifies the exit identifier (1-255) of the installation-supplied exit routine(s) to be called when the specified exit is taken. No more than 255 installation-supplied routines can be associated with an exit. See *z/OS JES2 Installation Exits* for information on identifying installation-supplied exit routines to JES2. You must specify at least one installation-supplied routine name.

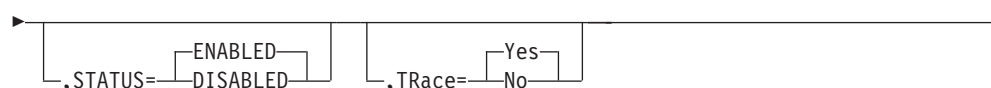
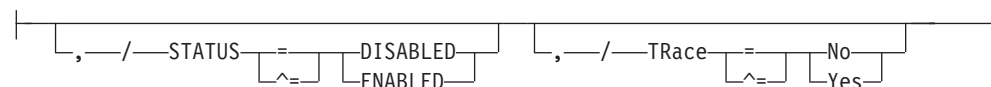
**Note:** If you modify EXIT(nnn) parameter values and then restart JES2 with a hot start, the parameter values in effect before termination will be used. JES2 uses the exits that were enabled before JES2 termination.

### Format Description for EXIT(nnn)



#### Modification keywords:



**Selection limiting keywords:****Notes:**

- 1 Omit the comma between initialization statement and first keyword
- 2 ROUtines can be coded up to 255 times

**Parameter Description for EXIT(nnn)****ROUtines=(+/-routine)**

Specifies a list of routines to replace the existing one, that is to add routines to the end of the list, to remove routines from the beginning of the list, or both. The "+" indicates the routine names to add to the end of the routine list. The "-" indicates routine names to be removed from the beginning of the routine list. If there is no "+" or "-" prefix for a routine name, then the previous prefix is used. If the non-prefix routine name is the first element in the specified list, then the list is a replacement of the existing one. Table 85 shows an example of specifying the routine list (cumulative list).

Table 85. Example for ROUtines parameter on EXIT(nnn) statement

ROUTINES= <i>specification</i>	Resulting routine list
A,B,C	A,B,C
+D	A,B,C,D
-B	A,C,D
+E,F,G	A,C,D,E,F,G
-C,D,+H,I	A,E,F,G,H,I
X,Y,Z,-X,+A	Y,Z,A

The added routine names are resolved to the address of the most recently loaded routine with a matching name. The existing routines in the list are not effected. As the example in Table 85, when +D is specified, the address of the most recently loaded routine named D is associated with the exit. However, the addresses associated with A, B, and C are not affected, even if a \$ADD LOADMOD was done for a new module with routine B in it.

**Note:** \$\$\$LOAD and \$\$\$DEL are reserved names. If you specify them, you will receive a \$HASP003 RC=06 message indicating that the value contains invalid data.

**Modification:** \$T EXIT(nnn) operator command.

**STATUS=ENABLED | DISABLED**

Specifies the initial status of the exit. If the exit is disabled, no exit routines can be invoked at this exit.

## EXIT(nnn)

Whether or not the installation exit routines associated with an enabled exit are executed is dependent upon:

- Whether the enabled status of the exit has been overridden by the \$T EXIT(nnn) operator command.
- Whether the job being processed is eligible to use the exit, as determined by your installation's setting of the job exit mask for that job. (See *z/OS JES2 Installation Exits* for information on how to use the job exit mask and *z/OS JES2 Commands* for information on how to use the \$T EXIT(nnn) command.)

**Modification:** \$T EXIT(nnn) operator command.

### TRACE=Yes|No

Specifies whether the execution of this exit is to be traced. To trace an exit, you must also provide the following initialization statements:

```
TRACE(n) START=Yes
TRACEDEF ACTIVE=Yes
```

This parameter setting can be overridden by the \$T EXIT(nnn) operator command. Exit tracing is also controlled by trace ID 13, the TRACE(n) and TRACEDEF initialization statements, and the \$TRACE command. (See *z/OS JES2 Initialization and Tuning Guide*, the TRACE(n) and TRACEDEF initialization statements in this chapter, and *z/OS JES2 Commands* for a description of the \$TRACE command for further information concerning the tracing facility.)

**Modification:** \$T EXIT(nnn) operator command.

---

## FSS(accccc) - Functional Subsystem Definition

The FSS(accccc) statement defines a functional subsystem to JES2. Use the FSS= keyword on the applicable device initialization statement to associate a JES2 device to a functional subsystem. Each FSS(accccc) statement **must** have a unique functional subsystem name (subscript).

The subscript (accccc) specifies the 1- to 8-character functional subsystem name. Each FSS(accccc) statement must have a unique name. If more than one statement includes the same accccc specification, all specifications on the last-defined FSS(accccc) statement will override any previously defined.

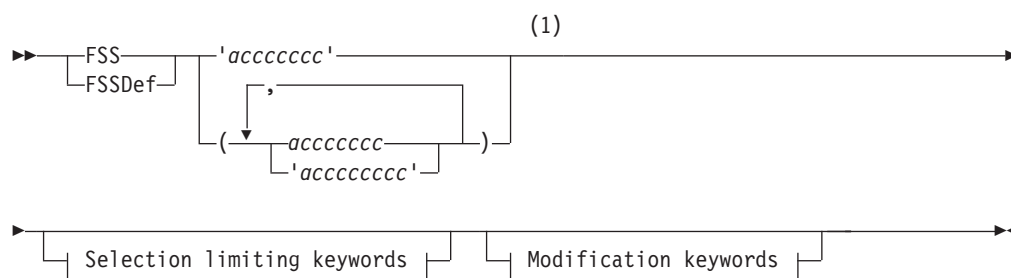
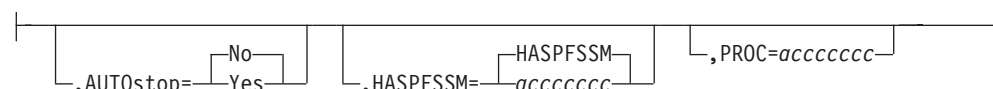
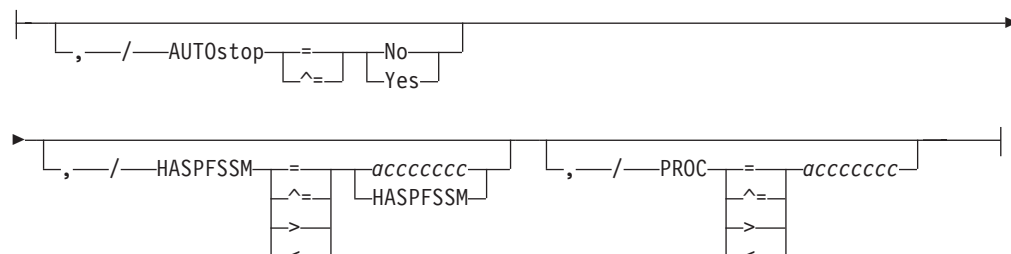
The subscript can be a specific FSS name (for example, FSS2) or a more generic form such as *PSF\**, *\**, or a range of FSSs. See "Subscript ranges" on page 2 for details.

If you modify FSS(accccc) parameters and then restart JES2 with a hot start, JES2 uses the FSSs that were defined before JES2 termination.

### Adding FSS Definitions

This statement and all its parameters can be added after initialization with the \$ADD FSS(accccc) operator command.

### Format Description for FSS(accccc)

**Modification keywords:****Selection limiting keywords:****Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter Description for FSS(accccccc)****PROC=accccccc**

Specifies the 1- to 8-character name of the procedure in the PROCxx concatenation used for the started tasks that contains the JCL required to start the functional subsystem.

This parameter defaults to the value specified as the FSS subscript name (accccccc).

**Modification:** \$T FSS operator command (if the address space is inactive).

**AUTOSTOP=Yes|No**

Specifies whether (Yes) or not (No) the FSS address space is to be stopped (shut down) if all the devices attached to the FSS are drained.

**Note:** If an error occurs while the FSS address space is stopping, you may have to issue an MVS CANCEL to end the address space before starting another printer to this FSS.

**Modification:** \$T FSS operator command.

**HASPFSM=accccccc|HASPFSM**

Specifies the 1- to 8-character name of the load module to be loaded into the functional subsystem address space. This load module contains the various JES2-supplied FSI service routines.

If your installation uses the default libraries and module names for the JES2 component, as distributed by IBM, omit this parameter or code HASPFSSM=HASPFSSM. If your installation manages the JES2 components in another way, ensure that the correct level of the HASPFSSM module is available to an FSS address space when an FSS is started.

For example, if your installation manages multiple versions of JES2 in libraries that are specified as a STEPLIB in JES2 cataloged JCL procedures, a similar library structure is required for HASPFSSM. The appropriate version of HASPFSSM must be available to the address space of the FSS through a //STEPLIB DD statement in the cataloged JCL procedure for the FSS.

If the load module specified by HASPFSSM= is not found during the start of the FSS address space, or if it is found but its version and structure do not match the rest of the JES2 component, JES2 returns an error code to the FSS that is attempting to connect to JES2.

**Modification:** \$T FSS operator command (if the address space is inactive).

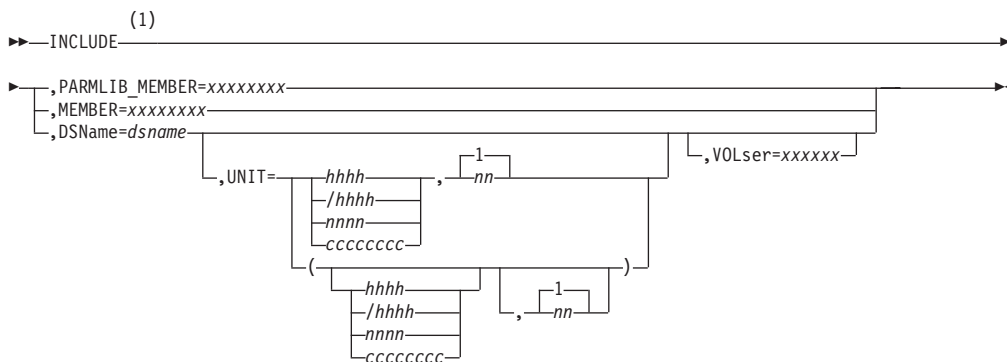
## INCLUDE - Include an Initialization Data Set

The INCLUDE initialization statement allows a new initialization data set to be processed. JES2 will immediately start reading records from the new data set and processing them. When all statements in the included data set have been processed, JES2 initialization resumes processing records from the original data set. INCLUDE statements can be nested (included initialization data set can include other data sets). JES2 can detect a nested include loop (for example, data set A includes data set B that then includes data set A). If JES2 detects a loop, the include request will fail.

**Note:**

1. A D INCLUDE statement displays the data set from which JES2 is currently reading initialization statements. This displays data sets that were included using the INCLUDE statement and from initialization data sets specified in the JES2 PROC.
2. When a data set being included reaches end of file, then all pending statements and comments are considered to be complete. Statements and comments cannot be continued past the end of an included data set.

## Format Description for INCLUDE





**Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter Description for INCLUDE****DSName=jxxx...x|jxxx...x(jxxxxxxxx)**

Specifies a 1- to 44-character data set name with optional 1- to 8-character member name, enclosed in parentheses, where JES2 initialization statements to be processed reside.

**Modification:** T INCLUDE operator statement.

**MEMBer=xxxxxxxx**

Includes another member from the data set that JES2 is using. If JES2 is using the logical PARMLIB data set, this includes another member of that data set. If we are in console mode because of a PARM=CONSOLE statement, this is an error. If JES2 is in console mode, because of the inclusion of a CONSOLE statement or an error in an initialization statement, then the data set that contained the CONSOLE or bad statement is used.

**Modification:** T INCLUDE operator statement.

**PARMlib\_member=xxxxxxxx**

Includes a member from the logical PARMLIB data set.

**UNIT=hhh|/hhh|nnnn|ccccccc**

If the JES2 initialization data set to be included is not cataloged, then the unit information for the device containing the data set must be specified in one of the following ways:

**hhh | /hhh**

specifies a 3- or 4-digit hexadecimal device number. Device numbers can be specified by any of the following formats:

- UNIT=hhh
- UNIT=/hhh
- UNIT=/hhhh

where hhh and hhhh represent the device numbers. A slash (/) must precede a 4 digit device number.

**nnnn**

Specifies a device name.

**ccccccc**

Specifies a 1- to 8-character group name assigned to the device or group of devices that contain the non-cataloged initialization data set to be included.

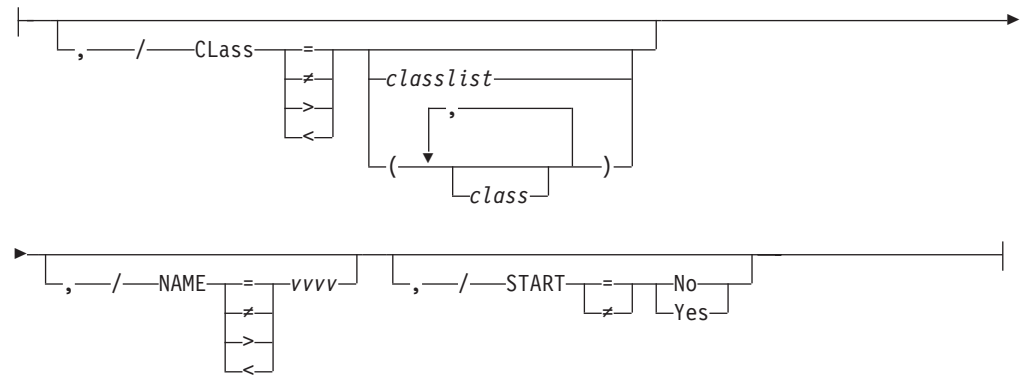
**Modification:** T INCLUDE operator statement.

**VOLser=xxxxxx**

If the JES2 initialization data set to be included is not cataloged, then this specifies a 1- to 6-character volume serial number on which the data set to be includes resided.

**Modification:** T INCLUDE operator statement.



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter Description for Init(nnnn)****NAME=vvvv**

Specifies a name that the operator can use to refer to this initiator; vvvv may be a 1- to 4-character name (A-Z, 0-9). More than one initiator can be assigned the same name allowing any operator command with that name to affect all initiators having that name.

This parameter defaults to the low order nnnn of the Init(nnnn) specification; leading zeros are converted to blanks.

**Note:** Initiator control commands affect all initiators based on the assigned or default name. The internal representation of the initiators' names are in four EBCDIC characters. Therefore, when you issue a JES2 initiator control command with a range of initiators, all the initiators whose EBCDIC names fall within the EBCDIC command range are affected. It is possible for the command to affect a range different from that which was intended.

For example, if all of the initiators are named " 1" through "20" (using defaults), and "A1" through "A2" (specified on the NAME parameter), then entering a \$DI1-10 command displays initiators 1 through 10, A1 and A2. This is because "A1" and "A2" collate above " 1" (X'4040F1') and below "10" (X'4040F1F0').

If you specify names using this parameter, explicitly specify all names on commands to avoid problems with name ranges.

**Modification:** Single-member warm start.

**Class=classlist | (class, class)**

Specifies the classes which are associated with the initiator. Classes associated with the initiator but ineligible to select work are not displayed in the list (but are matched on a filter).

The *classlist* variable specifies a list of single character job classes A-Z and 0-9: for example, 'ABCDEF'. A maximum of 36 classes can be specified.

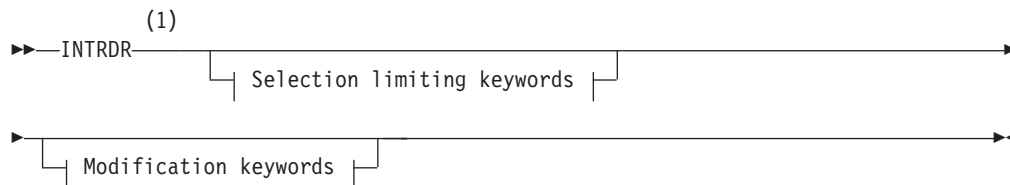
The *class* variable specifies a comma-separated list of job classes or job class groups (each 1-8 characters in length). A maximum of eight items can be specified in the list: for example, (CLASS1,CLASS2,CLASS3).

Wildcards can also be specified: see "Subscript ranges" on page 2 for details.

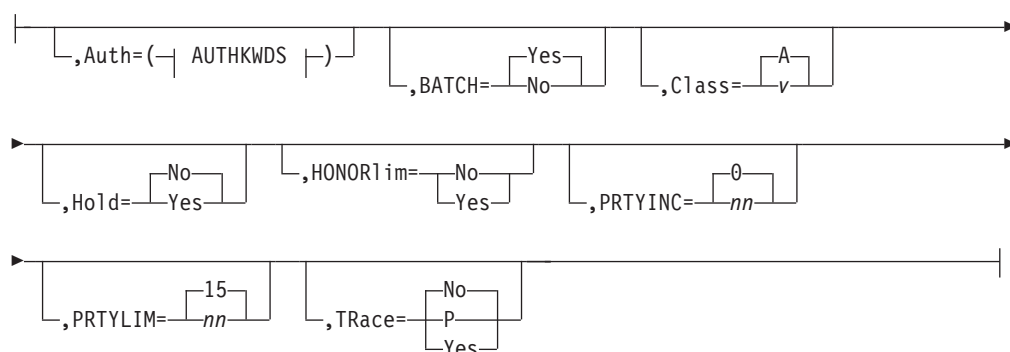


**Note:** If you modify INTRDR parameters and then restart JES2 with a hot start, the parameter values in effect before termination will be used. (For further information, see *z/OS JES2 Initialization and Tuning Guide*.)

## Format Description for INTRDR



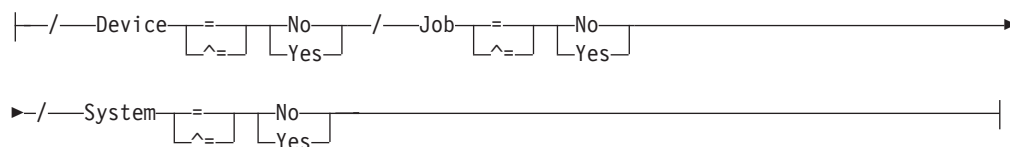
### Modification keywords:



### Selection limiting keywords:



### AUTHKWDS:



### Notes:

- Omit the comma between initialization statement and first keyword

## Parameter Description for INTRDR

**Auth=(Job=Yes|No,Device=Yes|No,System=Yes|No)**

Specifies the command authority for internal readers. These values authorize certain JES2 commands to be submitted through an internal reader.

**Note:** This parameter has no effect when the associated resource class and profile in RACF 1.9 or higher are active. For more information about using JES2 security facilities, see *z/OS JES2 Initialization and Tuning Guide*.

**Job=Yes|No**

Specifies that the device can (Yes) or cannot (No) issue commands that require job authority.

**Device=Yes|No**

Specifies that the device can (Yes) or cannot (No) issue commands that require device authority.

**System=Yes|No**

Specifies that the device can (Yes) or cannot (No) issue commands that require system authority.

This parameter affects JES2 control statements only. Use the AUTH parameter of the JOBCLASS initialization statement to specify the authorization for JCL statements. (JES2 control statements begin with /\* in columns 1 and 2. JCL statements begin with // in columns 1 and 2.)

**Modification:** \$T INTRDR operator command.

**BATCH=Yes|No**

Specifies whether internal readers can be used to process batch jobs in addition to time-sharing LOGONs and started tasks (Yes), or are to be dedicated exclusively to time sharing LOGONs and started tasks (No). If BATCH=No is specified, you can submit jobs only through real (local) card readers, RJE, NJE, or through spool reload.

**Modification:** Warm start.

**Class=class**

Specifies the default job class to be assigned to all jobs submitted through an internal reader that do not specify a job class in the CLASS operand of their JOB statements.

**Modification:** \$T INTRDR operator command.

**Hold=Yes|No**

Specifies that all jobs submitted through an internal reader are to be held (Yes) or not held (No) after JCL conversion until they are released for execution by the operator.

All internal readers are treated as a single facility; therefore, if one internal reader is held, all internal readers are held. This can be particularly troublesome if TSO/E users are submitting jobs and the operator has held the internal readers. This can be overcome by several operating techniques:

- All jobs submitted through an internal reader can be assigned a class and that class can be held by a JES2 parameter library entry or the \$H Qn operator command.
- Jobs submitted by the internal reader can use the TYPRUN=HOLD parameter on the JOB statement.
- Jobs submitted through an internal reader can be individually held with the \$H J operator command.

**Modification:** \$T INTRDR operator command.

**PRTYINC=nn|0**

Specifies an integer (0-15) to be **added** to the selection priorities of all jobs

submitted through internal readers. If the total of this number and a job's priority exceeds the value specified by `PRTYLIM=`, JES2 will assume the priority specified by `PRTYLIM=`.

**Modification:** \$T INTRDR operator command.

**PRTYLIM=nn | 15**

Specifies the maximum priority level (0-15) that can be assigned to jobs submitted through an internal reader. If a job's priority (with or without the increment specified by `PRTYINC=`) exceeds this level, it will be reduced to this level.

**Modification:** \$T INTRDR operator command.

**HONORLIM=Yes/No | HONOR=Yes/No**

Specifies whether data sets sent to the internal reader are to be counted towards the byte limit for a job.

**Modification:** \$T INTRDR operator command.

**TRace=Yes | P | No**

Specifies whether tracing is activated or deactivated for all internal readers. To trace an internal reader, you must also provide the following initialization statements:

```
TRACE(n) START=YES
TRACEDEF ACTIVE=YES
```

**Note:** Specifying `TRACE=P` is same as specifying `TRACE=Yes`.

This parameter setting can be overridden by the \$T INTRDR operator command. Internal reader tracing is also controlled by trace IDs 11 and 12, the `TRACE(n)` and `TRACEDEF` initialization statements, and the \$TRACE command. (See *z/OS JES2 Initialization and Tuning Guide*, the `TRACE(n)` and `TRACEDEF` initialization statements in this chapter, and *z/OS JES2 Commands* for a description of the \$TRACE command for further information concerning the tracing facility.)

**Modification:** \$T INTRDR command.

## JOBCLASS(*class* | **STC** | **TSU**) - Job, Started Task, and Time Sharing User Class

The `JOBCLASS(class | STC | TSU)` statement specifies the characteristics to be associated with one or more job classes, job class groups, started task (STC) jobs or time sharing user (TSU) classes. You can specify the following types of job classes:

- One of the 36 predefined one-character *class* names, by specifying a single alphabetic character (**A-Z**) or numeric character (**0-9**).
- The predefined **TSU** or **STC** job class.
- A user-defined job class from 2-8 alphanumeric characters.

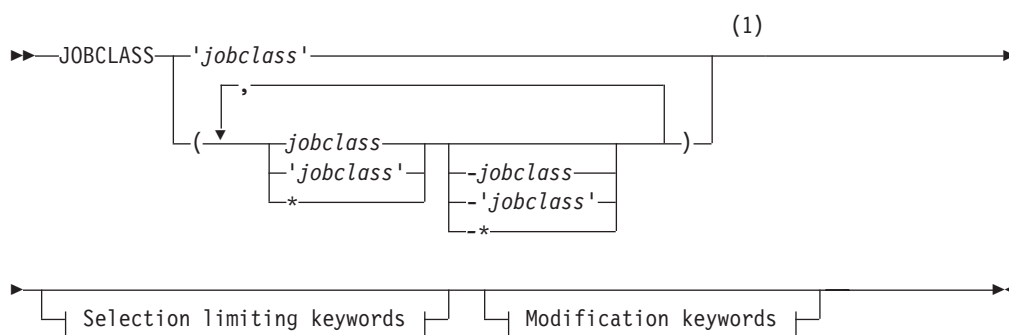
**Note:**

1. The `JOBCLASS` statement has no effect on APPC transaction programs.
2. Use the `JOBCLASS, STC` initialization statement to define the characteristics to be associated with started tasks. You can override some of the default characteristics defined by `JOBCLASS(STC)` by specifying an override value on the appropriate keyword of the `JOB JCL` statement for that started task.

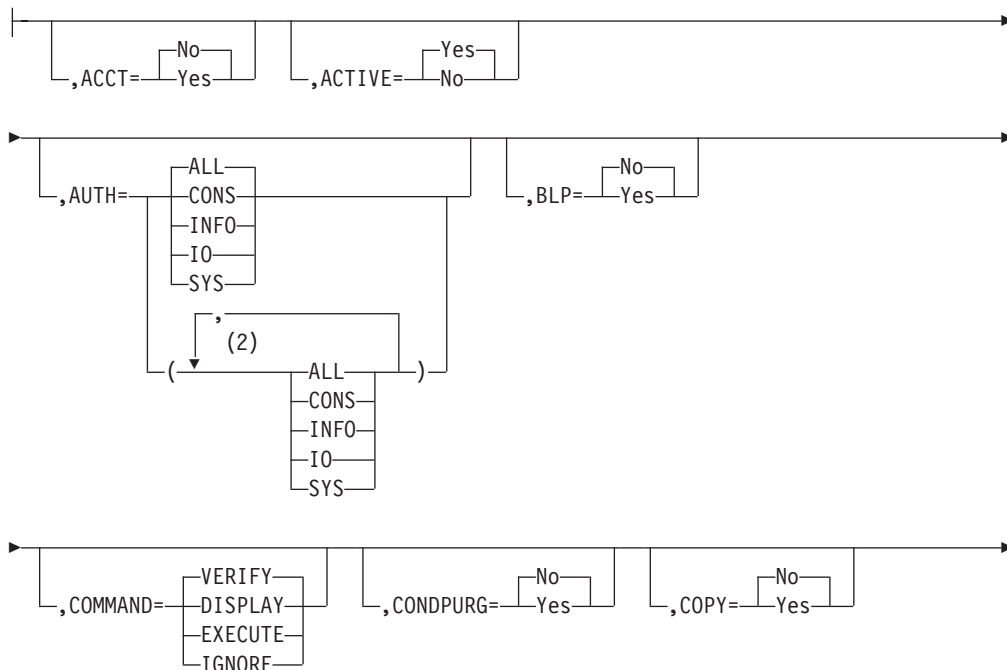
## JOBCLASS(class | STC | TSU)

3. A range of values that includes the letter "S" includes class S and also STC, and similarly including the letter "T" includes class T and also TSU (except when the range ends with "S" or "T"). This can lead to unexpected data returned by JES2.
4. JOBCLASS(\*) includes STC and TSU. This can lead to unexpected data returned by JES2.
5. JOBCLASS(?) includes only the 1-character classes (A-Z and 0-9) and therefore none of the 2-8 character class names or STC or TSU.
6. Not all JOBCLASS parameters are allowed on JOBCLASS(STC) and JOBCLASS(TSU) initialization statements. See each parameter description for restrictions.
7. JOBCLASS values are stored in the checkpoint and are MAS-wide in scope.

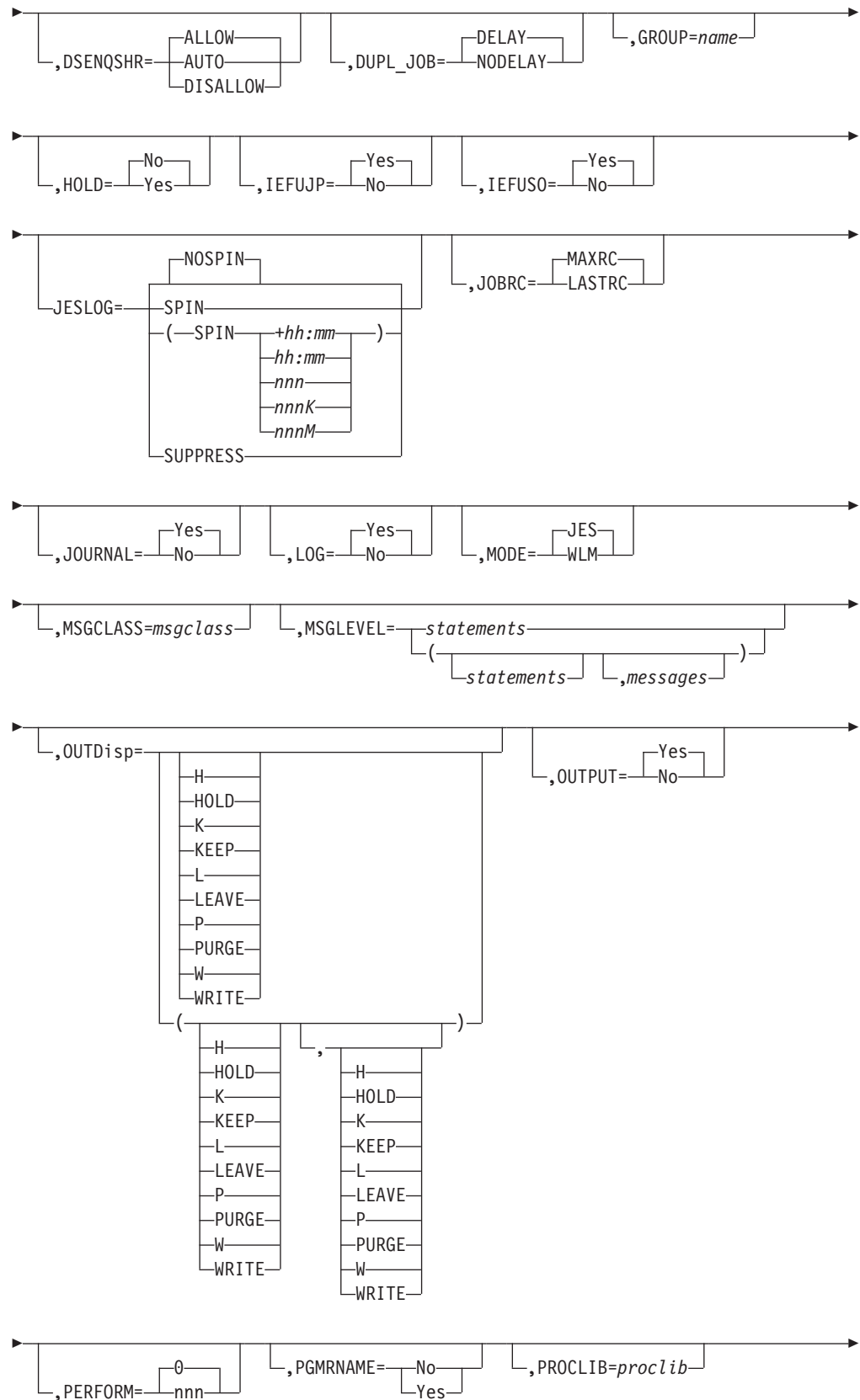
### Format Description for JOBCLASS(class | STC | TSU)



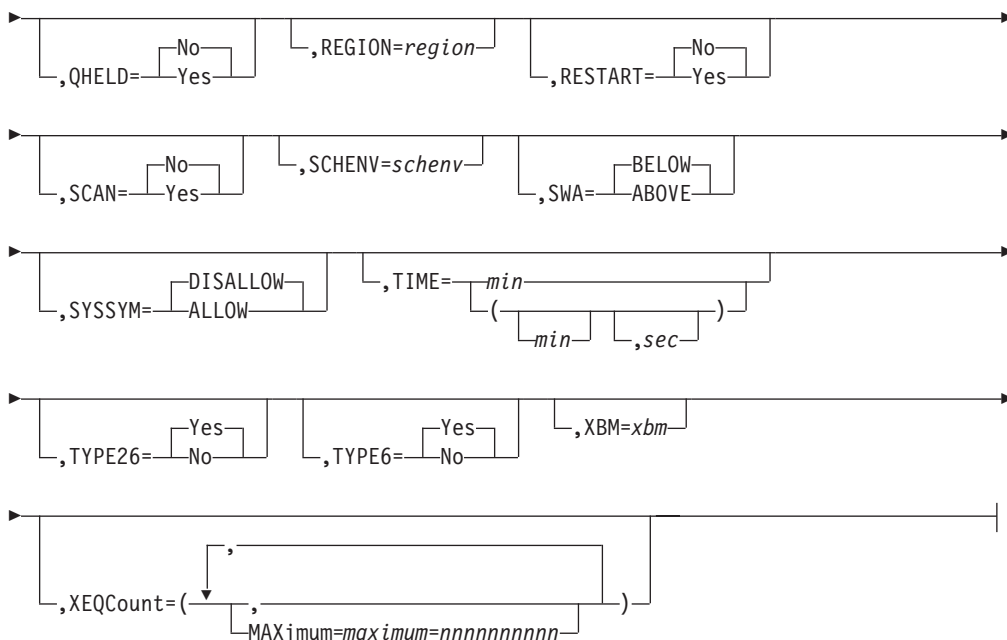
#### Modification keywords:







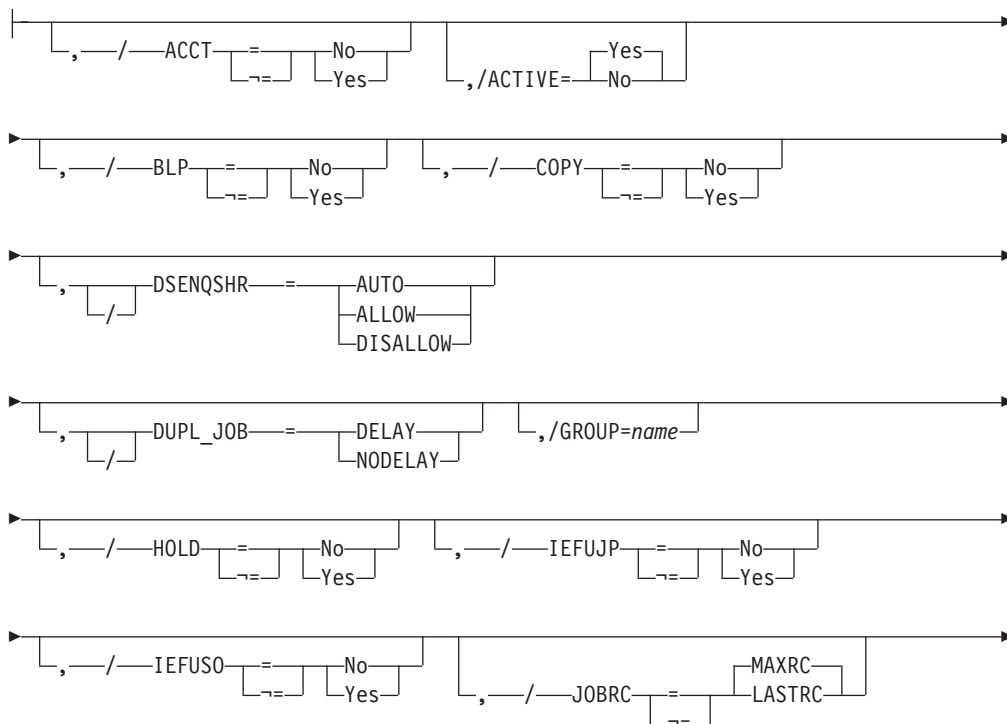
## JOBCLASS(class | STC | TSU)

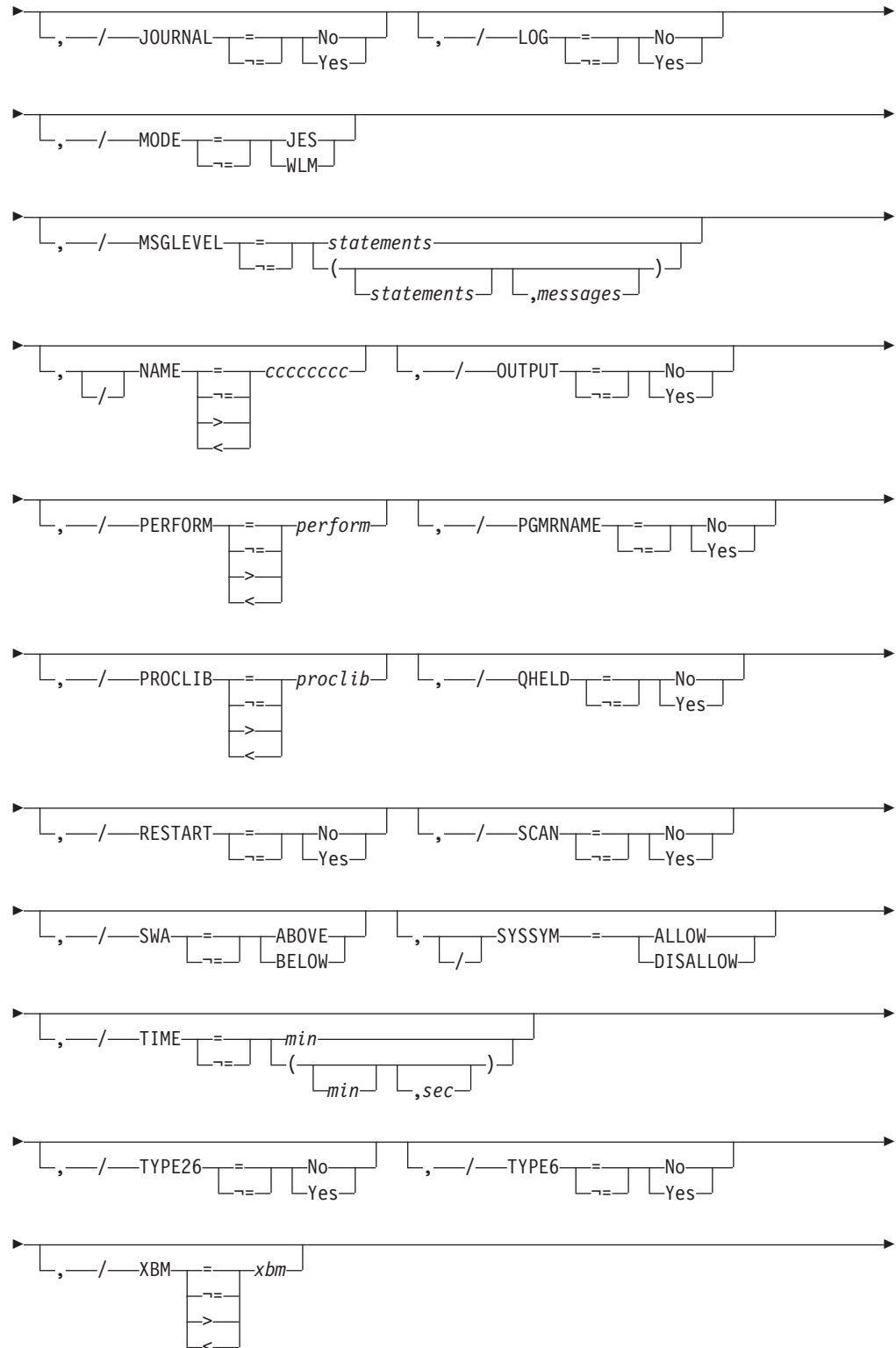


### Notes:

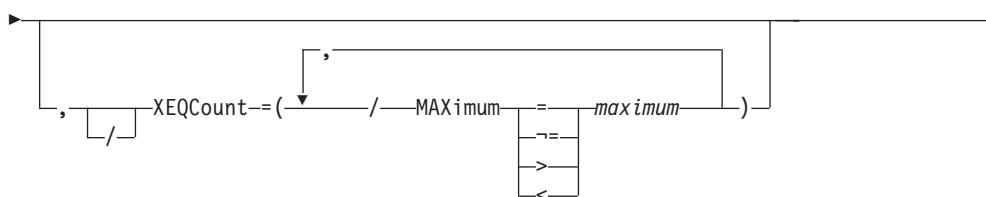
- 1 Omit the comma between initialization statement and first keyword
- 2 `auth` can be coded up to 4 times

### Selection limiting keywords:





## JOBCLASS(class | STC | TSU)



### Parameter Description for JOBCLASS(class | STC | TSU)

#### **ACCT=Yes | No**

Specifies whether an account number is required (Yes) or not required (No) on a JCL JOB statement. This parameter is not allowed on either the JOBCLASS(STC) or JOBCLASS(TSU) initialization statements.

**Modification:** \$T JOBCLASS operator command or cold start

#### **ACTIVE=[Yes | No]**

Specifies whether or not the specified job class is active. Active job classes can be used on new jobs that are submitted. The ACTIVE parameter has no effect on jobs once they have been submitted. This parameter does not apply to the STC and TSU job classes.

#### **AUTH=ALL | SYS | IO | CONS | INFO**

Specifies the MVS operator command groups that are to be executed. The groups include:

##### **SYS**

system commands

**IO** input/output commands

##### **CONS**

console commands

##### **INFO**

information commands (such as display)

##### **ALL**

all operator command types

For an explanation of operator command groups and the relationship of JES2 to MVS command groups, see *z/OS JES2 Commands* and *z/OS MVS System Commands*, respectively.

This parameter affects JCL statements only. Use the AUTH= parameter of the INTRDR and RDR initialization statement to specify the authorization for JES2 job entry control (JECL) statements. (JES2 control statements begin with /\* in columns 1 and 2. JCL statements begin with // in columns 1 and 2).

**Modification:** \$T JOBCLASS operator command or cold start

#### **BLP=Yes | No**

Specifies that either the bypass label processing parameter in the label field of a DD statement is to be ignored (No) and processed as no label, or that bypass label processing is performed as requested (Yes) and the label parameter is processed as it appears.

**Modification:** \$T JOBCLASS operator command or cold start.

**COMMAND=DISPLAY|EXECUTE|IGNORE|VERIFY**

Specifies the disposition of MVS commands read from the '// COMMAND' statement (or the '// command' statement) of the JCL input stream as follows.

**DISPLAY**

The command is displayed and scheduled for execution.

**EXECUTE**

The command is scheduled for execution. This is the default for JOBCLASS(STC) and JOBCLASS(TSU).

**IGNORE**

The command is ignored (that is, interpreted as a "no operation".)

**VERIFY**

Specifies that the system displays the command, asks the operator whether the command should be executed, and if the operator replies "YES", schedules the command for execution. This is the default for JOBCLASS(A-Z, 0-9).

**Modification:** \$T JOBCLASS operator command or cold start

**CONDPURG=Yes|No**

Specifies whether (YES) or not (NO) system data sets (such as JESMSG and SYMSG) in this job class are to be conditionally purged. This parameter is not allowed on the JOBCLASS(class) initialization statement.

**Modification:** \$T JOBCLASS or cold start.

**COPY=Yes|No**

COPY=Yes specifies that jobs in this job class are to be queued for output processing as though TYPRUN=COPY was specified on the JOB statement for these jobs.

The default value of this parameter is No, which specifies that jobs in this job class are to be queued as usual. NO will be ignored if the TYPRUN=COPY parameter is specified on the JOB statement for a job.

**Note:** This parameter is not allowed on JOBCLASS(STC) and JOBCLASS(TSU) initialization statements.

**Modification:** \$T JOBCLASS operator command or cold start.

**DSENQSHR{=ALLOW|AUTO|DISALLOW}**

Indicates how the system manages changes in data set disposition between job steps. When a step includes a DD statement with OLD, NEW or MOD on the DISP (disposition) keyword, and a later step requests the same data set as SHR, this parameter controls whether the system can change the serialization on the data set to shared control; permitting this change allows other jobs to share that data set. The value specified interacts with the value specified for DSENQSHR on the JOB card to determine the behavior:

**ALLOW**

The system is allowed to change the serialization on the data set to shared control if the JOB card specifies ALLOW.

**AUTO**

The system is allowed to change the serialization on the data set to shared control if the JOB card specifies ALLOW or USEJC.

## JOBCLASS(class | STC | TSU)

### DISALLOW

The system is not allowed to change the serialization on the data set to shared control.

**Note:** Specifying DSENQSHR=AUTO restricts any job that is converted with the class to run only on the z/OS 2.1 version of MVS, or later. If earlier levels of MVS are active in the MAS (JESPLEX), then this additional system restriction could prevent some jobs from running.

Table 86. JOBCLASS attribute for DSENQSHR

LANGUAGE	JOBCLASS attribute for DSENQSHR			
		AUTO	ALLOW	DISALLOW
JCL	ALLOW	yes	yes	no
	USEJC	yes	no	no
	DISALLOW	no	no	no

When yes is indicated, the system is allowed to change the data set serialization to shared control and other jobs may share that data set with this job.

### DUPL\_JOB=NODELAY|DELAY

Specifies whether or not JES2 is allowed to concurrently execute batch jobs with the same name in the same MAS. If DUPL\_JOB=DELAY is specified, JES2 is not allowed to execute batch jobs with the same name in the same MAS at the same time.

**Note:** DUPL\_JOB on a JOBCLASS specification is ignored if JOBDEF DUPL\_JOB=NODELAY. If JOBDEF DUPL\_JOB=DELAY, that specification can be overridden on a jobclass basis by specifying DUPL\_JOB=NODELAY on the JOBCLASS statement.

**Modification:** \$T JOBCLASS operator command or cold start.

### GROUP=name

Specifies the 2-8 character name of the job class group that the specified job class will be associated with. The group name cannot match any existing job class name (including the default 1-character job class names). This parameter does not apply to the STC and TSU job classes.

### HOLD=Yes|No

HOLD=Yes specifies that jobs in this job class are to be held until a RELEASE command for the job is issued by the operator (\$A J).

This parameter defaults to No. No will be ignored if the TYPRUN=HOLD parameter is specified on the JOB statement for a job.

**Note:** This parameter is not allowed on JOBCLASS(STC) and JOBCLASS(TSU) initialization statements.

**Modification:** \$T JOBCLASS operator command or cold start.

### IEFUJP=Yes|No

IEFUJP=No specifies that the IEFUJP exit is not to be taken when a job is purged. IEFUJP receives control when a job is ready to be purged from the system; that is, after the job has been ended and all the SYSOUT output that pertains to the job has been processed.

This parameter defaults to YES, which specifies that the IEFUJP exit is to be taken when a job is purged.

**Modification:** \$T JOBCLASS operator command or cold start.

**IEFUSO=Yes|No**

IEFUSO=NO specifies that the IEFUSO installation exit is not to be taken when the SYSOUT limit is reached for a job in this job class. The SYSOUT limit, which is specified by the OUTLIM parameter on the DD statement, defines the maximum number of physical records to be written to the associated SYSOUT data set. When the OUTLIM value is exceeded, JES2 normally calls the IEFUSO SMF exit routine either to increase the SYSOUT limit or to end the job. When NO is specified and OUTLIM is exceeded, JES2 abnormally ends the job.

This parameter defaults to YES, which specifies that the IEFUSO installation exit is to be taken when the SYSOUT limit is reached for a job in this job class.

**Modification:** \$T JOBCLASS operator command or cold start.

**JESLOG=**

Specifies for the indicated jobclass that each job's JESLOG data (JESMSGGLG and JESYSMSG data sets) is to be spun at a certain time interval, suppressed from being recorded, or not spun at all.

**Note:** Specifying JESLOG=SPIN will cause a job in this class to use at least 2 additional track groups of SPOOL space for the two JESLOG data sets (JESMSGGLG or JESYSMSG ). If this job class normally has a large number of jobs that use a minimal amount of SPOOL space, then an increase of 2 track groups could significantly increase SPOOL utilization. Consider these additional SPOOL requirements when deciding whether to use JESLOG=SPIN.

**SPIN** Jobs running in this job class are 'spinnable'. \$TJnnnn,SPIN can be used to immediately spin the JESMSGGLG and JESYSMSG data sets.

**(SPIN,+hh:mm)**

Indicates to spin JESLOG every hh:mm time interval.

where:

- hh is hours and has a range of 0 through 23
- mm is minutes and has a range of 00 through 59

**Note:** You must specify a minimum of 10 minutes or JES2 issues an error message. Also, for time intervals of less than one hour, you must specify the following format:  
JESLOG=(SPIN,+00:mm).

**(SPIN,hh:mm)**

Indicates to spin JESLOG at hh:mm every 24 hours.

**(SPIN,nnn)**

Indicates to spin JESLOG whenever either JESMSGGLG or JESYSMSG has nnn lines. nnn is the number (1-999) of lines in the data set.

**Note:**

You must specify a minimum of 500 lines or JES2 issues an error message.

**(SPIN,nnnK)**

Indicates to spin JESLOG whenever either JESMSGGLG or JESYSMSG has "nnnK" lines, where "K" indicates thousands of lines.

## JOBCLASS(class | STC | TSU)

### (SPIN,nnnM)

Indicates to spin JESLOG whenever either JESMSGLG or JESYSMSG has "nnnM" lines, where "M" indicates millions of lines.

### SUPPRESS

Indicates that JES2 will suppress writing to the JESLOG data sets during the execution of jobs defined for this job class. JES2 only writes data to the JESLOG data sets during each job's input service and post-execution processing phases.

### NOSPIN

Indicates that JESLOG data will not be spun, but will not be suppressed. NOSPIN is the default.

**Modification:** \$T JOBCLASS command or cold start.

### JOBRC=MAXRC | LASTRC

Specifies the method JES2 uses to determine the return code for jobs submitted in this class. Specify **MAXRC** to use the highest return code of any executed step as the job return code. Specify **LASTRC** to use the return code of the last executed step as the job return code. The default value is **MAXRC**.

**Modification:** \$T JOBCLASS operator command or cold start

### JOURNAL=Yes | No

Specifies whether (Yes) or not (No) job-related information is to be saved in a job journal.

Job journaling limits the scope of RESTART=YES. If the JOURNAL=Yes parameter is specified:

- JES2 restarts interrupted jobs from the beginning only if the MVS system is unable to restart the job from a step or checkpoint.
- RESTART=NO has no effect; all jobs are requeued for execution.

(Specifying RD=R|RNC on the JCL JOB statement has the same effect.)

If the jobs are not journaled (JOURNAL=No), JES2 always attempts to restart interrupted jobs in this class from the beginning.

JOURNAL=No specifies that information for the job journal is not to be processed for a job in this job class unless RD=R or RD=RNC is specified on the JOB statement for a job or on the EXEC statements for the job.

**Note:** To restart a job automatically through checkpoint/restart or step restart, information about the job must be recorded in the job journal. To restart a job using the automatic restart manager, the job journal is not needed (the automatic restart manager does not use the job journal).

The default of this parameter is Yes, which specifies that information for the job journal is to be processed for this job class.

**Note:** This parameter is not allowed on **JOBCLASS(STC)** and **JOBCLASS(TSU)** initialization statements.

**Modification:** \$T JOBCLASS operator command or cold start.

### LOG=Yes | No

LOG=NO specifies that the JES2 job log is not to be printed for this job class. The JES2 job log contains the user's console messages and replies to WTORs issued during the processing of the job. When No is specified, JES2 statistics information (normally printed with the job) is also suppressed.



This parameter defaults to Yes, which specifies that the job log is to be printed for this job class. Even when LOG=Yes is specified, the job log may be suppressed on an individual job basis through a parameter in the accounting field of the JOB card or by a parameter on a /\*JOBPARM control card.

**Modification:** \$T JOBCLASS operator command or cold start

**MODE=JES|WLM**

Indicates whether jobs in this class are to be run under JES-mode or WLM-mode initiators. See *z/OS JES2 Initialization and Tuning Guide* for more information.

**Note:** This parameter is not allowed on **JOBCLASS(STC)** and **JOBCLASS(TSU)** initialization statements.

**Modification:** \$T JOBCLASS operator command or cold start

**MSGCLASS=msgclass**

Specifies a default message class for started tasks or time-sharing users.

**Note:** This parameter is only allowed on **JOBCLASS(STC)** and **JOBCLASS(TSU)** initialization statements.

**Modification:** \$T JOBCLASS operator command or cold start

**MSGLEVEL=(n,m) |(0,1)**

Specifies a message level value (n) for use when the MSGLEVEL parameter is not specified on a JOB statement. If a MSGLEVEL parameter is not specified, JCL and allocation/termination messages are recorded in the system message data set according to the value specified in this parameter.

The character “n” specifies the kinds of JCL listed, as follows:

- 0 JOB statement only
- 1 Input statements, cataloged procedure statements, and symbolic parameter substitution values
- 2 Input statements only, including in-stream procedures.

The character “m” specifies the kinds of allocation/termination messages listed, as follows:

- 0 No messages are to be listed, except in the case of an abnormal termination, in which case allocation/termination messages are listed.
- 1 Allocation/termination messages are listed.

**Modification:** \$T JOBCLASS operator command or cold start

**NAME=ccccccc**

Specifies the jobclass to be used for modification.

**OUTDisp=( [normal] [, abnormal] )**

Specifies the default output disposition for JES data sets created for jobs in this class, depending on whether or not the job abended.

**normal**

Specifies the output disposition if the job does not abend.

**abnormal**

Specifies the output disposition if the job abends.

Valid output dispositions are:

## JOBCLASS(class | STC | TSU)

**Hold** Hold the output. JES2 does not process the output until you either change the disposition to WRITE or KEEP, or release the output. When the output is released, the disposition changes to WRITE.

**Note:** This specification is honored when the output reaches the destination node.

**Keep** Process the output and then keep a copy of it on spool. After processing, the disposition of this output becomes LEAVE.

**Leave** JES2 does not process the output until you change the disposition to WRITE or KEEP, or release the output. When the output is released, the disposition changes to KEEP.

**Purge** Purge the output immediately.

**Write** Process the output then purge it.

Only code OUTDISP= on JOBCLASS when you require that system data sets have a specific output disposition regardless of their message class (MSGCLASS=) specification. If you have no such requirement, either code OUTDISP=(), OUTDISP=(,) , or leave it off the JOBCLASS statement completely.

If you do not code OUTDISP=, JES2 assigns the value on the OUTCLASS statement for JES2 member data sets in this class. See *z/OS JES2 Initialization and Tuning Guide* for more information about specifying output disposition and how JES2 determines output disposition defaults.

**Modification:** \$T JOBCLASS operator command or cold start

### OUTPUT=Yes|No

OUTPUT=No specifies that no SYSOUT data is to be written for jobs executed in this job class.

**Note:** Specification of the No option prevents the TSO/E TRANSMIT command from functioning. For further discussion of the relationship between JES2 and the TSO/E interactive data transmission facility, see the description of Exit 13 in *z/OS JES2 Installation Exits*.

This parameter defaults to YES, which specifies that SYSOUT data is to be written for jobs executed in this job class.

**Modification:** \$T JOBCLASS operator command or cold start

### PERFORM=nnn|000

Specifies the default performance-group number (0-999) for this job class. This number is used as the performance-group number on the JCL EXEC statement when a performance-group number is not specified on the JCL JOB or EXEC statement for a job of this job class.

**Note:** The performance-group value specified on the EXEC card (step level) has no effect if running in WLM goal mode.

The parameter default is 000, which indicates that no performance-group processing will be performed by JES2. A default value of 1 will be assigned for all steps in a job.

**Modification:** \$T JOBCLASS operator command or cold start

### PGMRNAME=Yes|No

Specifies whether a programmer name is required (Yes) or not required (No) on a JCL JOB statement.

**Note:** This parameter is not allowed on **JOBCLASS(STC)** and **JOBCLASS(TSU)** initialization statements.

**Modification:** \$T JOBCLASS operator command or cold start

**PROCLIB=nn|00**

Specifies the default procedure library number (00-99) which is to be used for this job class. It allows you to specify procedure libraries for different job classes. In the JES2 procedure, one DD statement must be named PROC00. If you specify additional procedure libraries (01-99) at that time, you may associate these libraries to a job class by replacing the nn of this parameter with the appropriate procedure library number. All cataloged procedure libraries to be used by jobs, time-sharing users, or system tasks must be defined in the JES2 procedure.

**Modification:** \$T JOBCLASS operator command or cold start

**QHELD=Yes|No**

Specifies whether (Yes) or not (No) jobs in this class are not selected for execution (meaning they are held) until the class is released from held status by operator command.

**Note:** This parameter is not allowed on **JOBCLASS(STC)** and **JOBCLASS(TSU)** initialization statements.

**Modification:** \$T JOBCLASS operator command

**REGION=nnnnx|1M**

Specifies the default for the region size assigned to each job step. The "nnnn" indicates the number of units that make up the default region size; the "x" indicates the unit of measure (either 'K' for Kilobytes or 'M' for Megabytes).

- For nnnnK, the maximum allowable value is 9999K.
- For nnnnM, the maximum allowable value is 2047M.

The region size (0-2047M) is assigned when no region size is specified in the JOB and EXEC statements and the job step is to be run with ADDRSPC=VIRT. (See *z/OS MVS JCL Reference* for further details on specifying the REGION parameter on the JOB and EXEC statements.)

**Note:** For STC and TSU the default is 0K.

**Modification:** \$T JOBCLASS operator command or cold start

**RESTART=Yes|No**

Specifies whether (Yes) or not (No) JES2 is to requeue for execution any job of this job class that had been executing before the IPL of the system was repeated and a JES2 warm start was performed. The job is restarted from the beginning, unless the scheduler can restart it from a step or checkpoint.

Job journaling limits the scope of RESTART=Yes. If the JOURNAL=Yes parameter is specified:

- JES2 restarts interrupted jobs from the beginning only if the MVS system is unable to restart the job from a step or checkpoint.
- RESTART=No has no effect; all jobs are requeued for execution.

(Specifying RD=R|RNC on the JCL JOB statement has the same effect.)

If RESTART=Yes and the jobs are not journaled (JOURNAL=No), JES2 always attempts to restart interrupted jobs in this class from the beginning.

## JOBCLASS(class | STC | TSU)

**Note:** This parameter is not allowed on **JOBCLASS(STC)** and **JOBCLASS(TSU)** initialization statements.

**Modification:** \$T JOBCLASS operator command or cold start

### **Note:**

1. This parameter pertains to restarts that do not involve jobs registered with the MVS automatic restart manager. RESTART is ignored if the job is registered with the automatic restart manager.
2. Specifying RESTART=Y or RESTART=N on the /\*JOBPARM control statement for a particular job overrides this job class RESTART parameter.
3. RESTART=No only applies to restarts after a system failure.

### **SCAN=Yes | No**

SCAN=YES specifies that jobs in this job class are to be queued for output processing immediately after JCL conversion, as though TYPRUN=SCAN was specified on the JOB statement for these jobs.

This parameter defaults to NO, which specifies that jobs in this job class are to be queued as usual. SCAN=NO will be ignored if the TYPRUN=SCAN parameter is specified on the JOB statement for a job.

**Note:** This parameter is not allowed on **JOBCLASS(STC)** and **JOBCLASS(TSU)** initialization statements.

**Modification:** \$T JOBCLASS operator command or cold start

### **SCHENV=xxxxx**

Specifies a 1 to 16 character default WLM scheduling environment name to be used for jobs converted in this job class. SCHENV specified on a JOB card takes precedence over the value specified here. See the *z/OS MVS JCL Reference* for the rules regarding SCHENV names. The SCHENV will be rejected if it is not defined to WLM.

**Modification:** \$T JOBCLASS operator command or cold start

### **SWA= Above | Below**

SWA=Above specifies that all eligible schedule work area (SWA) control blocks created for jobs in this job class will be placed above 16 megabytes in virtual storage.

This parameter defaults to Below, which specifies that all SWA control blocks for jobs in this job class will reside below 16 megabytes in virtual storage.

**Modification:** \$T JOBCLASS operator command or cold start

### **SYSSYM[=ALLOW | DISALLOW]**

Specifies whether system symbols are substituted in batch jobs that are submitted in this JOBCLASS. Symbols are substituted when the job is processed by the z/OS converter using the system symbols that are set on the system where the conversion occurs.

**Note:** You can choose the system that converts a job using SYSAFF on the JOB or JOBPARM JCL/JECL card or SYSTEM on the JOB card. If CNVT\_SCHENV= is set to HONOR on the JOBDEF statement, then you can also choose the system that converts a job by associating a system with the job scheduling environment.

### **TIME=(mmmmmm, ss) | (30, 0)**

Specifies the default for the maximum processor time that each job step may

run. The “mmmmmm” indicates minutes (0-357912); the “ss” indicates seconds (0-59). The value specified is subject to the limits described for the TIME parameter in *z/OS MVS JCL Reference*.

This default TIME= specification is used when no TIME parameter is specified on the JCL EXEC statement. (See *z/OS MVS JCL Reference* for further details on specifying the TIME parameter on the EXEC statement. See notes for \$T job C=class in *z/OS JES2 Commands* for further details concerning the results of changing the job class.)

**Modification:** \$T JOBCLASS operator command or cold start

**Note:** This parameter only defaults the TIME for the EXEC statement; not for the JOB statement.

#### **TYPE6=Yes|No**

TYPE6=No specifies that JES2 is not to produce type 6 SMF records for jobs in this job class. Type 6 SMF records are written for each group of job-related data sets and each spin data set (available for printing) that is processed. Type 6 records are described in *z/OS MVS System Management Facilities (SMF)*.

This parameter defaults to Yes, which specifies that JES2 is to produce type 6 SMF records for this job class. When type 6 records are to be produced, the BUFNUM= parameter on the SMFDEF statement must specify two or more SMF buffers.

**Modification:** \$T JOBCLASS operator command or cold start

**Note:** Suppressing SMF information may not be consistent with your installation's security policy.

#### **TYPE26=Yes|No**

TYPE26=No specifies that JES2 is not to produce type 26 (job summary) SMF records for jobs in this job class. A full explanation of type 26 records is provided in *z/OS MVS System Management Facilities (SMF)*.

This parameter defaults to Yes, which specifies that JES2 is to produce type 26 SMF records for jobs in this job class. When type 26 records are to be produced, the BUFNUM= parameter on the SMFDEF statement must specify two or more SMF buffers.

**Modification:** \$T JOBCLASS operator command or cold start

**Note:** Suppressing SMF information may not be consistent with your installation's security policy.

#### **XBM= procname**

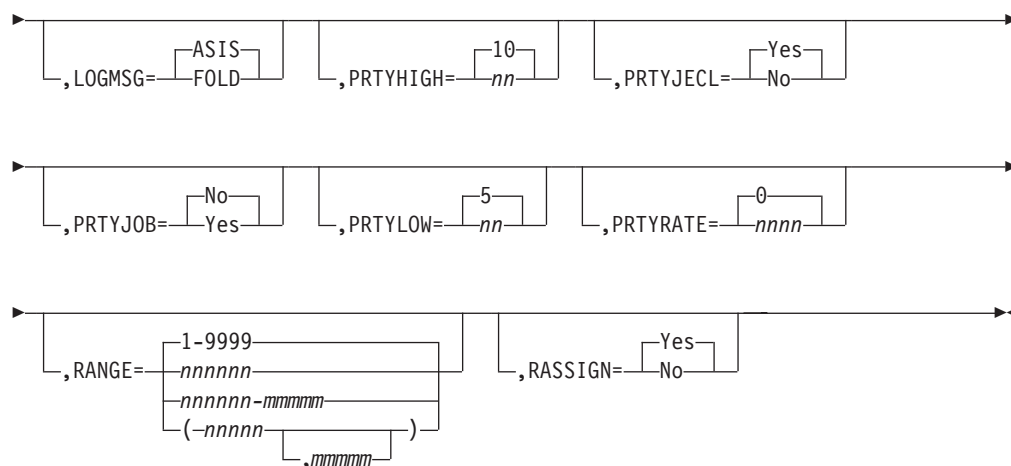
Specifies the procedure name JES2 uses as the target of an EXEC statement. The procedure names a program that processes the input submitted to this job class. Specifying this parameter reserves this job class for the Execution Batch Monitoring (XBM) facility. See *z/OS JES2 Initialization and Tuning Guide* for details on using this facility.

If you do not specify this parameter, or nullify the parameter, JES2 does not use the XBM facility and processes jobs in this class normally.

**Note:** This parameter is not allowed on **JOBCLASS(STC)** and **JOBCLASS(TSU)** initialization statements.

**Modification:** \$T JOBCLASS command or cold start



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter description for JOBDEF****ACCTFLD=IGNORE|REQUIRED|OPTIONAL**

Specifies whether the JES2 form of the accounting information (the job accounting number and room number) is required (REQUIRED), ignored by JES2 if present (IGNORE), or is not required but used by JES2 if present (OPTIONAL) on the JCL JOB statement for this job.

If ACCTFLD=REQUIRED is coded, JES2 cancels your job when either of the accounting field parameters is missing and issues message \$HASP110 jobid jobname ILLEGAL JOB CARD.

**Modification:** \$T JOBDEF operator command.

**BAD\_JOBNAME\_CHAR=c|?**

Specifies the character to use in place of invalid characters in a jobname. This translation is used for JES2 commands and displays RACF entity names too. Valid values are: A-Z,0-9, \$, #, @, /, +, :, ?, \_ , -, !

**Modification:** \$T JOBDEF operator command or JES2 cold start

**CISUB\_PER\_AS=nn|5**

Specifies the *nn* number of converter/interpreter subtasks (1-25) that are run in each of the jesxClxx address spaces when INTERPRET=JES is specified. Valid values are 1-25 (25 being the maximum number of converter PCEs that can be specified on PCEDEF).

**Modification:** \$T JOBDEF operator command

**CNVT\_ENQ=WAIT|FAIL**

Specifies how the system should process jobs that request JCLLIB data sets that are already enqueued at job conversion time.

**WAIT**

Indicates that system will allow the job to wait for the enqueued data set.

**FAIL**

Indicates that the system will fail (with a JCL error) a job that requests an unavailable JCLLIB data set.



**Modification:** \$T JOBDEF operator command or cold start. Note that this parameter cannot be modified through a hot start, quick start, or single-member warm start, such that the parameter value in effect before the termination will be used.

**CNVT\_SCHENV=HONOR|IGNORE**

Specifies whether the availability of a scheduling environment that is associated with a job controls which member a job converts on. If CNVT\_SCHENV=HONOR is specified, then a job can only convert on a system where the scheduling environment associated with the job is available.

**Modification:** \$T JOBDEF operator command. This parameter cannot be modified by a hot start, quick start or single-member warm start.

**DUPL\_JOB=NODELAY|DELAY**

Specifies whether or not JES2 is allowed to concurrently execute batch jobs with the same name in the same MAS.

**DELAY**

Do not allow JES2 to execute batch jobs with the same name in the same MAS at the same time.

**NODELAY**

Allow JES2 to execute batch jobs with the same name in the same MAS at the same time.

**Modification:** \$T JOBDEF operator command or JES2 cold start.

**CNVT\_ENQ=WAIT|FAIL**

Specifies how the system should process jobs that request JCLLIB data sets that are already enqueued at job conversion time.

**WAIT**

Indicates that system will allow the job to wait for the enqueued data set.

**FAIL**

Indicates that the system will fail (with a JCL error) a job that requests an unavailable JCLLIB data set.

**Modification:** \$T JOBDEF operator command or cold start. Note that this parameter cannot be modified through a hot start, quick start, or single-member warm start, such that the parameter value in effect before the termination will be used.

**DEF\_CLASS=class|A**

Specifies a default class that JES2 will use if a non-valid class is discovered during processing. The specified class must be a defined and active batch job class. The specified class cannot be set to ACTIVE=NO, and cannot be deleted. The following examples show when the default class would be used:

- When a job is submitted with a CLASS= value that is not valid. The job is failed, but this class is associated with the job for later processing.
- When a job class is deleted that is associated with the INTRDR statement as CLASS=. The INTRDR CLASS value is set to this value.
- During initialization processing, when the CLASS= value that is specified for a reader (INTRDR, local or remote) is not valid and the operator continues initialization.

The default is A.

**Modification:** \$T JOBDEF operator command or a JES2 all-member warm start.



**Scope:** MAS-wide

### **INTERPRET=INIT | JES**

Specifies when JES2 calls the MVS interpreter to process a job. The INTERPRET parameter is only valid when JES2 is in z11 mode. The INTERPRET parameter is not supported in z2 mode.

### **INIT**

Specifies to call the interpreter when the job is selected for execution by an initiator. Invoking the interpreter in the initiator is the traditional JES2 processing method.

### **JES**

Specifies for JES2 to call the interpreter at the end of conversion processing. The following functions are available if processing is done under JES (after conversion):

- Earlier detection of JCL errors that are detected by the MVS interpreter. This allows errors to be detected even if the job never executes for TYPRUN=.
- Processing of JESDS OUTPUT statements to control data set attributes, even if the job never executes.

**Note:** Specifying INTERPRET=JES causes EXIT 60 to be driven instead of exit 6. If you use exit 6, you might need to also provide similar function in exit 60 before setting interpret=JES.

**Modification:** \$T JOBDEF operator command.

### **JNUMWARN=nnn | 80**

Specifies the percentage (1–99) of assignable job numbers (specified through the RANGE= parameter) that have been used for jobs submitted at the local node at which the operator is to be alerted with message \$HASP050 JES2 RESOURCE SHORTAGE.

**Modification:** \$T JOBDEF operator command. Note that this parameter cannot be modified through a hot start, quick start, or single-member warm start.

### **JOBNUM=nnnnn | 1000**

Specifies the maximum number (must be no greater than 400000) of jobs that can be in the JES2 job queue at any given time. This value includes all TSU, STC jobs, and batch jobs.

**Performance Consideration:** Specify JOBNUM= large enough to accommodate all jobs (including batch jobs, started tasks, and TSO/E logons) in the system at all phases of processing. Be careful not to specify a value that is too small.

If you use the \$T JOBDEF command to increase JOBNUM=, only do so when you can allow your system to experience temporary performance degradation while all JES2 systems read the checkpoint data set.

**Note:** Use this parameter to increase the limit for the JNUM resource that is reported on the HASP050 message.

**Modification:** \$T JOBDEF operator command to increase or decrease the number of jobs.

### **JOBWARN=nnn | 80**

Specifies the percent (1–99) usage threshold of available job queue elements (JQEs) at which the operator is to be alerted with message \$HASP050 JES2 RESOURCE SHORTAGE. If you specify 0, no alert will be given.

**Modification:** \$T JOBDEF operator command. Note that this parameter cannot be modified through a hot start, quick start, or single-member warm start.

**LOGMSG=ASIS | FOLD**

Specifies whether the messages issued by JES2 and written at job JCL converter time are mixed-case (ASIS) or uppercase (FOLD). The default is ASIS.

**Modification:** \$T JOBDEF operator command or JES2 start.

**PRTYHIGH=nn | 10**

Specifies the upper priority limit (0-15) to be associated with the JES2 job priority-aging feature. A job will not be priority-aged if its priority is (or becomes) greater than or equal to the value specified in this parameter. Jobs on the \$HARDCPY queue are not priority aged.

**Modification:** \$T JOBDEF operator command. Note that this parameter cannot be modified through a hot start, quick start, or single-member warm start.

**PRTYJECL=YES | NO**

Specifies whether the JES2 /\*PRIORITY control statement is to be supported (YES) or ignored (NO).

**Modification:** \$T JOBDEF operator command.

**PRTYJOB=YES | NO**

Specifies whether the priority specified (PRTY= keyword) on the JCL JOB statement is supported (YES) or ignored (NO).

**Modification:** \$T JOBDEF operator command.

**PRTYLOW=nn | 5**

Specifies the lower priority limit (0-15) to be associated with the JES2 job priority-aging feature. A job will not be priority-aged unless its priority is initially equal to or greater than this value. Jobs on the \$HARDCPY queue are not priority aged. (See the PRTYRATE= and PRTYHIGH= parameters on this initialization statement for additional information.)

**Modification:** \$T JOBDEF operator command. Note that this parameter cannot be modified through a hot start, quick start, or single-member warm start.

**PRTYRATE=nnnn | 0**

Specifies the number (0-1440) of time periods into which a 24-hour day is to be divided for use in increasing a job's priority by the JES2 priority-aging feature. For example, if 3 is specified, a job's priority will be increased by one for every 8 hours it remains in the system. However, a job's priority will not be incremented unless it is at least equal to the value specified in the PRTYLOW= parameter; nor will a job's priority be increased above the value specified in the PRTYHIGH= parameter. If 0 is specified, the values specified in the PRTYLOW= and PRTYHIGH= parameters are ignored. See *z/OS JES2 Initialization and Tuning Guide* for a discussion of this processing.

If a job's priority is specified on a /\*PRIORITY control statement or through the PRTY parameters on the JOB card, the job will be priority-aged if its priority is eligible. See the JOBPRTY statement (JOBPRTY= parameter) and OUTPRTY statement (RECORD=, PAGE=, and PRIORITY= parameters) in this chapter for additional information.) Jobs in WLM-mode job classes are not priority aged.

**Modification:** \$T JOBDEF operator command. Note that this parameter cannot be modified through a hot start, quick start, or single-member warm start.



## JOBPRTY(n)

If this parameter is not specified, the following values are used as default values:

JOBPRTY(n)	PRIORITY=
(1)	9
(2)	8
(3)	7
(4)	6
(5)	5
(6)	4
(7)	3
(8)	2
(9)	1

**Modification:** \$T JOBPRTY(n) operator command.

### TIME=nnnnnn

Specifies execution times (1-279620), in minutes, that are to be associated with job-scheduling priorities, as specified in a corresponding PRIORITY parameter.

If a /\*PRIORITY control statement is specified for a job or if PRTY= is specified on the JOB statement, these values are not used. See the PRIORITY= parameter on this initialization statement for additional information.

If these parameters are not specified, the following are used as defaults:

JOBPRTY(n)	PRIORITY=	TIME=
(1)	9	2
(2)	8	5
(3)	7	15
(4)	6	279620
.	.	.
.	.	.
.	.	.
(9)	1	279620

**Modification:** \$T JOBPRTY(n) operator command.

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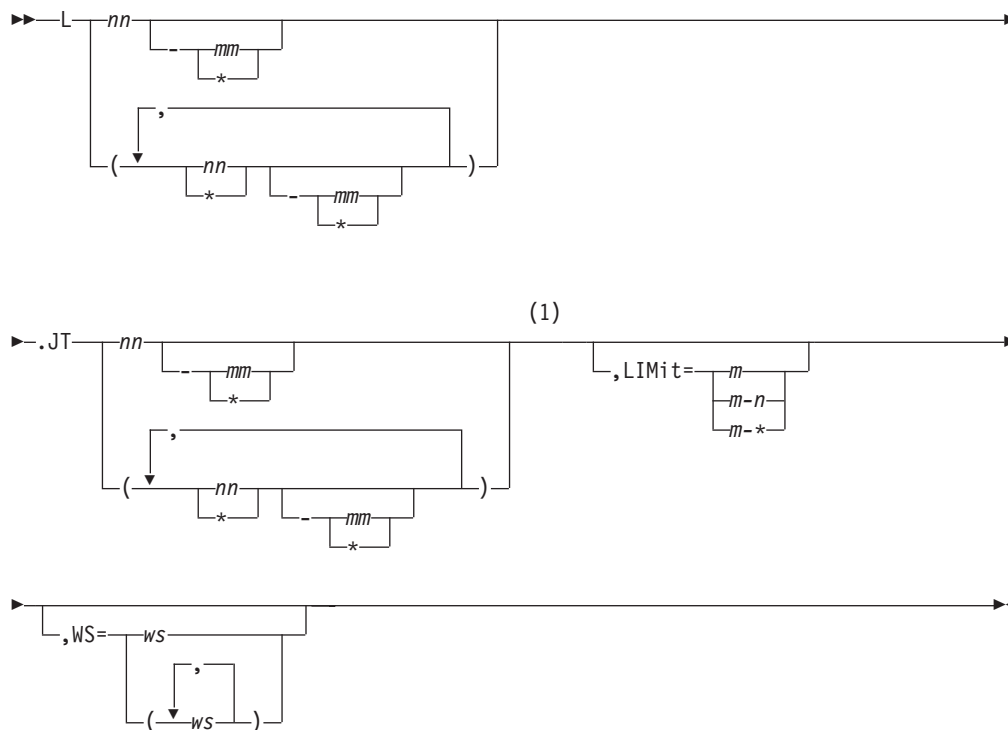
## L(nnnnn).JT(n) - Job Transmitter

The L(nnnnn).JT(n) statement specifies work selection characteristics for a job transmitter on one teleprocessing line or logical line (for SNA NJE terminals) to be used during network job entry. The work selection characteristics include size limits, by number of lines and pages, for data sets that the transmitter will accept. Use these limits to customize transmitter streams to specific workloads, such as large files or smaller message traffic, depending on the needs of the system. Identify the teleprocessing line by L(nnnnn), where nnnnn can be 1-65535. Identify the Job transmitter by .JT(n), where n can be 1-7.

**Note:** If a job transmitter number (n) is higher than the value of the JTNUM= parameter on the NJEDEF statement, or higher than an overriding STNUM= value on a LINE statement for this line, the transmitter is not created. When this statement is coded with a valid transmitter number, a full set of job transmitters and receivers is created for the line as specified on JRNUM=, JTNUM=, SRNUM=, and STNUM= parameters of the NJEDEF or LINE statements.

After you define the job transmitters, you can use the subscript on this statement name to modify transmitters, that is, individual lines (nnnnn), a range of lines in either ascending (n-m) or descending (m-n) order, or a generic range in ascending (n-\*), descending (\*-n) order, or an asterisk (\*) to indicate all lines. The valid subscript range for the LINE statement is now 1–65535.

## Format Description for L(nnnnn).JT(n)



### Notes:

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for L(nnnnn).JT(n)

### LIMit=m|m-n|m-\*

Specifies the limits (in records) for data sets that the transmitter will select for line-mode transmissions. This number applies to the total lines of all non-spun output in the job or to individual spun SYSOUT data sets (or data set fragments) in a job.

For both variables  $m$  and  $n$ , you can specify a range of values 0-4294967295.  $m$  and  $n$  can be equal. If they are not equal,  $n$  must be larger than  $m$ .

If you code only  $m$ , that value becomes both the lower and upper limit. If  $m-*$  is specified, the upper limit is set to the default value of 4294967295.

**Default:** If you omit this parameter, JES2 uses the defaults  $m=0$  and  $n=4294967295$ .

**Modification:** \$TL(nnn).JT(n) command.

### WS=(criteria,.../criteria,...)

Specifies the work selection criteria for this device. Using any combination of

## L(nnnnn).JT(n)

installation- and JES2-defined criteria, you can specify up to 18 criteria in the WS= list. JES2 defines LIM (page and record limit only); any other criterion is installation defined through use of the \$WSTAB macro. (See *z/OS JES2 Macros* for an explanation of using the \$WSTAB macro.) Multiple entries must be separated by commas and the list (even a list of one criterion) must be enclosed in parentheses. If a criterion is specified in the list, work selection is based on the current setting of the corresponding parameter. If a criterion is not specified in the list, the criterion is not considered during work selection.

The general rules for specifying a SYSOUT transmitter work selection list are:

- You can use one slash (/) before or after one of the criterion to further specify work selection. Criteria placed before the slash must be matched exactly if the work is to be selected. Criteria placed after the slash do not have to match exactly.
- The order of those criteria specified after the slash indicates the priority (highest to lowest, in left to right order) in which JES2 attempts to match them.
- If the data being considered for transmission was received from a node that does not provide a page count for its files, then JES2 sets the page count to zero and transmits the data only if a zero page count is within the limits. For more information, see the sending node's reference documentation.
- In general, the smaller the work selection list the less the placement of certain criteria within the list affects the work selection.

**Default:** / (no work selection criteria)

**Modification:** \$TL(nnn).JT(n) command.

---

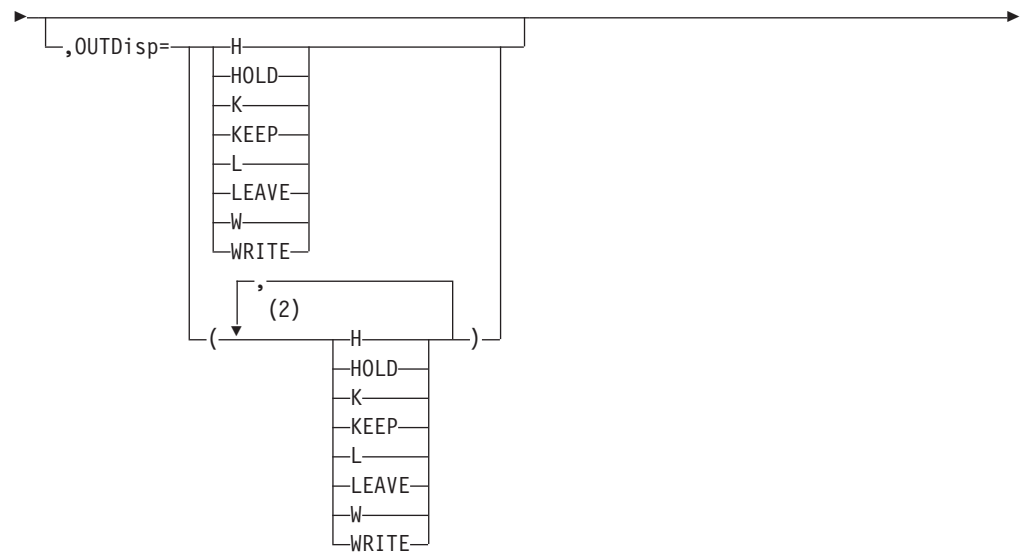
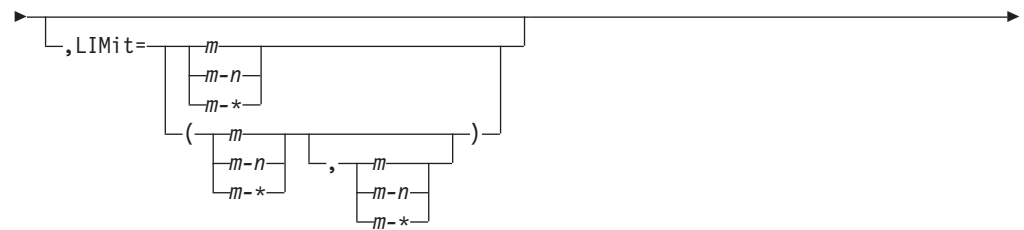
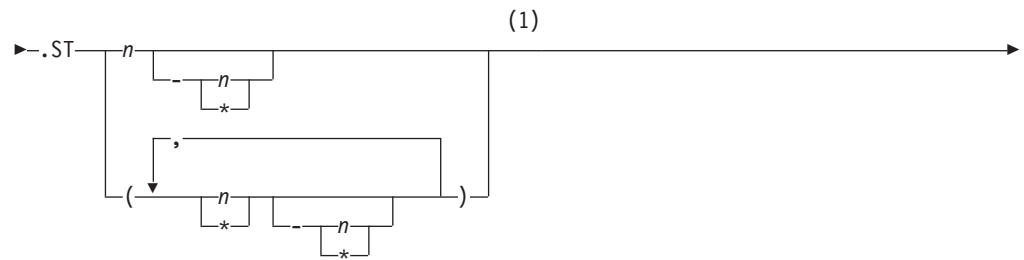
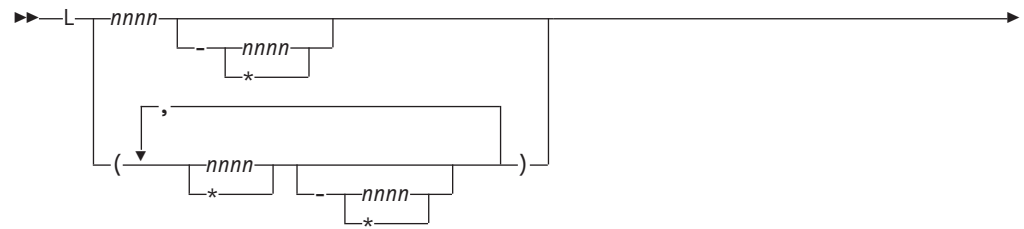
## L(nnnnn).ST(n) - SYSOUT Job Transmitter

The L(nnnnn).ST(n) statement specifies work selection characteristics for a SYSOUT transmitter on one teleprocessing line or logical line (for SNA NJE terminals) to be used during network job entry. The work selection characteristics include size limits, by number of lines and pages, for SYSOUT data sets that the transmitter will accept. Use these limits to customize transmitter streams to specific workloads, such as large files or smaller message traffic, depending on the needs of the system. Identify the teleprocessing line by L(nnnnn), where nnnnn can be 1-65535. If you specify \* as an ending subscript range, possible performance degradation can result during JES2 initialization. Identify the SYSOUT transmitter by .ST(n), where n can be 1-7.

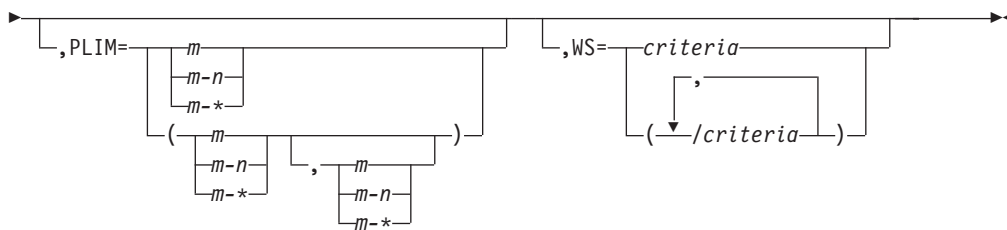
**Note:** If a SYSOUT transmitter number (n) is higher than the value of the STNUM= parameter on the NJEDEF statement, or higher than an overriding STNUM= value on a LINE statement for this line, the SYSOUT transmitter is not created. When this statement is coded with a valid transmitter number, a full set of job and SYSOUT transmitters and receivers is created for the line as specified on JRNUM=, JTNUM=, SRNUM=, and STNUM= parameters of the NJEDEF or LINE statements.

After you define the SYSOUT job transmitters, you can use the subscript on this statement name to modify SYSOUT transmitters, that is, individual lines (nnnnn), a range of lines in either ascending (n-m) or descending (m-n) order, or a generic range in ascending (n-\*), descending (\*-n) order, or an asterisk (\*) to indicate all lines. The valid subscript range for the LINE statement is now 1-65535.

## Format Description for L(nnnnn).ST(n)



## L(nnnnn).ST(n)



### Notes:

- 1 Omit the comma between initialization statement and first keyword
- 2 OUTDisp can be coded up to 4 times

## Parameter Description for L(nnnnn).ST(n)

### LIMit=*m*|*m-n*|*m-\**

Specifies the limits (in records) for SYSOUT data sets that the SYSOUT transmitter will select for line-mode transmissions. This number applies to the total lines of all non-spun output in the job or to individual spun SYSOUT data sets (or data set fragments) in a job.

For both variables *m* and *n*, you can specify a range of values 0-4294967295. *m* and *n* can be equal. If they are not equal, *n* must be larger than *m*.

If you code only *m*, that value becomes both the lower and upper limit. If *m-\** is specified, the upper limit is set to the default value of 4294967295.

**Default:** If you omit this parameter, JES2 uses the defaults *m*=0 and *n*=4294967295.

**Modification:** \$T L(nnnnn).ST(n) operator command.

### OUTDisp=(*disposition*[,*...**disposition*])

Specifies the disposition(s) that the output must have in order to be eligible for processing by this offload transmitter. The operator can specify one to four of the following valid dispositions:

#### HOLD|H

Hold the output. JES2 does not process the output until you either change the disposition to WRITE or KEEP, or release the output. When the output is released, the disposition changes to WRITE.

**Note:** This specification is honored when the output reaches the destination node.

#### KEEP|K

JES2 processes the output. After processing, the disposition of this output becomes LEAVE. A copy will NOT be kept on spool on the source node after transmission, or offload process. Output disposition is only honored at final destination.

#### LEAVE|L

JES2 does not process the output until you change the disposition to WRITE or KEEP, or release the output. When the output is released, the disposition changes to KEEP. A copy will NOT be kept on spool on the source node after transmission, or offload process. Output disposition is only honored at final destination.



**WRITE | W**

JES2 processes the output then purges it.

See *z/OS JES2 Initialization and Tuning Guide* for more information about specifying output disposition and how JES2 determines output disposition defaults.

**Default:** Only output with dispositions WRITE and KEEP are selected by this offload transmitter if you do not specify values for OUTDisp=.

**Modification:** \$T L(n).ST operator command

**PLIM=m|m-n|m-\***

Specifies the limits (in pages) set by this device for SYSOUT data sets that the SYSOUT transmitter will select for page-mode transmissions. This number applies to the total pages of all non-spun output in the job or to individual spun SYSOUT data sets in a job.

For both variables *m* and *n*, you can specify a range of values 0-4294967295. *m* and *n* can be equal. If they are not equal, *n* must be larger than *m*.

If you code only *m*, that value becomes both the lower and upper limit. If *m-\** is specified, the upper limit is set to the default value of 4294967295.

**Default:** If you omit this parameter, JES2 uses the defaults *m*=0 and *n*=4294967295.

**Modification:** \$T L(nnnnn).ST(n) operator command.

**WS=(criterion,.../criterion,...)**

Specifies the work selection criteria for this device. Using any combination of installation- and JES2-defined criteria, you can specify up to 18 criteria in the WS= list. JES2 defines LIM (page and record limit only); any other criterion is installation defined through use of the \$WSTAB macro. (See *z/OS JES2 Macros* for an explanation of using the \$WSTAB macro.) Multiple entries must be separated by commas and the list (even a list of one criterion) must be enclosed in parentheses. If a criterion is specified in the list, work selection is based on the current setting of the corresponding parameter. If a criterion is not specified in the list, the criterion is not considered during work selection.

The general rules for specifying a SYSOUT transmitter work selection list are:

- You can use one slash (/) before or after one of the criterion to further specify work selection. Criteria placed before the slash must be matched exactly if the work is to be selected. Criteria placed after the slash do not have to match exactly.
- The order of those criteria specified after the slash indicates the priority (highest to lowest, in left to right order) in which JES2 attempts to match them.
- If the data being considered for transmission was received from a node that does not provide a page count for its files, then JES2 sets the page count to zero and transmits the data only if a zero page count is within the limits. For more information, see the sending node's reference documentation.
- In general, the smaller the work selection list the less the placement of certain criteria within the list affects the work selection.

**Default:** / (no work selection criteria)

**Modification:** \$T L(nnnnn).ST(n) operator command.

## LINE(nnnnn) - NJE/RJE BSC Lines

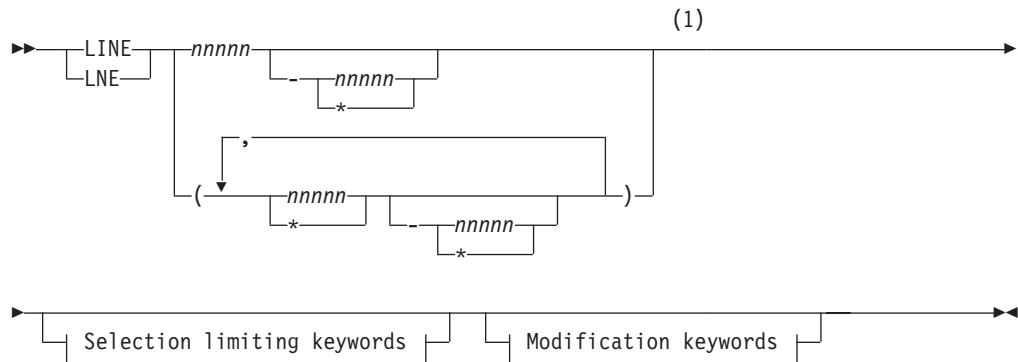
The LINE(nnnnn) statement specifies the characteristics of one teleprocessing line to be used during remote or network job entry (for BSC NJE and RJE terminals). Define each teleprocessing line by a LINE(nnnnn) statement with a unique value (1-65535).

Use the subscript on this statement name to specify individual lines (nnnnn), a range of lines in either ascending (n-m) or descending (m-n) order, or a generic range in ascending (n-\*), descending (\*-n) order, or an asterisk (\*) to indicate all lines. The valid subscript range for the LINE statement is now 1-65535.

There are four parameters that you use to define the number of transmitters and receivers for a line. They are: JRNUM=, JTNUM=, SRNUM=, and STNUM=, and are collectively referred to as xxNUM= parameters. If all the xxNUM= parameters are specified as DEFAULT, no devices are dedicated to this line unless a device is specified on either an L(nnnnn).ST(n) statement or an L(nnnnn).JT(n) statement for this line. In that case, a full set of transmitter and receiver devices is dedicated as specified on the NJEDEF xxNUM= parameters. If any of the xxNUM= parameters are set to a value other than DEFAULT, a full set of transmitters and receivers is dedicated to the line, with default values taken from NJEDEF.

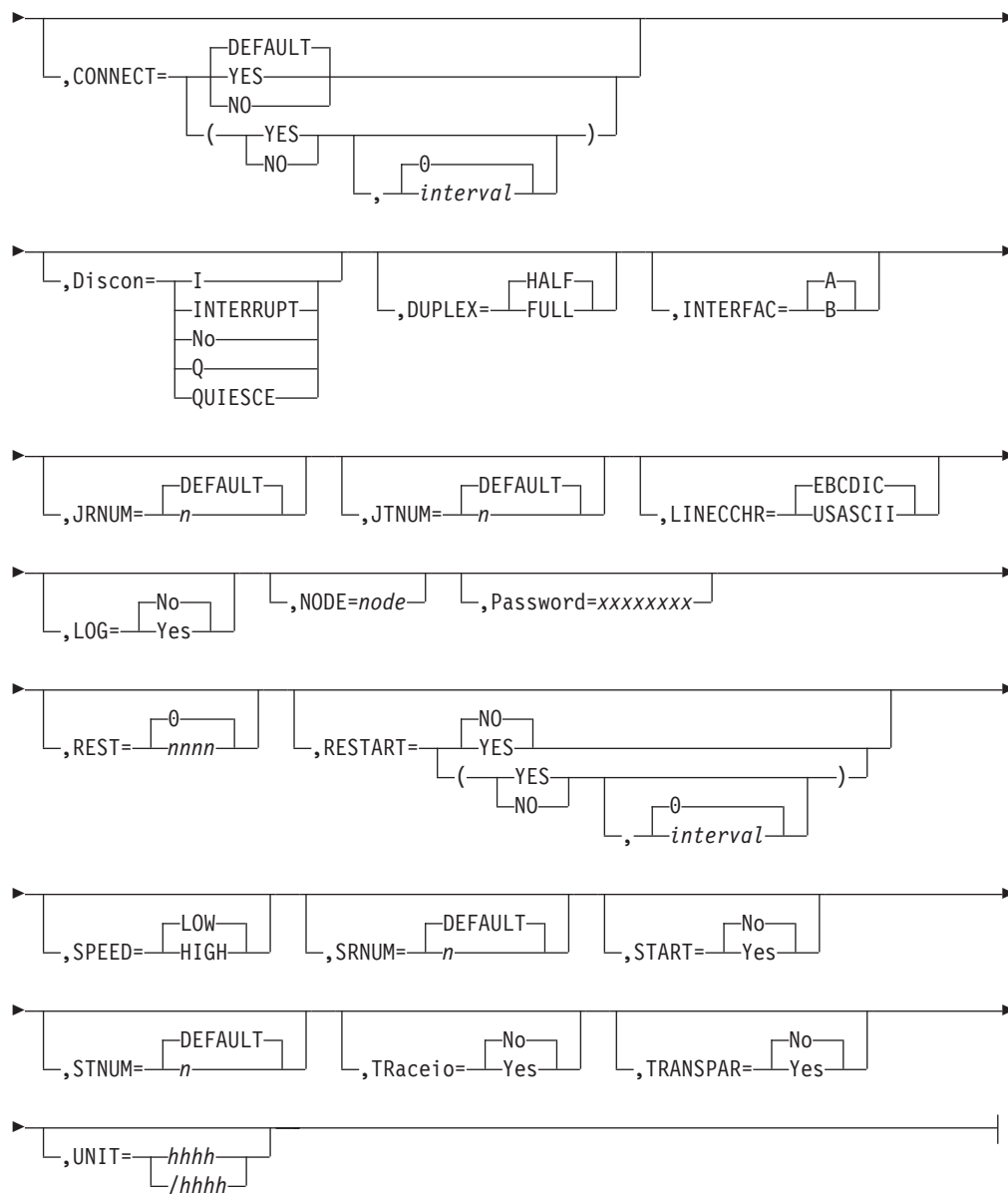
- If a set of transmitters and receivers are dedicated to the line, the line may not be used for RJE.
- If transmitters/receivers are not dedicated to the line, it may still be used for NJE.
- A default set of transmitters and receivers is assigned when the NJE link is started, and detached when the NJE link is ended.

### Format Description for LINE(nnnnn) - BSC

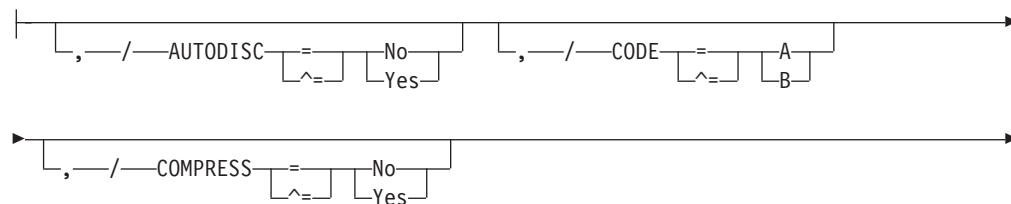


#### Modification keywords:

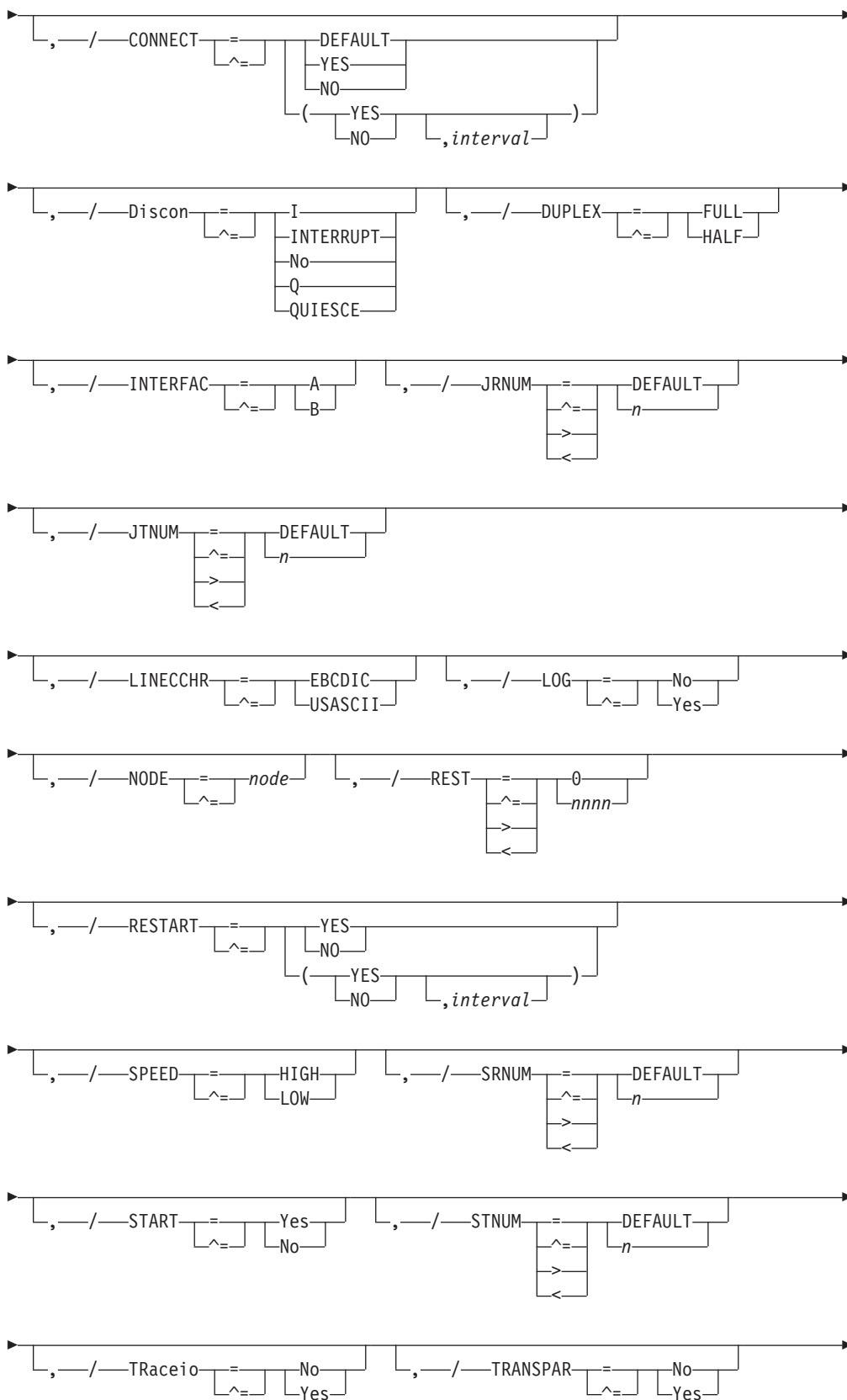


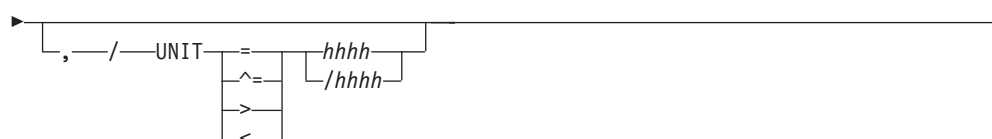


**Selection limiting keywords:**



# LINE(nnnnn) - BSC



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter Description for LINE(nnnnn) - BSC****AUTODISC=Yes|No**

Specifies whether (Yes) or not (No) this line is to be disconnected automatically from a terminal when the local modem disconnects.

**Note:** If you use AUTODISC=Yes for a leased, dedicated line, you can cause serious performance impact without receiving the \$HASP094 I/O ERROR message. This may also occur if a modem is disconnected or powered-off during a session or a line started with a modem disconnected or powered off.

**Modification:** \$T LINE(nnnnn) operator command.

**CODE=A|B**

Specifies the code for this line.

- A** Specifies code A for this line; code A refers to the first code in a BSC adapter that has the dual code feature.
- B** Specifies code B for this line. Code B refers to the second code in a BSC adapter that has the dual code features. If the dual code feature is not present, B should not be specified. See *2701 Data Adapter Component Description*, GA22-6864, for information about BSC CCWs and sense codes.

**Modification:** \$T LINE(nnnnn) operator command.

**COMPRESS= Yes|No**

**For RJE workstations only**, specifies whether (Yes) or not (No) BSC hardware terminals attached to this line can utilize data compression. If you specify NO, it overrides the specification of the COMPRESS= parameter on the RJE workstation (RMT(nnnnn) ) initialization statement for any workstation that might use this line and any remote device statement. Compression compatibility is standard for BSC multileaving workstations.

If you specify COMPRESS=Yes, the specification of the COMPRESS= parameter on the RMT(nnnnn) and the COMP parameter on the remote device (Rnnnnn.xxx) statements is allowed to take effect. IF RMT(nnnnn) specifies COMPRESS=No, or Rnnnnn.xxx specifies NOCOMP, no compression will take place.

This parameter defaults to Yes, which specifies that the line allows data compression.

**Modification:** \$T LINE(nnnnn) operator command.

**CONNECT= (Yes|No|DEFAULT, interval)**

Specifies whether an NJE connection should be automatically attempted for this line. If DEFAULT is specified, processing defers to the CONNECT=(YES|NO) value that is specified on the associated NODE statement. The *interval* is the approximate time (in minutes) between attempted connections. The valid range for *interval* is 0 to 1440. A value of 0 indicates that

## LINE(nnnnn) - BSC

the default interval (from NJEDEF CONNECT=) should be used. The default CONNECT value is DEFAULT, and the default *interval* is 0.

### **Discon={I|INTERRUPT|Q|QUIESCE}**

Specifies whether the line is to be disconnected immediately (I) or after it completes its current activity (Q).

#### **I or INTERRUPT**

A sign-off record is sent to the attached multi-leaving remote workstation or to the connected NJE node.

#### **Q or QUIESCE**

The disconnection occurs as though the remote operator or NJE node had signed off. This is for active lines only.

**Note:** You can change this parameter only if the specified line is **not** currently drained.

### **DUPLEX=HALF|FULL**

Specifies whether this is a full-duplex (FULL) or half-duplex (HALF) line.

**Modification:** \$T LINE(nnnnn) operator command.

### **INTERFAC=A|B**

A specifies interface A for this line; interface A refers to the first interface in a BSC adapter that has the dual-communications interface feature.

B specifies interface B for this line; interface B refers to the second interface in a BSC adapter that has the dual-communications interface feature. If the adapter for this line does not have the dual-communications interface feature, B should not be specified.

**Modification:** \$T LINE(nnnnn) operator command.

### **JRNUM=n|DEFAULT**

Specifies the number (0-7) of network job receivers to be associated with this NJE line. The value of n is an integer that specifies the maximum number of input job streams allowed to be concurrently active on this line. This specification should match the value of JTNUM= for this line on other nodes with which this node is to communicate directly. The sum of the values of JRNUM= and SRNUM= for this line must not exceed 8, or the statement is ignored.

This value overrides the default global value set by the JRNUM= parameter of the NJEDEF statement. If this value is omitted or set to DEFAULT, the value is taken from the JRNUM= parameter of NJEDEF. If you omit or use the DEFAULT where the sum of JRNUM= and SRNUM= exceeds 8, JRNUM= is reduced so that the sum equals 8.

**Default:** Value of the JRNUM parameter of NJEDEF.

**Modification:** Operator command.

### **JTNUM=n|DEFAULT**

Specifies the number (0-7) of network job transmitters to be associated with this NJE line. The value of n is an integer that specifies the maximum number of output job streams allowed to be concurrently active on this line. You should not change this value unless it is known that a particular user has jobs with extremely large amounts of input to be transmitted and other short jobs that must be transmitted concurrently. If there are not enough receivers on the receiving node to receive jobs over the line, excess transmitters drain

automatically. The sum of the values JTNUM and STNUM for this line must not exceed 8, or the statement is ignored.

This value overrides the default global value set by the JTNUM= parameter of the NJEDEF statement. If this value is omitted or set to DEFAULT, the value is taken from the JTNUM= parameter of NJEDEF. If you omit or use the DEFAULT where the sum of JTNUM and STNUM exceeds 8, JTNUM= is reduced so that the sum equals 8.

**Default:** Value of the JTNUM= parameter of NJEDEF.

**Modification:** Operator command.

#### LINECHR=USASCII|EBCDIC

USASCII specifies that the BSC adapter is configured for ASCII line-control characters. When USASCII is specified, this line must be used with 2770, 2780, or 3780 USASCII terminals. EBCDIC specifies that the BSC adapter is configured for EBCDIC line-control characters.

**Modification:** \$T LINE(nnnnn) operator command.

#### LOG=Yes|No

Specifies whether (Yes) or not (No) JES2 is to monitor this line for channel-end completions or SNA events. If you specify LOG=Yes, JES2 issues \$HASP094 message for every transmission across this BSC line. You should specify LOG=No if your installation performs extensive networking activity.

**Modification:** \$T LINE(nnnnn) operator command.

#### NODE=node

Specifies the NJE node name associated with this node. This value determines which node to connect to when a \$SN,LINE=xxx command is issued or the line is automatically connected.

#### Password=xxxxxxx

Specifies a 1- to 8-character security password JES2 is to use to prevent unauthorized terminal users from using this line. You can use this password in the connection request from RJE workstations.

If you do not specify a password, one does not exist.

**Modification:** \$T LINE(nnnnn) operator command.

#### REST=nnnn|0

Specifies an integer between 0 and 2000 which represents the resistance rating of the line as viewed by the installation management and coordinated with other installations. Resistance is an arbitrary value set to indicate a specific line's ability or inability to route work that has "normal" workload requirements and line speed. See *z/OS JES2 Initialization and Tuning Guide* for details concerning resistance selection.

**Modification:** \$T LINE(nnnnn) operator command.

#### RESTART= (Yes|No, interval)

Specifies whether (Yes) or not (No) this line will be restarted if it is drained. The *interval* is the approximate time (in minutes) between attempted restarts. The valid range for *interval* is 0 to 1440. A value of 0 indicates that the default interval (from NJEDEF CONNECT=) should be used. The default RESTART value is No, and the default *interval* value is 0.

#### SPEED=HIGH|LOW

Specifies whether this is a high-speed (greater than 9600 bits per second) or low-speed line.

## LINE(nnnnn) - BSC

**Note:** This parameter is only applicable to 360/20 submodels 2 and 4.

**Modification:** \$T LINE(nnnnn) operator command.

### **SRNUM=n | DEFAULT**

Specifies the number (0-7) of network SYSOUT receivers to be associated with this NJE line. The value of n is an integer which specifies the maximum number of SYSOUT receiver streams allowed to be concurrently active on this line. This specification should match the value of STNUM= for this line on the other nodes with which this member is to communicate directly. The sum of the values JRNUM= and SRNUM= for this line must not exceed 8, or the statement is ignored. This value overrides the default global value set by the SRNUM= parameter of the NJEDEF statement. If this value is omitted or set to DEFAULT, the value is taken from the SRNUM= parameter of NJEDEF. If you omit or use the DEFAULT where the sum of SRNUM= and JRNUM= exceeds 8, SRNUM= is reduced so that the sum equals 8.

**Default:** Value of the SRNUM= parameter of NJEDEF.

**Modification:** Operator command.

### **START=Yes | No**

Specifies whether (Yes) or not (No) this line, if it is ready, will be started automatically when JES2 starts processing. The default START value is No.

### **STNUM=n | DEFAULT**

Specifies the number (0-7) of network SYSOUT transmitters which will be associated with this NJE line. The value of n is an integer which specifies the maximum number of SYSOUT transmitter streams allowed to be concurrently active on this line. If there are not enough receivers on the receiving node to receive SYSOUT data over the line, excess transmitters drain automatically. The sum of the values JTNUM= and STNUM= for this line must not exceed 8, or the statement is ignored.

This value overrides the default global value set by the STNUM= parameter of the NJEDEF statement. If this value is omitted or set to DEFAULT, the value is taken from the STNUM= parameter of NJEDEF. If you omit or use the DEFAULT where the sum of STNUM= and JTNUM= exceeds 8, STNUM value is reduced so that the sum equals 8.

**Default:** Value of the STNUM= parameter of NJEDEF.

**Modification:** Operator command.

### **TRaceio=Yes | No**

Specifies whether (Yes) or not (No) trace ID 4 will trace channel-end completions for BSC lines on VTAM lines and JES2/VTAM interface events, and trace IDs 21 through 24 will trace network control connect (NCC) records.

**Modification:** \$T LINE(nnnnn) operator command.

### **TRANSPAR=Yes | No**

Specifies whether (Yes) or not (No) the text transparency feature of the BSC adapter is present on this line. The text transparency feature allow JES2 to send all 256 characters in a data stream without the data being interpreted as control characters. You must specify Yes for NJE lines.

TRANSPAR=No is valid only for EP links generated to operate as a D/T2701 without the transparency feature. For device types which require the transparency feature, such as 2703 and CTC, specifying TRANSPAR=NO will have no effect and TRANSPAR=YES will be forced at initialization.

**Modification:** \$T LINE(nnnnn) operator command.



**UNIT=hhh | /hhh**

UNIT can be specified as one of the following:

- A 3- or 4-digit hexadecimal device number. Device numbers can be specified in any of the following formats:

```
UNIT=hhh
UNIT=hhhh
UNIT=/hhh
UNIT=/hhhh
```

where hhh and hhhh represent the device numbers.

A slash (/) can optionally precede the device number (for compatibility with other initialization statements that require a slash to denote a 4-digit device number).

- For RJE BSC lines, specify the device number as the same address that you specified for the subchannel address defined for the communication controller.
- NJE protocols support an ESCON<sup>®</sup> Basic Mode CTC (defined to the hardware configuration dialog as BCTC) and a 3088 CTC but do not support an ESCON CTC (defined to the hardware as SCTC).

The same unit address may be specified for more than one line to allow use of different interfaces or codes available in a single BSC adapter. JES2 will allow only one of these lines to be started by the operator at any one time.

If UNIT= is specified, a BSC adapter that was previously offline during JES2 initialization will remain accessible.

You can specify line availability in the following three ways:

1. Make the line available to any RJE workstation (dial up)
2. Make the line available to two or more RJE workstations that must contend for use of the line
3. Make the line available only to a single RJE workstation

The relationship between lines and RJE workstations is controlled by the LINE(nnnnn) and RMT(nnnnn) initialization statements.

If non-SNA NJE lines are attached to a 3705, the 3705 must have been generated to emulate a 2701 or a 2703. During system installation, use hardware configuration definition (HCD) to define the attached NJE lines as follows:

- On the 'Primary Task Selection' panel, select '1. Define, modify, or view configuration'. On the resulting panel, select '5. I/O devices'
- On the 'Add Device' panel, specify the device type as BSC1.
- On the 'Define Parameter / Feature' panel, specify the TCU parameter as 2701

See *z/OS HCD User's Guide* for a complete list of the steps involved in defining a device.

If not specified, JES2 does not assign an available BSC line; instead, a BSC line can be dynamically assigned using a \$T LINE(nnnnn) command.

**Modification:** \$T LINE operator command.

## LINE(nnnnn) - NJE/RJE SNA Lines

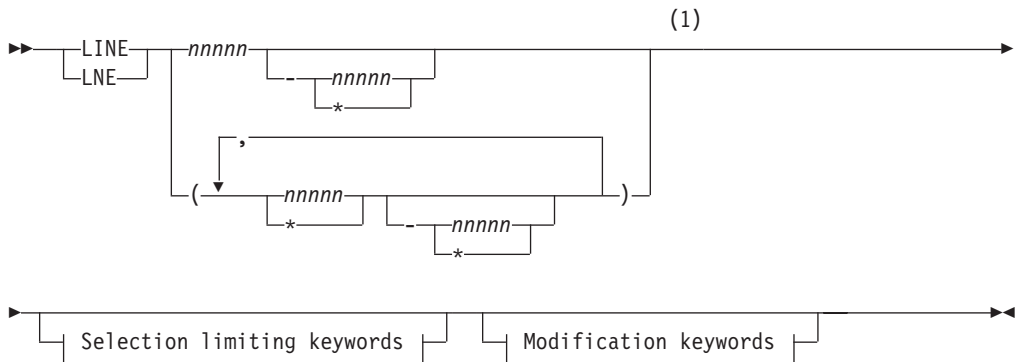
The LINE(nnnnn) statement specifies the characteristics of one teleprocessing line or logical line (for SNA RJE terminals) to be used during remote or network job entry. Define each teleprocessing line by a LINE(nnnnn) statement with a unique value (1-65535).

Use the subscript on this statement name to specify individual lines (nnnnn), a range of lines in either ascending (n-m) or descending (m-n) order, or a generic range in ascending (n-\*), descending (\*-n) order, or an asterisk (\*) to indicate all lines. The valid subscript range for the LINE statement is now 1-65535.

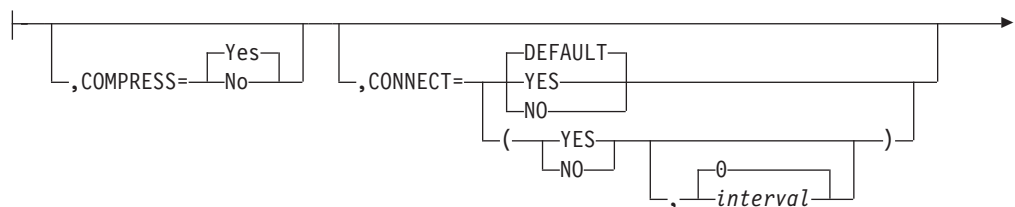
**Note:**

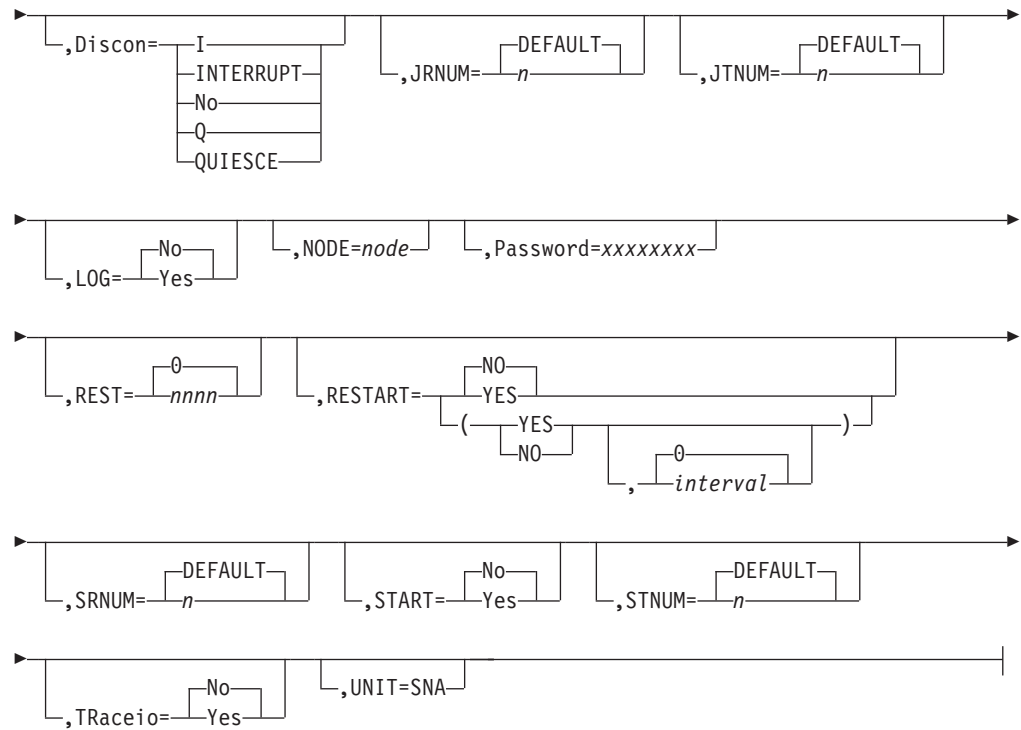
1. Do not specify a password for SNA lines used in NJE host-to-host sessions.
2. There are four parameters that you use to define the number of transmitters and receivers for a line. They are: JRNUM=, JTNUM=, SRNUM=, and STNUM=, and are collectively referred to as xxNUM= parameters. If all the xxNUM= parameters are specified as DEFAULT, no devices are dedicated to this line unless a device is specified on an L(nnnnn) statement for this line. In that case, a full set of transmitter and receiver devices is dedicated as specified on the NJEDEF xxNUM= parameters. If any of the xxNUM= parameters are set to a value other than DEFAULT, a full set of transmitters and receivers is dedicated to the line, with default values taken from NJEDEF.
  - If a set of transmitters and receivers are dedicated to the line, you cannot use the line RJE.
  - If transmitters or receivers are not dedicated to the line, you can still use the line for NJE.
  - A default set of transmitters and receivers is assigned when the NJE link is started, and detached when the NJE link is ended.

### Format Description for LINE(nnnnn) - SNA

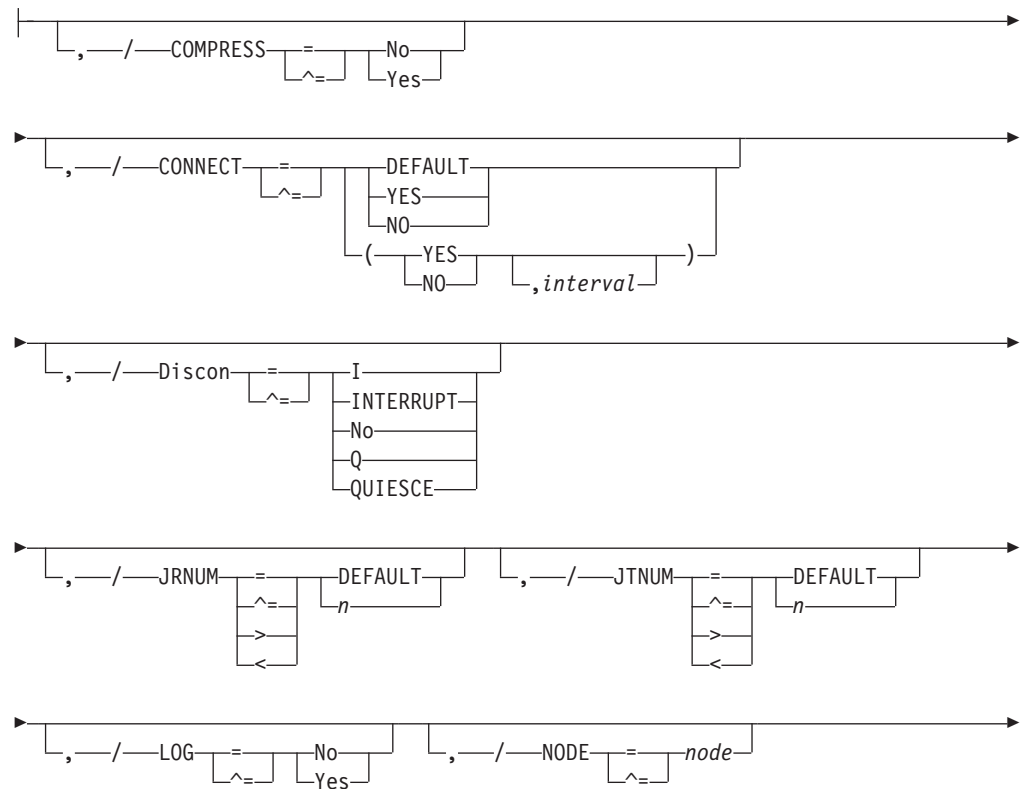


**Modification keywords:**

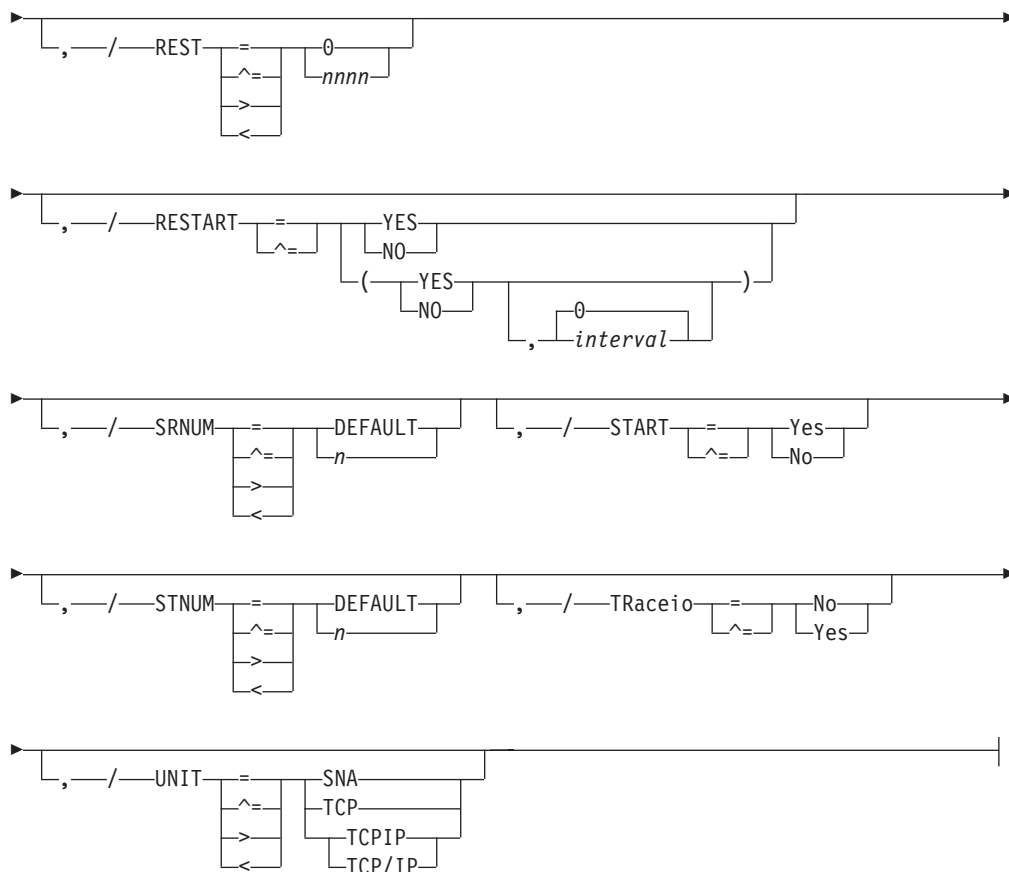




**Selection limiting keywords:**



## LINE(nnnnn) - SNA



### Notes:

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for LINE(nnnnn) - SNA

### COMPRESS= Yes|No

For RJE workstations only, specifies whether (Yes) or not (No) hardware terminals attached to this line can utilize data compression. If you specify No, it overrides the specification of the COMPRESS= parameter on the RJE workstation (RMT(nnnnn) ) initialization statement for any RJE workstation that might use this line and any remote device statement.

If you specify COMPRESS=Yes, the specification of the COMPRESS= parameter on the RMT(nnnnn) and the COMP parameter on the remote device (Rnnnnn.xxx) statements is allowed to take effect. IF RMT(nnnnn) specifies COMPRESS=oO, or Rnnnnn.xxx specifies NOCOMP, no compression will take place.

This parameter defaults to Yes, which specifies that the line allows data compression.

**Modification:** \$T LINE(nnnnn) operator command.

### CONNECT= (Yes|No|DEFAULT, interval)

Specifies whether an NJE connection should be automatically attempted for this line. If DEFAULT is specified, processing defers to the CONNECT=(YES|NO) value that is specified on the associated NODE statement. The *interval* is the approximate time (in minutes) between attempted connections. The valid range for *interval* is 0 to 1440. A value of 0 indicates that

the default interval (from NJEDEF CONNECT=) should be used. The default CONNECT value is DEFAULT, and the default interval is 0.

**Discon={I|INTERRUPT|Q|QUIESCE}**

Specifies whether the line is to be disconnected immediately (I) or after it completes its current activity (Q).

**I or INTERRUPT**

A sign-off record is sent to the attached multi-leaving remote workstation or to the connected NJE node.

**Q or QUIESCE**

The disconnection occurs as though the remote operator or NJE node had signed off. This is for active lines only.

**Note:** You may change this parameter only if the specified line is **not** currently drained.

**JRNUM=n|DEFAULT**

Specifies the number (0-7) of network job receivers to be associated with this NJE line. The value of n is an integer that specifies the maximum number of input job streams allowed to be concurrently active on this line. This specification should match the value of JTNUM for this line on other nodes with which this node is to communicate directly. The sum of the values of JRNUM and SRNUM for this line must not exceed 8, or the statement is ignored.

This value overrides the default global value set by the JRNUM= parameter of the NJEDEF statement. If this value is omitted or set to DEFAULT, the value is taken from the JRNUM= parameter of NJEDEF. If you omit or use the DEFAULT where the sum of JRNUM= and SRNUM= exceeds 8, JRNUM= is reduced so that the sum equals 8.

**Default:** Value of the JRNUM= parameter of NJEDEF.

**Modification:** \$T LINE(nnnnn) operator command.

**JTNUM=n|DEFAULT**

Specifies the number (0-7) of network job transmitters to be associated with this NJE line. The value of n is an integer that specifies the maximum number of output job streams allowed to be concurrently active on this line. This value should remain unchanged unless it is known that a particular user has some jobs with extremely large amounts of input to be transmitted and other short jobs that must be transmitted concurrently. If there are not enough receivers on the receiving node to receive jobs over the line, excess transmitters drain automatically. The sum of the values JTNUM= and STNUM= for this line must not exceed 8, or the statement is ignored.

This value overrides the default global value set by the JTNUM= parameter of the NJEDEF statement. If this value is omitted or set to DEFAULT, the value is taken from the JTNUM= parameter of NJEDEF. If you omit or use the DEFAULT where the sum of JTNUM= and STNUM= exceeds 8, JTNUM= is reduced so that the sum equals 8.

**Default:** Value of the JTNUM= parameter of NJEDEF.

**Modification:** \$T LINE(nnnnn) operator command.

**LOG=Yes|No**

Specifies whether (Yes) or not (No) JES2 is to monitor this line for channel-end completions or SNA events. If you specify LOG=Yes, JES2 issues \$HASP094

## LINE(nnnnn) - SNA

message for every transmission across this SNA line. You should specify LOG=No if your installation performs extensive networking activity.

**Modification:** \$T LINE(nnnnn) operator command.

### **NODE=node**

Specifies the NJE node name associated with this node. This value determines which node to connect to when a \$SN,LINE=xxx command is issued or the line is automatically connected.

### **Password=xxxxxxx**

Specifies a 1- to 8-character security password JES2 is to use to prevent unauthorized terminal users from using this line. This password can be used in the connection request from RJE workstations. You cannot specify a password for SNA lines used in NJE host-to-host sessions.

**Note:** If you specify a password for an SNA line, it is meaningful only if that line is a dedicated line.

If you do not specify a password, none exists.

**Modification:** \$T LINE(nnnnn) operator command.

### **REST=nnnn|0**

Specifies an integer between 0 and 2000 which represents the resistance rating of the line as viewed by the installation management and coordinated with other installations. Resistance is an arbitrary value set to indicate a specific line's ability or inability to route work that has "normal" workload requirements and line speed.

Note that this parameter defaults to the REST= value specified on the APPL(jxxxxxx) or the NODE(xxxxxxx) initialization statement. See *z/OS JES2 Initialization and Tuning Guide* for details concerning resistance selection.

**Modification:** \$T LINE(nnnnn) operator command.

### **RESTART= (Yes|No, interval)**

Specifies whether (Yes) or not (No) this line will be restarted if it is drained. The *interval* is the approximate time (in minutes) between attempted restarts. The valid range for *interval* is 0-1440. A value of 0 indicates that the default interval (from NJEDEF CONNECT=) should be used. The default RESTART value is **No**, and the default interval value is **0**.

### **SRNUM=n|DEFAULT**

Specifies the number (0-7) of network SYSOUT receivers to be associated with this NJE line. The value of n is an integer which specifies the maximum number of SYSOUT receiver streams allowed to be concurrently active on this line. This specification should match the value of STNUM= for this line on the other nodes with which this member is to communicate directly. The sum of the values JRNUM= and SRNUM= for this line must not exceed 8, or the statement is ignored.

This value overrides the default global value set by the SRNUM= parameter on the NJEDEF statement. If this value is omitted or set to DEFAULT, the value is taken from the SRNUM= parameter of NJEDEF. If you omit or use the DEFAULT where the sum of SRNUM= and JRNUM= exceeds 8, SRNUM= is reduced so that the sum equals 8.

**Default:** Value of the SRNUM= parameter of NJEDEF.

**Modification:** \$T LINE(nnnnn) operator command.

**START=Yes|No**

Specifies whether (Yes) or not (No) this line, if it is ready, will be started automatically when JES2 starts processing. The default START value is **No**.

**STNUM=n|DEFAULT**

Specifies the number (0-7) of network SYSOUT transmitters which will be associated with this NJE line. The value of n is an integer which specifies the maximum number of SYSOUT transmitter streams allowed to be concurrently active on this line. If there are not enough receivers on the receiving node to receive SYSOUT data over the line, excess transmitters drain automatically. The sum of the values JTNUM= and STNUM= for this line must not exceed 8, or the statement is ignored.

This value overrides the default global value set by the STNUM= parameter of the NJEDEF statement. If this value is omitted or set to DEFAULT, the value is taken from the STNUM= parameter of NJEDEF. If you omit or use the DEFAULT where the sum of STNUM= and JTNUM= exceeds 8, STNUM= is reduced so that the sum equals 8.

**Default:** Value of the STNUM= parameter of NJEDEF.

**Modification:** \$T LINE(nnnnn) operator command.

**TRaceio=Yes|No**

Specifies whether (Yes) or not (No) trace ID 5 will trace I/O associated with SNA lines on VTAM lines and JES2/VTAM interface events, and trace IDs 11 through 24 will trace network control connect (NCC) records.

**Modification:** \$T LINE(nnnnn) operator command.

**UNIT=SNA**

Specify UNIT=SNA to obtain a logical line. You can specify the line availability in the following three ways:

1. Make the line available to any RJE workstation (dial up)
2. Make the line available to two or more RJE workstations that must contend for use of the line
3. Make the line available only to a single RJE workstation

The relationship between lines and RJE workstations is controlled by the LINE(nnnnn) and RMT(nnnnn) initialization statements. For example, to define a SNA line that is to be available to any RJE workstation, specify only UNIT=SNA on the LINE(nnnnn) statement and do not specify LINE=nnnnn on the RMT(nnnnn) statement.

You must specify this parameter as SNA.

**Modification:** \$T LINE operator command.

**LINE(nnnnn) - NJE TCP/IP lines**

The LINE(nnnnn) statement specifies the characteristics of one teleprocessing line or logical line to be used during remote or network job entry. Define each teleprocessing line by a LINE(nnnnn) statement with a unique value (1-65535).

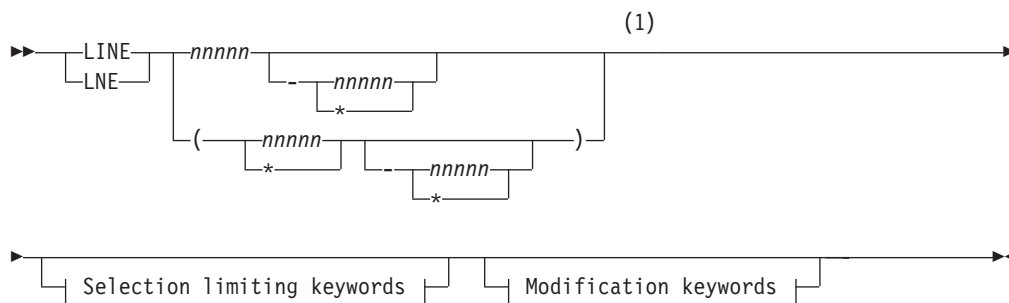
Use the subscript on this statement name to specify individual lines (nnnnn), a range of lines in either ascending (n-m) or descending (m-n) order, or a generic range in ascending (n-\*), descending (\*-n) order, or an asterisk (\*) to indicate all lines. The valid subscript range for the LINE statement is now 1-65535.

**Note:**

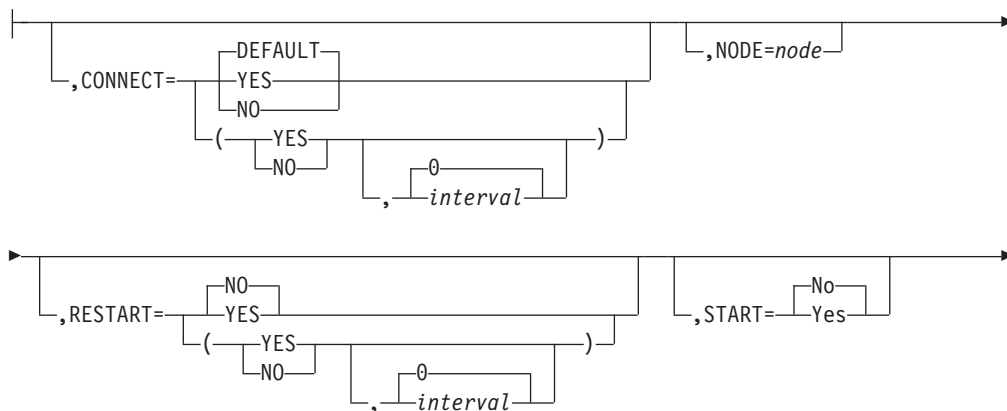
## LINE(nnnnn) - TCP/IP

1. Do not specify a password for TCP/IP lines used in NJE host-to-host sessions.
2. There are four parameters that you use to define the number of transmitters and receivers for a line. They are: JRNUM=, JTNUM=, SRNUM=, and STNUM=, and are collectively referred to as xxNUM= parameters. If all the xxNUM= parameters are specified as DEFAULT, no devices are dedicated to this line unless a device is specified on an L(nnnnn) statement for this line. In that case, a full set of transmitter and receiver devices is dedicated as specified on the NJEDEF xxNUM= parameters. If any of the xxNUM= parameters are set to a value other than DEFAULT, a full set of transmitters and receivers is dedicated to the line, with default values taken from NJEDEF.
  - If a set of transmitters and receivers are dedicated to the line, you cannot use the line for RJE.
  - If transmitters or receivers are not dedicated to the line, you can still use the line for NJE.
  - A default set of transmitters and receivers is assigned when the NJE link is started, and detached when the NJE link is ended.

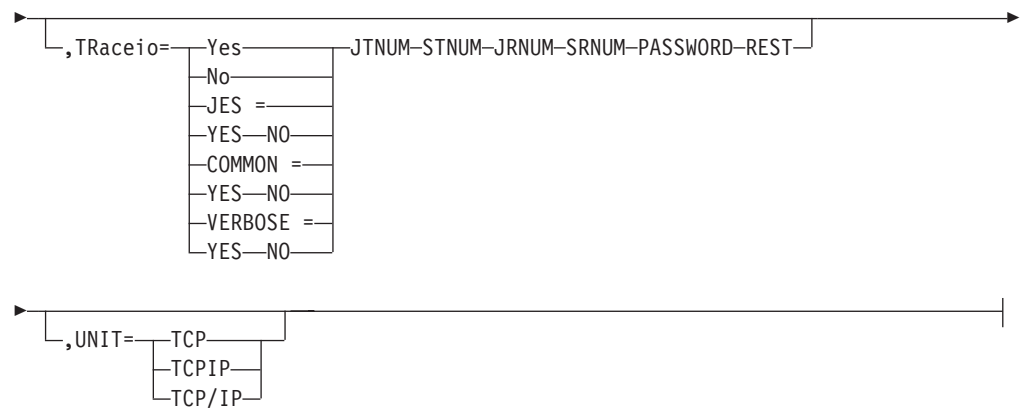
### Format Description for LINE(nnnnn) - TCP/IP



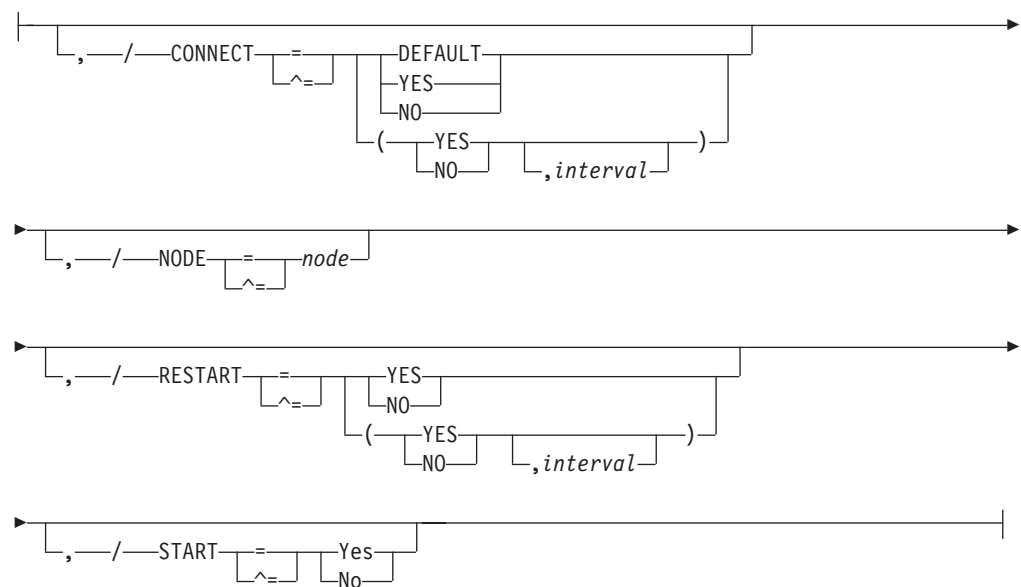
#### Modification keywords:







**Selection limiting keywords:**



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter Description for LINE(nnnnn) - TCP/IP**

**CONNECT= (Yes|No|DEFAULT, interval)**

Specifies whether an NJE connection should be automatically attempted for this line. If DEFAULT is specified, processing defers to the CONNECT=(YES|NO) value that is specified on the associated NODE statement. The *interval* is the approximate time (in minutes) between attempted restarts. The valid range for *interval* is 0 to 1440. A value of 0 indicates that the default interval (from NJEDEF CONNECT=) should be used. The default CONNECT value is DEFAULT, and the default *interval* is 0.

**JRNUM=n|DEFAULT**

Specifies the number (0-7) of network job receivers to be associated with this NJE line. The value of n is an integer that specifies the maximum number of input job streams allowed to be concurrently active on this line. This specification should match the value of JTNUM for this line on other nodes

## LINE(nnnnn) - TCP/IP

with which this node is to communicate directly. The sum of the values of JRNUM and SRNUM for this line must not exceed 8, or the statement is ignored.

This value overrides the default global value set by the JRNUM= parameter of the NJEDEF statement. If this value is omitted or set to DEFAULT, JES2 takes the value from the JRNUM= parameter of NJEDEF. If you omit the value or use the default value where the sum of the values of JRNUM and SRNUM exceeds 8, JRNUM= is reduced so that the sum equals 8.

**Default:** Value of the JRNUM= parameter of NJEDEF.

**Modification:** Hot start.

### **JTNUM=n | DEFAULT**

Specifies the number (0-7) of network job transmitters to be associated with this NJE line. The value of n is an integer that specifies the maximum number of output job streams allowed to be concurrently active on this line. You should not change this value unless it is known that a particular user has jobs with extremely large amounts of input to be transmitted and other short jobs that must be transmitted concurrently. If there are not enough receivers on the receiving node to receive jobs over the line, excess transmitters drain automatically. The sum of the values JTNUM= and STNUM= for this line must not exceed 8, or the statement is ignored.

This value overrides the default global value set by the JTNUM= parameter of the NJEDEF statement. If this value is omitted or set to DEFAULT, the value is taken from the JTNUM= parameter of NJEDEF. If you omit or use the DEFAULT value, where the sum of the values of JRNUM and SRNUM exceeds 8, JTNUM= is reduced so that the sum equals 8.

**Default:** Value of the JTNUM= parameter of NJEDEF.

**Modification:** Hot start.

### **NODE=node**

Specifies the NJE node name associated with this node. This value determines which node to connect to when a \$SN,LINE=xxx command is issued or the line is automatically connected.

### **Password=xxxxxxx**

Specifies a 1- to 8- character security password JES2 is to use to prevent unauthorized terminal users from using this line. This password can be used in the connection request from RJE workstations. Do not specify a password for TCP/IP lines used in NJE host-to-host sessions.

**Note:** If you specify a password for a TCP/IP line, it is meaningful only if that line is a dedicated line.

If you do not specify a password, none exists.

**Modification:** \$T LINE(nnnnn) operator command.

### **REST=nnnn | 0**

Specifies an integer between 0 and 2000 which represents the resistance rating of the line as viewed by the installation management and coordinated with other installations. Resistance is an arbitrary value set to indicate a specific line's ability or inability to route work that has "normal" workload requirements and line speed.

Note that this parameter defaults to the REST= value specified on the SOCKET(jxxxxxxx) or the NODE(xxxxxxxx) initialization statement. See *z/OS JES2 Initialization and Tuning Guide* for details concerning resistance selection.

**Modification:** \$T LINE(nnnnn) operator command.

**RESTART= (Yes|No, interval)**

Specifies whether (Yes) or not (No) this line will be restarted if it is drained. The *interval* is the approximate time (in minutes) between attempted restarts. The valid range for *interval* is 0 to 1440. A value of 0 indicates that the default interval (from NJEDEF CONNECT=) should be used. The default RESTART value is No, and the default *interval* value is 0.

**SRNUM=n|DEFAULT**

Specifies the number (0-7) of network SYSOUT receivers to be associated with this NJE line. The value of n is an integer which specifies the maximum number of SYSOUT receiver streams allowed to be concurrently active on this line. This specification should match the value of STNUM= for this line on the other nodes with which this member is to communicate directly. The sum of the values JRNUM= and SRNUM= for this line must not exceed 8, or the statement is ignored.

This value overrides the default global value set by the SRNUM= parameter on the NJEDEF statement. If this value is omitted or set to DEFAULT, the value is taken from the SRNUM= parameter of NJEDEF. If you omit or use the DEFAULT where the sum of SRNUM= and JRNUM= exceeds 8, SRNUM= is reduced so that the sum equals 8.

**Default:** Value of the SRNUM= parameter of NJEDEF.

**Modification:** Hot start.

**START=Yes|No**

Specifies whether (Yes) or not (No) this line, if it is ready, will be started automatically when JES2 starts processing. The default START value is No.

**STNUM=n|DEFAULT**

Specifies the number (0-7) of network SYSOUT transmitters which will be associated with this NJE line. The value of n is an integer which specifies the maximum number of SYSOUT transmitter streams allowed to be concurrently active on this line. If there are not enough receivers on the receiving node to receive SYSOUT data over the line, excess transmitters drain automatically. The sum of the values JTNUM= and STNUM= for this line must not exceed 8, or the statement is ignored.

This value overrides the default global value set by the STNUM= parameter of the NJEDEF statement. If this value is omitted or set to DEFAULT, the value is taken from the STNUM= parameter of NJEDEF. If you omit or use the DEFAULT where the sum of STNUM= and JTNUM= exceeds 8, STNUM= is reduced so that the sum equals 8.

**Default:** Value of the STNUM= parameter of NJEDEF.

**Modification:** Hot start.

**UNIT=TCP|TCPIP|TCP/IP**

Specify UNIT=TCP to define a logical line. TCP/IP lines may only be used for NJE communication.

**TRaceio={YES|NO|JES=YES|NO|COMMON=YES|NO|VERBOSE=YES|NO}**

Specifies whether tracing is to be active, and which types of traces are to be activated for the TCP/IP line.

## LINE(nnnnn) - TCP/IP

### YES

Indicates all types of tracing are to be done.

**NO** Indicates no tracing is to be done.

### JES=YES|NO

Indicates whether data and control records passed between JES2 and TCP/IP are to be traced for this line.

### COMMON=YES|NO

Indicates whether TCP/IP and other services called by IAZNJTCP are to be traced.

### VERBOSE=YES|NO

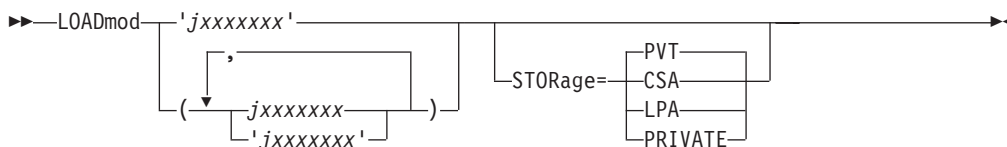
Indicates whether diagnostic messages are to be issued to the master console and SYSLOG.

---

## LOADmod(jxxxxxxx) - Load Installation Exit Routine Modules

The LOADmod(jxxxxxxx) statement causes a load module of one or more installation exit routines to be loaded. JES2 will verify that the module has standard JES2 module structure. Use the subscript to specify a 1- to 8-character name of the module to be loaded. When loading the module, the system uses the RMODE and page alignment attributes assigned by the linkage editor.

### Format Description for LOADmod(jxxxxxxx)



### Parameter Description for LOADmod(jxxxxxxx)

#### STORage=PVT|CSA|LPA|PRIVATE

Specifies whether this load module is to be loaded into the user's private area (PVT), common storage (CSA), or if the module is to be found in the link pack area (LPA). See *z/OS JES2 Initialization and Tuning Guide* for more details. For details on how JES2 uses this statement to determine which load module (if more than one) to use, see *z/OS JES2 Installation Exits*.

**Modification:** Single-member warm start.

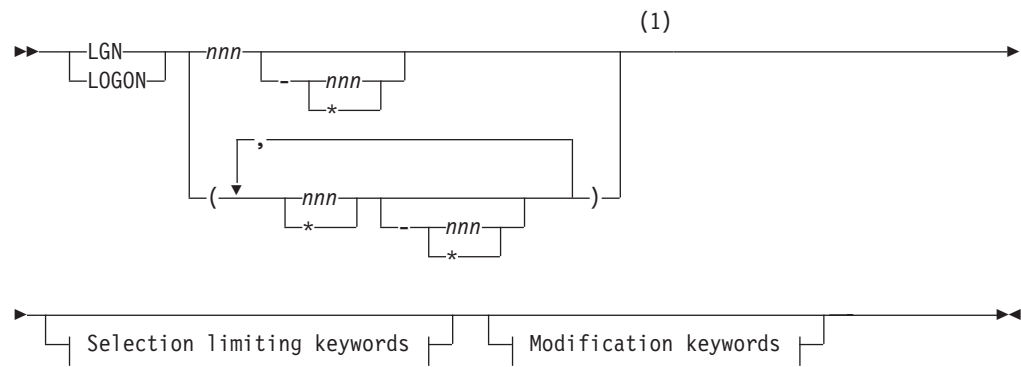
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## LOGON(nnn) - Identification of JES2 to VTAM

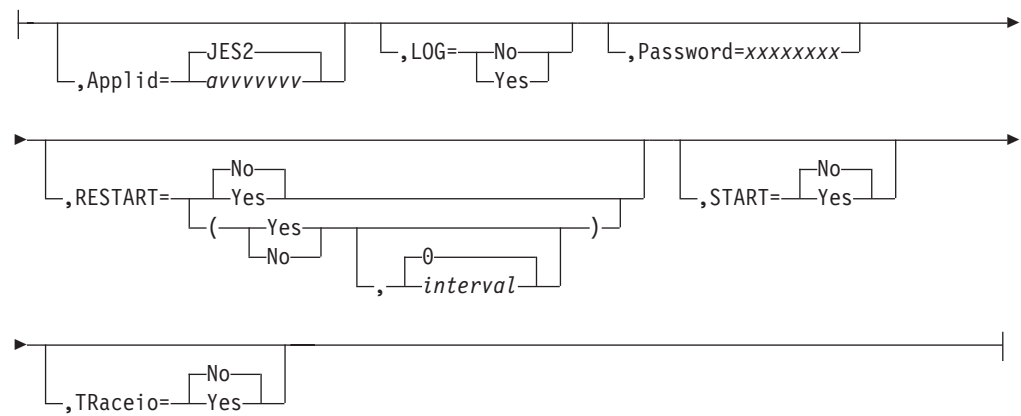
The LOGON(nnn) statement identifies JES2 as an application program to VTAM.

Automatic logon is available to SNA RJE workstations.

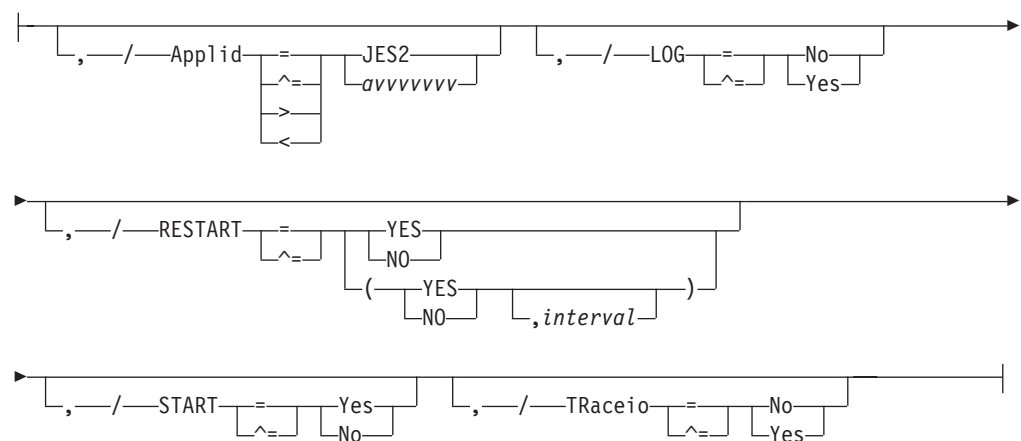
### Format Description for LOGON(nnn)



**Modification keywords:**



**Selection limiting keywords:**



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter Description for LOGON(nnn)**

**nnn**  
Specifies the number applications.

## LOGON(nnn)

### **APPLID=avvvvvv|JES2**

Specifies the 1- to 8-character name that your installation assigned to JES2. This name is passed to VTAM, and it must match the name defined to VTAM. (See *z/OS Communications Server: SNA Resource Definition Reference* for more information about VTAM definition.)

Although the default name, JES2, will be supplied in the absence of this specification, it must be stressed that in the JES2 networking environment each job entry subsystem must have a unique name by which it is defined to VTAM. For NJE, this name must correspond to an application name appearing in one of the application table (APT) entries defined for the local node (OWNNODE parameter on the NJEDEF statement). Application table entries are created using information provided on the APPLID(avvvvvv) initialization statement or, by default, using information from the NODE(xxxxxxx) initialization statement.

**Modification:** \$T LOGON(n) operator command.

### **LOG=Yes|No**

Specifies whether or not JES will monitor the VTAM interface and record all SNA events.

If you specify LOG=YES, JES2 issues a \$HASP094 message for every transmission on the LOGON APPLID. You should specify LOG=NO if your installation performs extensive networking activity.

This parameter does not have a default.

**Modification:** \$T LOGON(n) operator command.

### **Password=xxxxxxx**

Specifies a 1- to 8-character security password that is presented to VTAM. (Passwords with fewer than 8 characters are padded with blanks.) This password must have been associated with the APPLID= parameter on this statement at VTAM system definition.

If you do not specify a password, none exists.

**Modification:** \$T LOGON(n) operator command.

### **RESTART= (Yes|No, interval)**

Specifies whether this logon will be restarted if it is drained. The *interval* is the approximate time (in minutes) between attempted restarts. The valid range for *interval* is 0 to 1440. A value of 0 indicates that the default interval (from NJEDEF CONNECT=) should be used. The default RESTART value is No, and the default *interval* value is 0.

### **START=Yes|No**

Specifies whether (Yes) or not (No) this logon will be started automatically when JES2 starts processing. The default START value is No.

### **TRaceio=Yes|No**

Specifies whether (Yes) or not (No) JES2 will trace channel-end completions for logons. This is done with trace ID 5.

**Modification:** \$T LOGON(n) operator command.

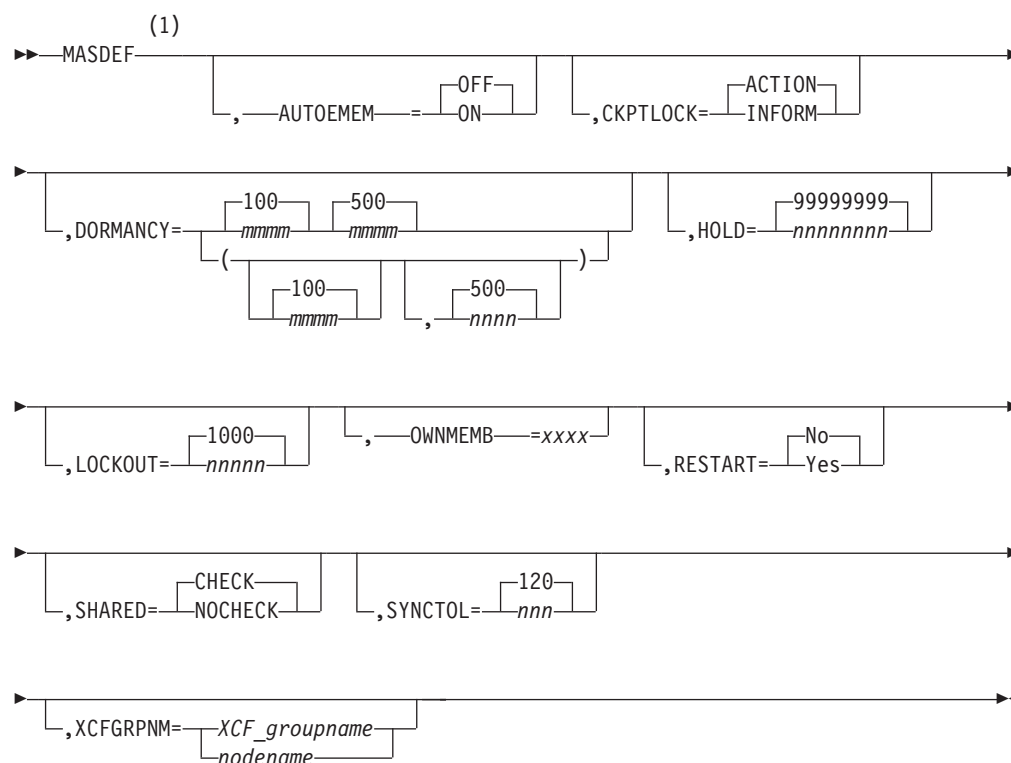
---

## MASDEF - Multi-Access Spool Definition

The MASDEF statement defines the JES2 multi-access spool configuration.

**Attention:** Because the SHARED= parameter on this statement defaults to CHECK (that is, your spool and checkpoint devices are shared), you **must** add this statement with SHARED=NOCHECK to your initialization data set if you are operating a single-member environment.

## Format Description for MASDEF



### Notes:

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for MASDEF

### AUTOEMEM=ON|OFF

Specifies whether (ON) or not (OFF) this JES2 MAS member wants to have its work restarted if this member fails. If a MAS member has specified AUTOEMEM=ON and the MVS system where the member resides fails, its jobs will be warm started if another active member has specified RESTART=YES on its MASDEF statement.

**Note:** If you specify AUTOEMEM=ON, but no other MAS member has RESTART=YES, and the MVS system on which this member resides fails, then the active work on this member will not be restarted.

However, if the job is registered with the automatic restart manager, the automatic restart manager restarts jobs regardless of the settings of the AUTOEMEM= and RESTART= parameters.

**Modification:** \$T MASDEF operator command.

**CKPTLOCK=INFORM|ACTION**

CKPTLOCK=INFORM causes JES2 not to issue message \$HASP479 during a cold or warm start of JES2 if the following conditions exist:

- The checkpoint lock cannot be obtained
- The member id of the member holding the lock is the same as the one being started.

Instead, JES2 issues message \$HASP459 to indicate that the member has bypassed confirmation of the lock release.

If you specify CKPTLOCK=ACTION, JES2 issues message \$HASP479 in all cases.

**Modification:** \$T MASDEF command during initialization only.

**DORMANCY=(mmmm, nnnn) | (100, 500)**

Use the first positional operand (mmmm) to specify, in hundredths of a second (0-3000), the minimum time a member of a multi-access spool configuration must wait after releasing control of the checkpoint data set (that is, shared queues) before again attempting to gain control of them. This parameter is used to prevent one member of a multi-access spool configuration from monopolizing control of the checkpoint data set.

Use the second positional operand (nnnn) to specify, in hundredths of a second (100-6000), the maximum time a member of a multi-access spool configuration may refrain from attempting to gain control of the checkpoint data set.

When processors are active in JES2, this parameter has little meaning because control of the checkpoint data set is frequently requested. However, when JES2 is idle, this parameter ensures that JES2 periodically looks at the shared queues for eligible work that another member of the configuration may have placed there.

**Note:**

1. If the value specified for nnnn is too small, excessive system time could be expended in unnecessary attempts to reacquire the checkpoint data set. However, if the value specified is too large, the start of certain functions and the responses to certain display commands may be delayed.
2. See *z/OS JES2 Initialization and Tuning Guide* for a discussion of the relationship between DORMANCY= and HOLD=, and recommended configuration-dependent initial values.

**HOLD=nnnnnnnn | 99999999**

Specifies, in hundredths of a second (0-99999999), the minimum length of time a member of a multi-access spool configuration must maintain control of the checkpoint data set after gaining control of them.

This parameter is provided to minimize the contention that could occur with the checkpoint data set in an environment in which all members of the configuration specify HOLD=0.

**Note:**

1. If you have more than one member in the MAS, you **MUST** specify a value for this parameter.
2. Setting this parameter to a high value will tend to limit access of other members of the configuration to the shared queues.



3. See *z/OS JES2 Initialization and Tuning Guide* for a discussion of the relationship between DORMANCY= and HOLD=, and recommended configuration-dependent initial values.

**Performance Considerations:** If you specify MODE=DUAL on CKPTDEF, also specifying HOLD=99999999 on the MASDEF statement causes performance degradation. If you must use HOLD=99999999 on MASDEF, be certain to also specify MODE=DUPLEX on CKPTDEF.

**Modification:** \$T MASDEF operator command.

**LOCKOUT=nnnnn | 1000**

Specifies, in hundredths of a second, the time interval (500-15000) from the first-denied request for access to the shared queues of a member of a multi-access spool configuration to the time that the configuration will assume the member controlling the queues is down. When this situation occurs, JES2 issues either the \$HASP263 WAITING FOR ACCESS TO JES2 CHECKPOINT VOLUME or \$HASP263 WAITING FOR ACCESS TO JES2 CHECKPOINT. LOCK HELD BY MEMBER *member* message, indicating a lock-out situation, and resets the timer interval to the LOCKOUT value.

**Modification:** \$T MASDEF operator command.

**OWNMEMB=xxxx**

Specifies the member identifier of this member, where xxxx is the 1- to 4-character alphanumeric name to be used in place of that provided by System Management Facility (SMF). This parameter may be required to warm start JES2 on a system with a different SMF-defined system ID or to warm start JES2 on the same system following an IPL with different SMF specifications. The member identifier for OWNMEMB defaults to the generated system SMF ID.

**Note:** When naming a member, avoid 1- or 2-digit numbers such as '6' and '23'. This can cause confusion when the name is used in commands or displayed in messages. Consider the following initialization statements and series of commands:

```
MEMBER(3) NAME=6
MEMBER(6) NAME=SYSA
```

If you enter:

```
$E MEMBER(3)
```

JES2 resets the third member (NAME=6).

If you enter:

```
$E MEMBER(SYSA)
```

JES2 resets the sixth member (NAME=SYSA).

However, if you enter:

```
$E MEMBER(6)
```

it might not be obvious that JES2 resets the third member (MEMBER(3) NAME=6), not MEMBER(6) NAME=SYSA.

Therefore, if you must use 1- or 2-digit names, to reduce any possibly of confusion, pad the number on the left with 0s. The above example becomes:

```
MEMBER(3) NAME=0006
MEMBER(6) NAME=SYSA
```

## MASDEF

Now \$E MEMBER(6) resets the sixth member (MEMBER(6) NAME=SYSA), and \$E MEMBER(0006) resets the third member (MEMBER(3) NAME=0006).

**Modification:** Single-member warm start

### **RESTART=Yes|No**

Specifies whether (Yes) or not (No) a JES2 MAS member can make the jobs on a failed member eligible for restart.

#### **Note:**

1. If the job is registered with the automatic restart manager, the automatic restart manager restarts jobs regardless of the settings of the AUTOEMEM= and RESTART= parameters.
2. If a JES2 member has been identified as the target of an automatic reconfiguration facility takeover, specify RESTART=NO. For more information about the Processor Resource/Systems Manager™ (PR/SM™) environment to which this applies, see *PR/SM Planning Guide* and *z/OS MVS Setting Up a Sysplex*.

**Modification:** \$T MASDEF operator command.

### **SHARED=CHECK|NOCHECK**

Specifies whether the DASD used in your configuration for the spool and checkpoint devices is shared (CHECK) or non-shared (NOCHECK).

**Note:** You must specify CHECK in a multi-access spool environment and you must specify NOCHECK in a single-member environment. The exceptions to this rule are the following:

- Use this parameter specifically to test your multi-access spool complex when in a poly-JES environment; shared DASD is not required.
- If the shared pack is damaged, the installation can use a non-shared pack to bring up one JES2 member.

**Modification:** \$T MASDEF operator command, cold start or warm start.

### **SYNCTOL=nnn|120**

Specifies, in seconds (0-300), the time interval that must elapse before one JES2 member in a multi-access spool configuration is assumed to be not operating.

Actions such as cold start, warm start, or \$E MEMBER operator commands are rejected unless the time stamps of the affected members in the shared checkpoint record are greater than the current time minus this parameter value.

**Note:** JES2 processing uses the SYNCTOL= keyword value to identify when members of differing sysplexes are using the same checkpoint. JES2, in this way, can identify this exceptional condition and take appropriate action. Generally, all members in a sysplex use a unique checkpoint, and any given checkpoint is not typically shared among sysplexes.

**Modification:** \$T MASDEF operator command.

### **XCFGRPNM=XCF\_groupname | nodename**

Each MAS in a sysplex is required to use a unique XCF groupname. The groupname must be a 1- to 8-alphanumeric or special character ( \$ # @ ) name that follows all XCF naming conventions. To avoid using the names IBM uses for its XCF groups, do not begin group names with the letters A through I or the character string SYS. Also, do not use the name UNDESIG, which is reserved for use by the system programmer in your installation.

The default is the local node name as defined on the NAME= parameter of the local NODE(xxxxxxx) initialization statement. IBM suggests that you use the default unless it conflicts with an existing XCF group name.

If you set the XCFGRPNM to the SYSPLEX value, ensure that no other functions are also registering to that same name or else you risk receiving \$HASP792 at JES2 startup stating that some members were found active but are not part of the SYSPLEX.

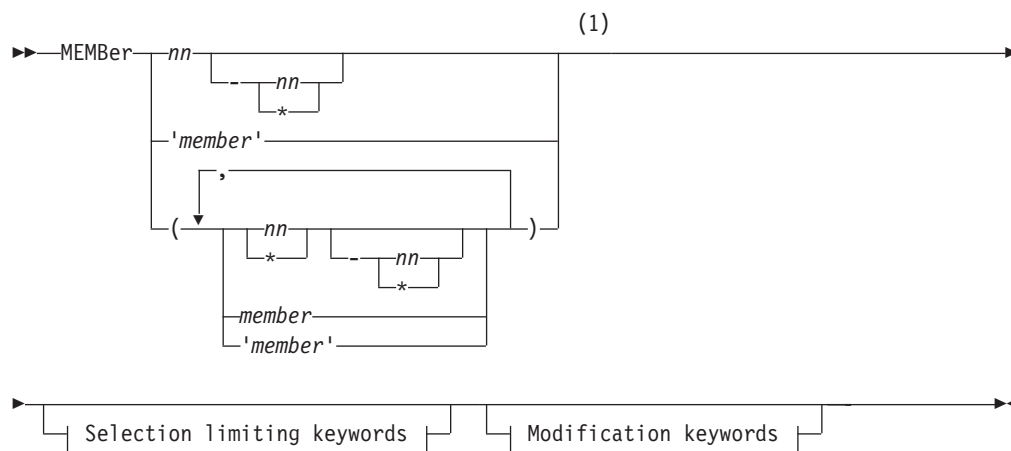
**Modification:** All-member warm start.

## MEMBer(nn) - Define Members of a Multi-Access Spool Configuration

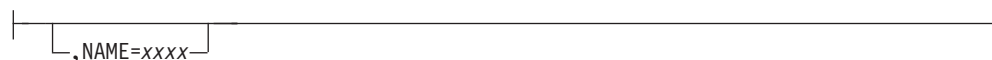
The MEMBer statement defines each member in a multi-access spool (MAS) configuration.

See *z/OS JES2 Initialization and Tuning Guide* for additional information about using the MEMBer statement when initializing the multi-access spool configuration.

### Format Description for MEMBer



#### Modification keywords:



#### Selection limiting keywords:



#### Notes:

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for MEMBer

### member

Specifies the member name to be defined in the multi-access spool (MAS) environment.

**nn** Specifies a number from 1 to 32.

### NAME=xxxx

Specifies the 1- to 4-character member name. Specify only the following characters: A-Z, 0-9, \$, #, and @. Each member must have a unique name.

### Note:

1. When naming a member, avoid 1- or 2-digit numbers such as '6' and '23'. This can cause confusion when the name is used in commands or displayed in messages. JES2 first interprets the *n* in \$E MEMBer(*n*) as the member name (NAME= on this initialization statement). Only, if there is no matching NAME= specification, will JES2 interpret the *n* to be the subscript (MEMBer(subscript) ) of this initialization statement. Consider the following initialization statements and series of commands:

```
MEMBer(3) NAME=6
MEMBer(6) NAME=SYSA
```

If you enter:

```
$E MEMBer(3)
```

JES2 resets the third member (NAME=6).

If you enter:

```
$E MEMBer(SYSA)
```

JES2 resets the sixth member (NAME=SYSA).

However, if you enter:

```
$E MEMBer(6)
```

it might not be obvious that JES2 resets the third member (MEMBer(3) NAME=6), not MEMBer(6) NAME=SYSA.

Therefore, if you must use 1- or 2-digit names, to reduce any possibly of confusion, pad the number on the left with 0s. The above example becomes:

```
MEMBer(3) NAME=0006
MEMBer(6) NAME=SYSA
```

Now \$E MEMBer(6) resets the sixth member (MEMBer(6) NAME=SYSA), and \$E MEMBer(0006) resets the third member (MEMBer(3) NAME=0006).

2. Do not set the first three characters of a member name to ANY, ALL, or IND. These specifications have other meanings reserved for use on the /\*JOBPARM control statement.
3. To avoid confusion, you may not want to use '\$' in the member name. The member name is part of the XCF group name specified as *nodename\$membername*.

**Modification:** Single-member warm start to define the name of the starting member. Hot start to define the name of any member that is not active.

---

## NAME - Naming the Module to Change Through the JES2 Patching Facility

The NAME initialization statement is one of several statements used by the JES2 patching facility. For the other statements, see “REP - Replacing Code Through the JES2 Patching Facility” on page 347 and “VERify - Verifying Code Through the JES2 Patching Facility” on page 389. When specifying replacement data, this statement is optional unless JES2 issues a \$HASP467 message indicating that data cannot be replaced at the storage location specified. If JES2 issues a \$HASP467 diagnostic message, you must use the NAME statement before specifying the VER and REP statements.

The JES2 patching facility allows you to specify replacement data (patches) for the following:

- Any module in JES2 (HASJES20 or an installation exit load module)
- Any absolute storage address from the address space where JES2 is loaded.
- On a hot start, any address in a data space created by JES2 (that is, owned by JES2AUX)
- On any warm start, any address in the JES2 checkpoint data set.

The JES2 patching facility applies temporary patches to the in-storage copy of JES2 modules. You place patching facility statements in the JES2 initialization stream; these patches are applied when you initialize JES2. Because some of the initialization code has already been executed before the patch facility initialization statements are processed, patches made to those portions of the code are ineffective; those portions of code **do not** execute again until you restart JES2. Most patches are applied immediately as the statements are processed. However, checkpoint updates are deferred until the checkpoint record is read. Non-checkpoint patches are not saved across a warm start. In addition, you should be aware that the JES2 patching facility does **not** support:

- Patching a module or data area residing in read-only storage. For example, you cannot use the facility to modify modules in PLPA or PSA.
- Patching a HASPFSSM load module that has been loaded into a functional subsystem address space. Use AMASPZAP (the service aid program that modifies both instructions and data) to patch the HASPFSSM load module.
- Altering the JES2 dump formatting exit modules (HASMxxxx).
- Using a patch across a restart of JES2. Because these patches are valid only until a load module is reloaded, they must be reapplied every time JES2 is started.

The JES2 patching facility statements in the JES2 initialization data set can be specified in either the JES2 patching format or in the AMASPZAP format. All patches in the JES2 patching form should precede any AMASPZAP patches. If you supply the NAME statement or first format type of the AMASPZAP patch, JES2 resets prior verification errors. For more information on AMASPZAP patches, see “SPZAP” in *z/OS MVS Diagnosis: Tools and Service Aids*.

## Format Description for NAME



### Notes:

- 1 Omit the comma between initialization statement and first keyword or variable

## Parameter Description for NAME

### NAME

Specifies the module as a keyword that must be coded.

### member

Specifies the member name on the AMASPZAP control statement. JES2 processing ignores this field on an AMASPZAP patch statement, but you must specify it to provide compatibility with the AMASPZAP control statements.

### *csect* | *dspanme* | **CKPTname** | \*

Specifies the control section (or control block), dataspace name, or checkpoint CTENT in which the data to be modified or verified resides.

If an asterisk (\*) is coded, JES2 uses the CSECT in effect on a previous JES2 patch statement. Table 93 on page 391 contain a list of the possible patch names which can be coded and area to which these names refer. If the CSECT is listed in Table 93 on page 391, you can specify the last four characters of the CSECT name.

If an installation exit CSECT is referenced, the JES2 patching facility requires the entire module name, except for the reserved names HASPXJ00-HASPXJ31. If you do not linkedit the installation exit routines HASPXJ00 - HASPXJ31 with the HASJES20 load module, you must specify the full 8-character CSECT name.

Furthermore, do not name an exit with the same three or four characters (xxxx) as used for a JES2 module. For example, an installation-defined exit named CKPT or TABS (that is, HASPCKPT or HASPTABS, with the HASP characters removed) would modify the IBM-supplied HASPCKPT or HASPTABS module.

While this field is optional on the AMASPZAP control statement, it is required on the AMASPZAP patch statement. For further information on AMASPZAP, see "REP - Replacing Code Through the JES2 Patching Facility" on page 347 and "VERify - Verifying Code Through the JES2 Patching Facility" on page 389

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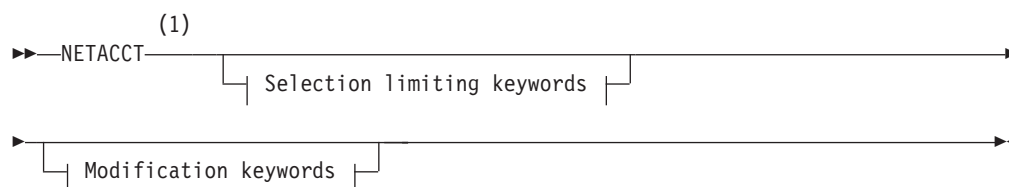
## NETACCT - Define Network/JES2 Account Number Correspondence

The NETACCT statement specifies the correspondence between a JES2 (local) account number (or range of account numbers) and the network account number (or range of account numbers). In its simplest form, the statement defines a direct correspondence between a single JES2 account number and a single network account number. A collection of NETACCT statements is used to define lookup tables for conversion between JES2 account numbers and corresponding network account numbers.

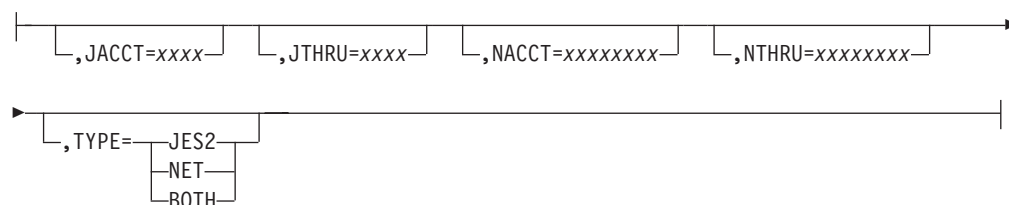
Each NETACCT statement can cause an entry to be made in two lookup tables: a JES2-to-network conversion lookup table and a network-to-JES2 lookup table. The JES2-to-network table is used by JES2 input service to obtain network account numbers for jobs which specify JES2 account numbers but do not specify a network account number through a /\*NETACCT control statement. The network-to-JES2 table is used by the JES2 NJE job receiver and the JES2 NJE SYSOUT receiver to obtain local JES2 account numbers for jobs and SYSOUT data received from other nodes.

When specifying multiple NETACCT initialization statements, ensure that the ranges specified on each statement do not overlap. For example, if the first NETACCT statement specifies a range from A11 to B33 and the next NETACCT initialization statement specifies numbers from A27 to B0, JES2 does not provide a JES2 account number for jobs with network account numbers from A11 to A26 and B1 to B33. The conversion of JES2 account numbers to network account numbers is unaffected. For more information on specifying JES2 and network account numbers, see *z/OS JES2 Initialization and Tuning Guide*.

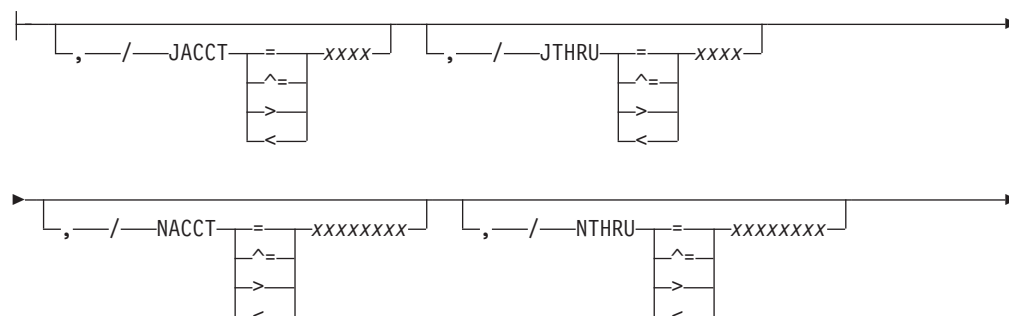
## Format Description for NETACCT

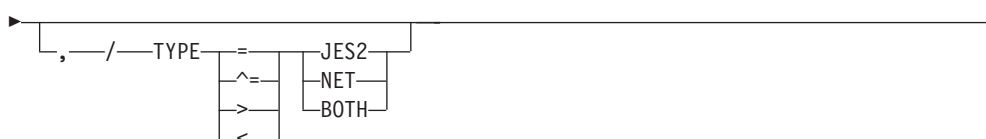


### Modification keywords:



### Selection limiting keywords:



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for NETACCT

**JACCT=xxxx**

Specifies the 1- to 4-character name that defines a job account number. If this parameter is used in conjunction with the JTHRU= parameter, it defines the lower limit of the defined range.

This parameter must be specified.

**Modification:** Single-system warm start.

**JTHRU=xxxx**

Specifies the 1- to 4-character upper limit of the range of job account numbers.

If the JTHRU= parameter is specified on this statement, it causes a range of JES2 account numbers to correspond to a single network account number in the JES2-to-network lookup table. Also, only two entries are created in the appropriate lookup tables (one for either limit of the range), regardless of range size. Ranges of this type may be used to cause the JES2 account numbers for an entire department, for example, to be converted to a single network account number for charging outside the local node.

This parameter defaults to the name specified on the JACCT= parameter.

This parameter is ignored if TYPE=NET.

**Modification:** Single-system warm start.

**NACCT=xxxxxxxx**

Specifies the 1- to 8-character name that defines a network account number. If this parameter is used in conjunction with the NTHRU= parameter, it defines the lower limit of the range specified.

This parameter must be specified.

**Modification:** Single-system warm start.

**NTHRU=xxxxxxxx**

Specifies the 1- to 8-character upper limit of the range of network account numbers.

If the NTHRU= parameter is specified on this statement, it causes a range of network account numbers to correspond to a single JES2 account number in the network-to-JES2 lookup table. Also, only two entries are created in the appropriate lookup tables (one for either limit of the range), regardless of range size. Ranges of this type may be used to cause all of the network account numbers in use at some distant location to be converted to a single JES2 account number for local charging.

This parameter defaults to the name specified on the NACCT= parameter.

This parameter is ignored if TYPE=JES2.

**Modification:** Single-system warm start.



**TYPE=JES2|NET|BOTH**

Specifies the type of account number defined by this statement.

**JES2**

This statement defines a JES2 account number.

**NET**

This statement defines a network account number.

**BOTH**

This statement defines both a JES2 and network account number. Duplicate entries will be made in both lookup tables.

If the NETACCT statement specifies two ranges (that is, both JTHRU= and NTHRU= are specified) then the JES2 account range will be converted to the low end of the network account number range. Also, the network account number range will be converted to the low end of the JES2 account number range. Because of these conversions, it may be desirable to define ranges of this type with two separate NETACCT statements; one statement specifying the JES2 range (TYPE=JES2) and the other specifying the network range (TYPE=NET).

If the TYPE= parameter is not specified on the NETACCT statement or is specified as TYPE=BOTH, then duplicate entries will be made in both lookup tables. For example, assume the following specification:

```
NETACCT JACCT=1234,NACCT=NET001A
```

In this case, if a job enters the local node with JES2 account number "1234" and does not specify a network account number through a /\*NETACCT statement, it will be assigned network account number "NET001A" by JES2 input service. Conversely, if a job (or SYSOUT) is received from another node which specifies network account number "NET001A" in its NJE job header, it will be assigned the local JES2 account number "1234".

The entries may also be assigned on two different NETACCT statements as follows:

```
NETACCT JACCT=1234,NACCT=NET001A,TYPE=JES2
NETACCT JACCT=9999,NACCT=NET001A,TYPE=NET
```

In this example, a job entering the local node and specifying JES2 account number "1234" will be assigned network account number "NET001A" as in the previous example, but a job received from the network specifying network account number "NET001A" will be assigned JES2 account number "9999" for local processing. For this example, if a job enters the local node specifying JES2 account number "9999", it will not be assigned network account number "NET001A" because there is no entry for JES2 account number "9999" in the JES2-to-network lookup table. Therefore, no network account number will be assigned, rather it will remain as binary zeros.

This parameter has no default.

**Modification:** Single-system warm start.

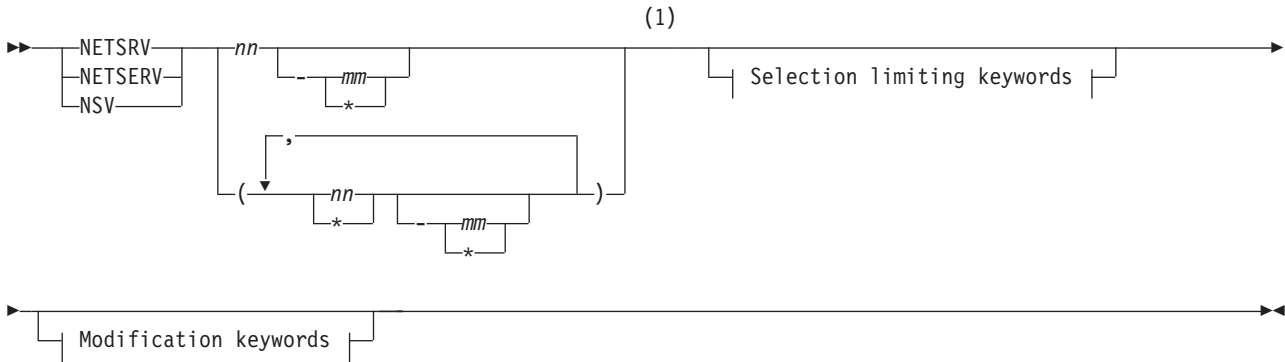
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## NETSERV(nnn) - Define NJE over TCP/IP server address space

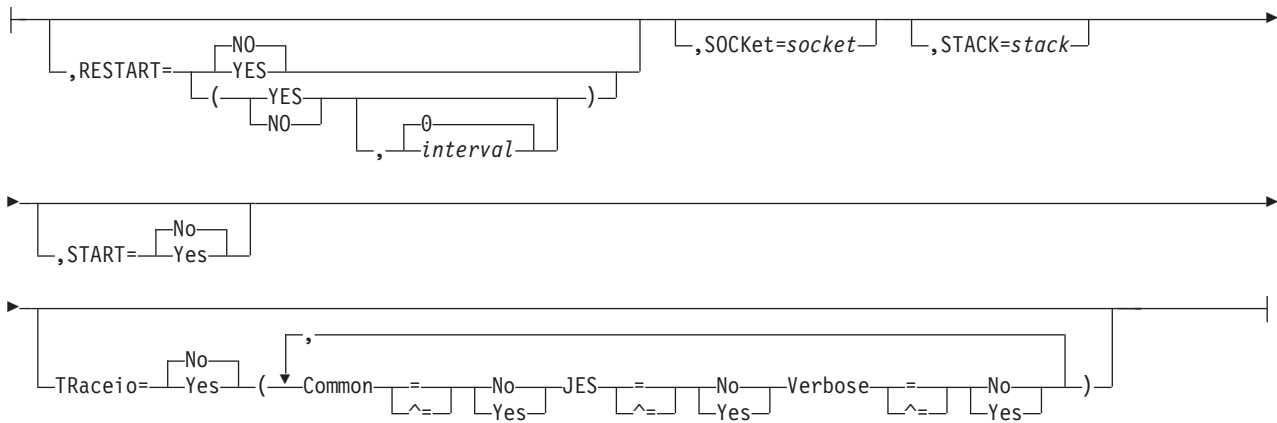
The NETSERV statement defines a network server that is to be used for NJE TCP/IP communication.

# NETSERV

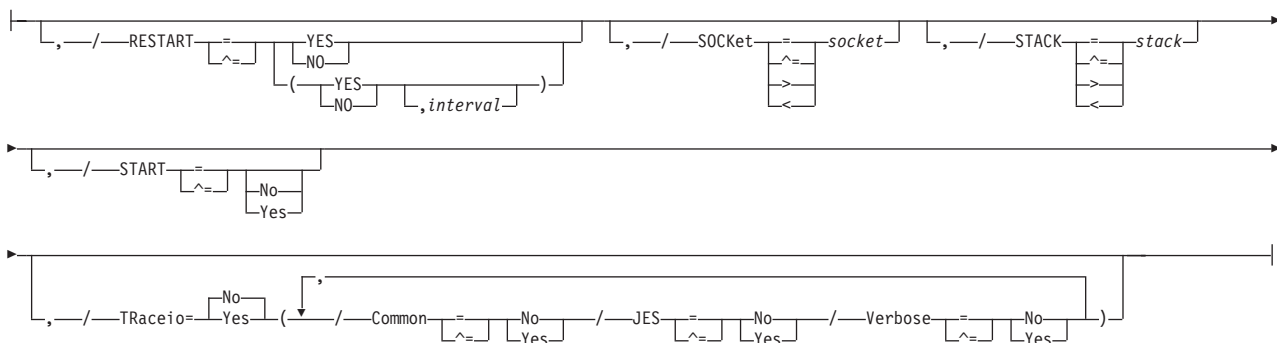
## Format Description for NETSERV(nnn)



### Modification keywords:



### Selection limiting keywords:



### Notes:

- Omit the comma between initialization statement and first keyword

## Parameter Description for NETSERV(1-nnn)

### RESTART= (Yes|No, interval)

Specifies whether this netsrv will be restarted if it is drained. The *interval* is the time (in minutes) between attempted restarts. The valid range for *interval* is 0

to 1440. A value of 0 indicates that the default interval (from NJEDEF CONNECT=) is used. The default RESTART value is No, and the default *interval* value is 0.

**SOCKET=xxxxxxx**

Specifies the name of a local socket upon which the NETSRV should listen.

**Modification:** \$TNETSRV command.

**START=Yes|No**

Specifies whether (Yes) or not (No) this server should be started automatically. The default START value is No.

**TRaceio=Yes|No|JES=YES/NO|COMMON=YES/NO|VERBOSE=YES/NO**

Specifies whether (YES) or not (NO) tracing is to be active, and if YES, which types of traces are to be activated for the server.

**YES** Indicates all types of tracing are to be done.

**NO** Indicates no tracing is to be done.

**JES=YES|NO**

Indicates whether data and control records passed between JES and TCP/IP are to be traced for this server.

**COMMON=YES|NO**

Indicates whether TCP/IP and other services called by IAZNJTCP are to be traced.

**VERBOSE=YES|NO**

Indicates whether diagnostic messages are to be issued to the master console and SYSLOG.

**Modification:** \$T NETSRV command.

**STACK=xxxxxxx**

Specifies the name of a TCP/IP stack to be used by this server when the Common INET (CINET) configuration is being used. If not specified, all stacks on the local machine will be used. When only an INET configuration is being used, a specification of a stack name is ignored.

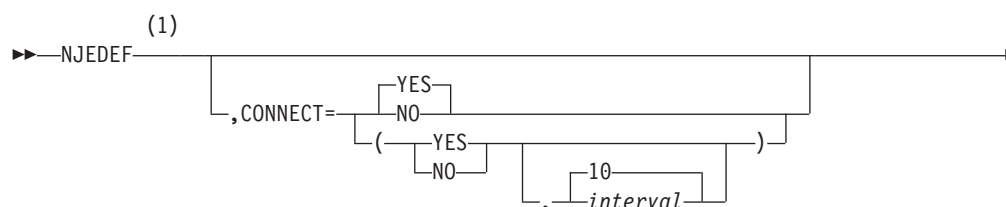
**Modification:** \$T NETSRV command.

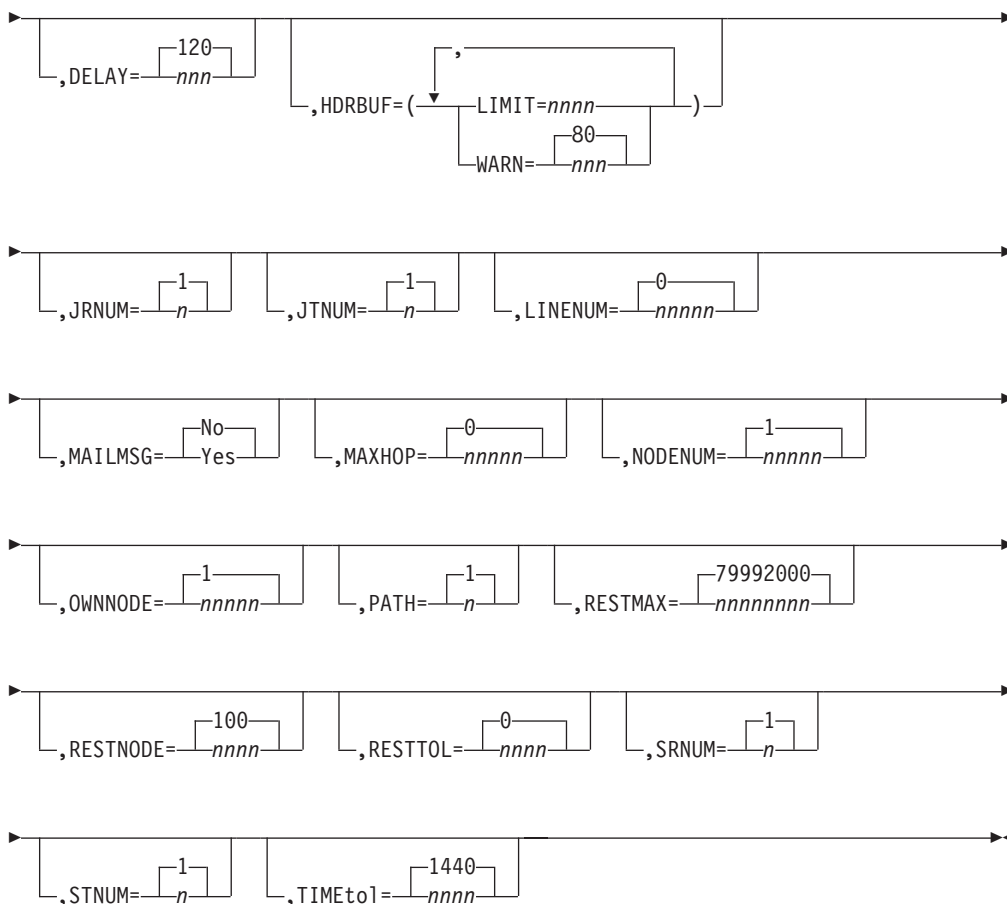
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## NJEDEF - Network Job Entry Definition

The NJEDEF statement defines the network job entry characteristics of this JES2 node.

### Format Description for NJEDEF





**Notes:**

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for NJEDEF

**CONNECT= (YES|NO, interval)**

Specifies whether NJE connections for APPL, LINE, or SOCKET statements that specify or defer to CONNECT=YES should automatically be initiated or restarted. The *interval* is the time (in minutes) between attempted connections. The valid range for *interval* is 1-1440; the default value is 10. The default CONNECT value is YES.

**DELAY=nnn|120**

Specifies the maximum length of time, in approximate seconds (10-999), that a message or command will be delayed in any stage of transmission between MAS members in a node before the member is to assume that possible lockout situations have occurred. The member will discard messages or restart communication lines in attempts to clear the congestion and remove the lockout situation.

**Modification:** \$T NJEDEF operator command.

**HDRBUF= (LIMIT=nnnn, WARN=nnn)**

Specifies the amount of storage (cell buffers) used by NJE headers and trailers at a particular installation.

**LIMIT=nnnn**

Specifies the number of NJE header and trailer cell buffers (10-9999) allocated by this installation for both jobs and SYSOUT transmitted from another node.

If you do not specify a value for the LIMIT= parameter, JES2 processing provides a default based upon the following algorithm:

$$(\text{number of NJE lines}) \times 2 + ((\text{number of offload devices}) + 2)$$

JES2 determines the number of NJE lines at an installation through the LINENUM= parameter on this initialization statement and the number of lines defined on a packet of predefined transmitters and receivers based on the L(nnnn).ST(m) initialization statement, the L(nnnn).JT(n) initialization statement, or the L(nnnn).ST(n) initialization statement. JES2 determines the number of offload devices defined through the number of OFFLOAD(n) initialization statements defined. For more information about how to adjust this parameter for particular installation needs, see *z/OS JES2 Initialization and Tuning Guide*.

If the result of the algorithm is less than 10, JES2 allocates 10 cells.

**Note:** Use this parameter to increase the limit for the JNUM resource that is reported on the HASP050 message.

**WARN=nnn|80**

Specifies the percentage (0-100) of NJE header and trailer cells that have been used by this JES2 member when it issues the \$HASP050 warning message.

If you specify WARN=0, JES2 does not issue the \$HASP050 message.

**Modification:** \$T NJEDEF operator command.

**JRNUM=n|1**

Specifies the number (0-7) of network job receivers to be associated with each NJE line. The value of n is an integer that specifies the maximum number of input job streams allowed to be concurrently active on a given line. This specification should match the value of JTNUM= on other members with which this member is to communicate directly.

**Modification:** Hot start.

**JTNUM=n|1**

Specifies the number (0-7) of network job transmitters to be associated with each NJE line. The value of n is an integer that specifies the maximum number of output job streams allowed to be concurrently active on a given line. This value should remain unchanged unless it is known that a particular user has some jobs with extremely large amounts of input to be transmitted and other short jobs that must be transmitted concurrently. If there are not enough receivers on the receiving node to receive jobs over the line, excess transmitters drain automatically. The sum of the values JTNUM= and STNUM= must not exceed 8.

**Modification:** Hot start.

**LINENUM=nnnnn|0**

Specifies the number of lines (0-65535), including CTC adapters, to be used by this JES2 member for NJE communications. The value of nnnn is an integer between 0 and the number of lines defined by unique LINEnnnn initialization statements.

This value does not include the number of NJE lines that have transmitters and receivers specifically defined by the JRNUM=, JTNUM=, SRNUM=, or STNUM= parameters of the LINE statements, or by the L(nnnn).ST(m) statement, the L(nnnn).JT(n) initialization statement, or the L(nnnn).ST(n) initialization statement.

**Modification:** Hot start.

**MAILMSG=Yes|No**

Specifies whether (YES) or not (NO) JES2 issues the \$HASP549 mail notification message automatically to notify a userid that a transmitted file has arrived from another node or a spool reload procedure.

If Exit 40 sets a response value of X040FRNT or X040RRNT, this parameter is ignored. For more information on Exit 40, see *z/OS JES2 Installation Exits*.

If you specify MAILMSG=Yes, and the target userid is not logged on, the \$HASP549 message is discarded. However, JES2 adds the \$HASP549 message to the shared SYS1.BROADCAST or userid.BROADCAST data set when the target userid is logged off.

**Modification:** \$T NJEDEF operator command.

**MAXHOP=nnnn|0**

Specifies the maximum number of nodes (0-65535) through which a job can travel before it is placed in hold. To determine the proper value for your installation, you should specify a value that is twice the longest path in your network plus 2. Specifying MAXHOP=0 or MAXHOP=65535 causes JES2 to assign no limit.

**Modification:** \$T NJEDEF operator command.

**NODENUM=nnnn|1**

Specifies the maximum number (1-32767) of nodes in the NJE network to which this member belongs or a value greater than or equal to the highest numbered node in your system. For example, if your system contains three nodes numbered 1, 2, and 3, set NODENUM=3 (or greater). However, if your system contains three nodes numbered 1, 10, and 20, set NODENUM=20 (or greater).

**Modification:** The number of nodes can be increased on any start other than a hot start, or through operation command. Cold start is required to decrease the value.

**OWNNODE=nnnn|1**

Specifies the number (1-32767) of this node, where nnnn is an integer between 1 and the value specified in the NODENUM= parameter. In an NJE network environment, node names must be unique to be able to connect to other nodes. Therefore, the NJEDEF OWNNODE value must be coordinated with other node names (in network) and point to a node number that has a unique node name. Each JES2 member of the same multi-access spool configuration must have the same value for OWNNODE=.

**Modification:** Cold start.

**PATH=n|1**

Specifies the maximum number (1-8) of paths from the local subsystem to a given non-adjacent node that must be maintained simultaneously. The integer value should be set to the maximum number of connection devices the local subsystem has for sending work to a given non-adjacent node. If, at any given time, a node will use only one path to transmit data to another node, the value should be left at 1.

**Modification:** Single member warm start.

**RESTMAX=nnnnnnn|79992000**

Specifies the maximum tolerable resistance (0 to 79992000) of a connection. If the resistance of a path is greater than the value specified in RESTMAX=, the path will be ignored.

If the path to a given node passes through an undesirably large number of members, the value of RESTMAX= may be set so that JES2 ignores the paths which are too long for practical use. Low values would be used when a member should wait for better connections before attempting to communicate with nodes connected through inefficient paths. (For more information, see *z/OS JES2 Initialization and Tuning Guide*.)

When RESTMAX=0, the direct path to any adjacent node is considered usable regardless of the resistance to that node. Nodes beyond the adjacent node are only considered reachable if the total resistance to them is zero or they are in the same subnet as an adjacent node. RESTMAX=0 can be used to ensure that data will only be sent directly to an adjacent node and never to an intermediate node for forwarding to the destination node.

**Note:** This parameter applies to both adjacent and non-adjacent nodes.

**Modification:** \$T NJEDEF operator command.

**RESTNODE=nnnn|100**

Specifies the resistance (1-2000) of the node to the flow of jobs through the network. High values of RESTNODE= will tend to make other JES2 members choose other paths rather than come through this member's node (see *z/OS JES2 Initialization and Tuning Guide* for more information).

**Modification:** \$T NJEDEF operator command.

**RESTTOL=nnnn|0**

Specifies the maximum difference in resistance (0-8000) allowed between the best possible path and an acceptable alternate path. This value has no meaning unless the value specified in the PATH= parameter is greater than 1.

If the value of RESTTOL= is greater than or equal to the minimum resistance between any two nodes within the network, jobs and messages may be transmitted throughout the network in an erratic fashion. (For more information, see *z/OS JES2 Initialization and Tuning Guide*.)

**Modification:** \$T NJEDEF operator command.

**SRNUM=n|1**

Specifies the number (0-7) of network SYSOUT receivers to be associated with each NJE line. The value of n is an integer which specifies the maximum number of SYSOUT receiver streams allowed to be concurrently active on a given line. This specification should match the value of STNUM on the other members with which this member is to communicate directly. The sum of the values JRNUM= and SRNUM= must not exceed 8.

**Modification:** Hot start.

**STNUM=n|1**

Specifies the number (0-7) of network SYSOUT transmitters which will be associated with each NJE line. The value of n is an integer which specifies the maximum number of SYSOUT transmitter streams allowed to be concurrently active on a given line. This value should remain unchanged unless it is known that a particular user has some extremely large data sets to be transmitted, and

other short data sets that must be transmitted concurrently. If there are not enough receivers on the receiving node to receive SYSOUT data over the line, excess transmitters drain automatically.

**Modification:** Hot start.

**TIMETOL=nnnn | 1440**

Specifies the approximate time difference (0 - 1500 minutes) allowed between the TOD clock of this node and any adjacent node. For example, if you specify TIMETOL=60 and an adjacent node attempts a signon to this node with a clock that differs from this clock by 60 minutes or less, the signon is successful. If the adjacent node's clock differs from this clock by significantly more than 60 minutes, the signon fails.

Supply a TIMETOL= value (or accept the default value) so that JES2 can determine whether to accept status information about any node in the network or permit a signon.

During JES2 processing, if a record is received with a future timestamp, but the time does not differ from the TOD clock value by more than the TIMETOL=value, JES2 accepts the record. If the timestamp is in the future by an amount that is significantly greater than the TIMETOL= value, JES2 rejects the record. For network topology records, rejection results in the record being ignored (with error message \$HASP500). For network signon records, the signon to the adjacent node fails.

**Modification:** \$T NJEDEF operator command.

## NODE(xxxxxxxx) - Define a Network Node to JES2

The NODE(xxxxxxxx) statement defines each node or a range of nodes. The subscript (nnnn) can specify:

- A specific node with a numeric identifier (1-32767), as specified by the NODENUM= parameter on the NJEDEF statement), for example, NODE(105).
- A range of nodes with a generic numeric identifier in the form NODE(x-\*), for example, NODE(105-\*).
- A specific node with a symbolic identifier in the form xxxxxxxx, for example, NODE(POKIPSY1). This must be related to a NAME= parameter on a previous NODE(xxxxxxxx) statement.
- A range of nodes with a generic symbolic identifier in the form jx\*, for example, NODE(POK\*).
- All nodes in the form NODE(\*). This defines all nodes from 1 to the NODENUM= specification on the NJEDEF initialization statement. Using the form NODE(\*) causes JES2 to scan for 32767 nodes, regardless of the number previously defined. Using this option does not create definitions of additional nodes (that is, above the NODENUM= specification on the NJEDEF initialization statement), but can significantly increase the processing time that JES2 takes to process this initialization statement.

**Note:**

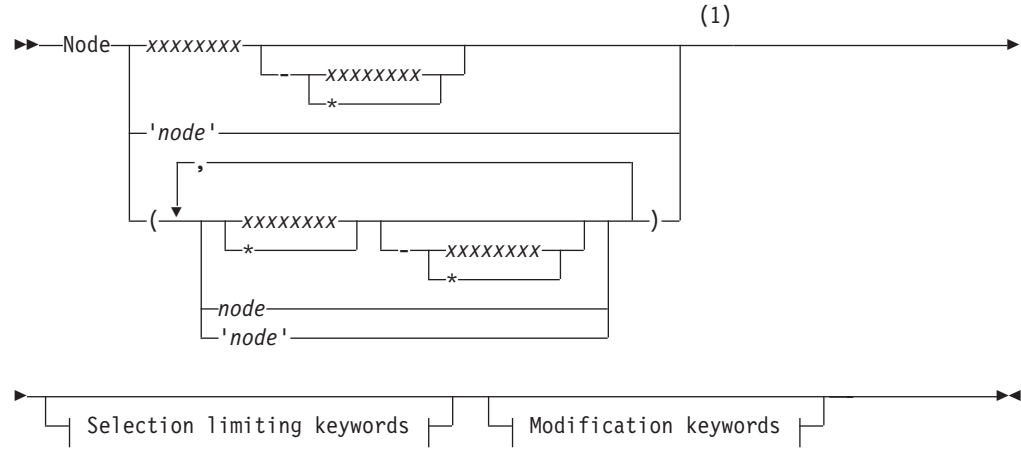
1. If the node being defined is the same as that specified by the OWNNODE= parameter on the NJEDEF statement (the NODE(xxxxxxxx) statement is for the node that is being initialized, not for another node), the only useful specifications are the NAME= and PASSWORD= parameters. When one



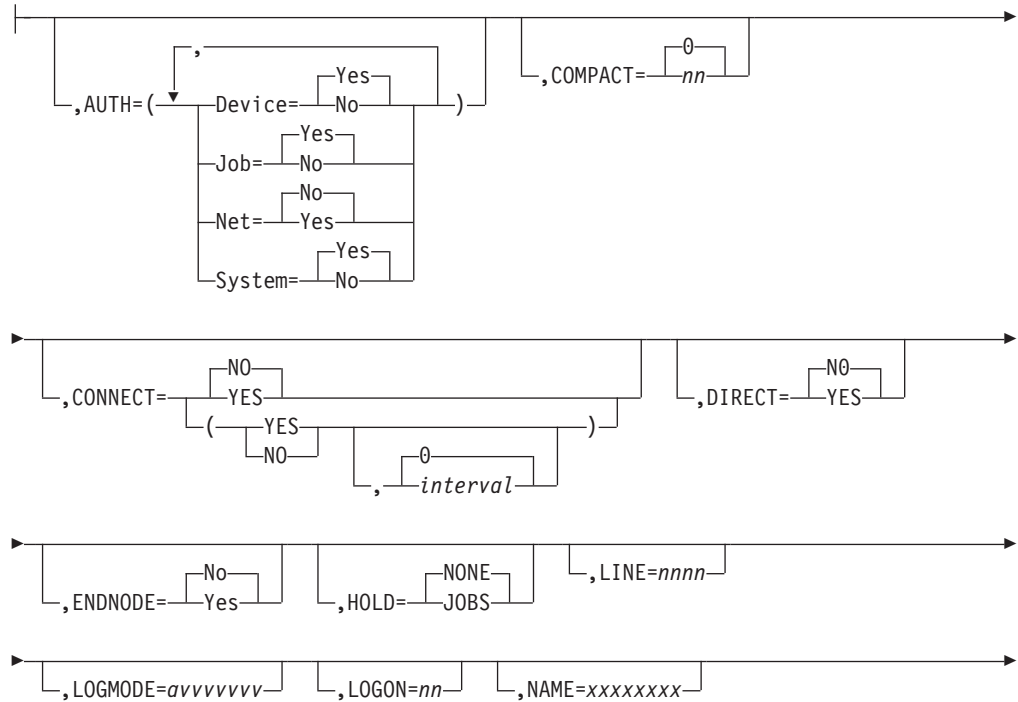
member signs on to another, the name and password(s) are used in the signon sequence such that the other member can verify the acceptability of the member signing on.

- Before defining a node name that starts with a numeric character, ensure that all nodes in your network support node names that start with numeric characters, that is, the nodes are at JES2 SP5.1 or higher.

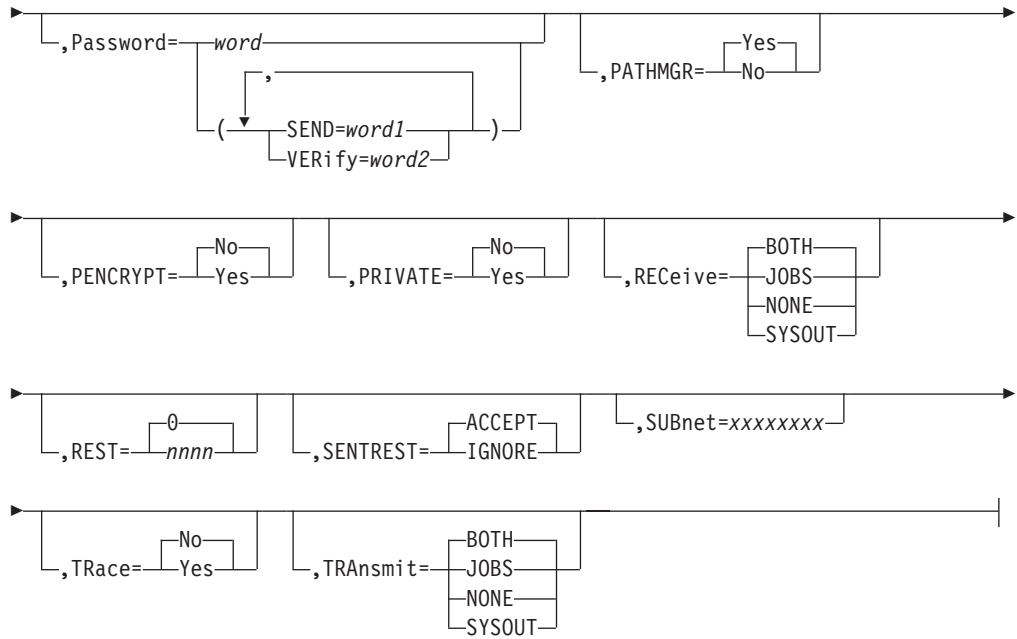
**Format Description for NODE(xxxxxxxx)**



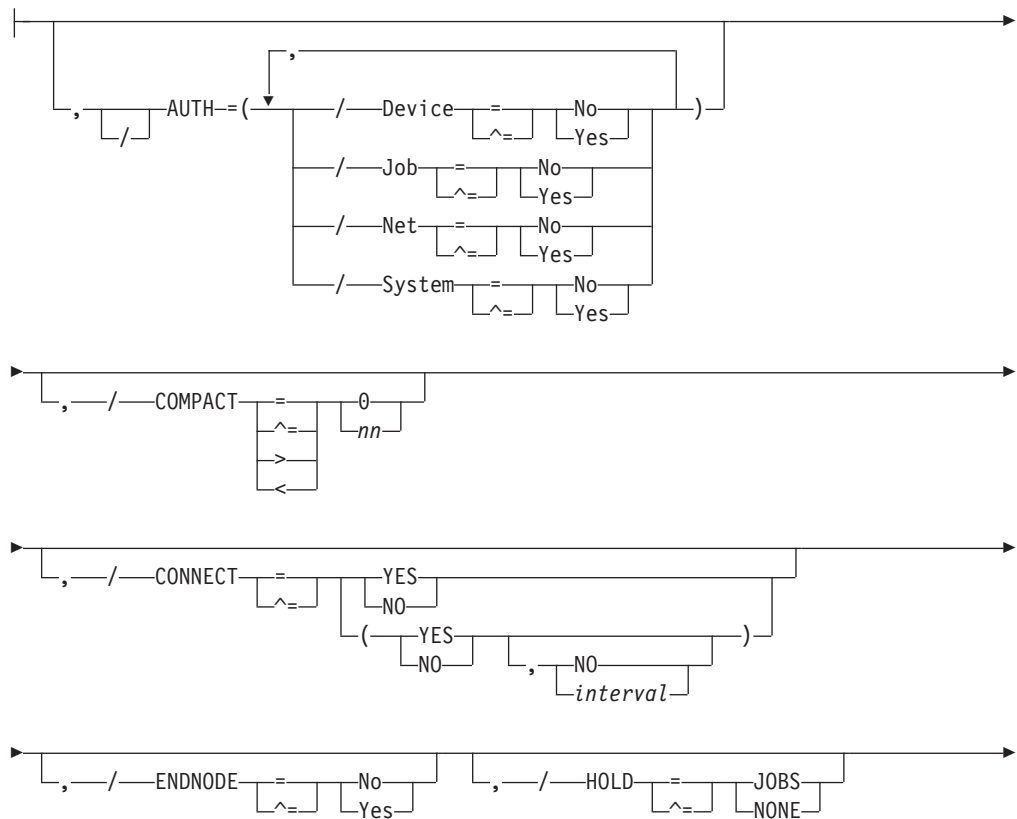
**Modification keywords:**

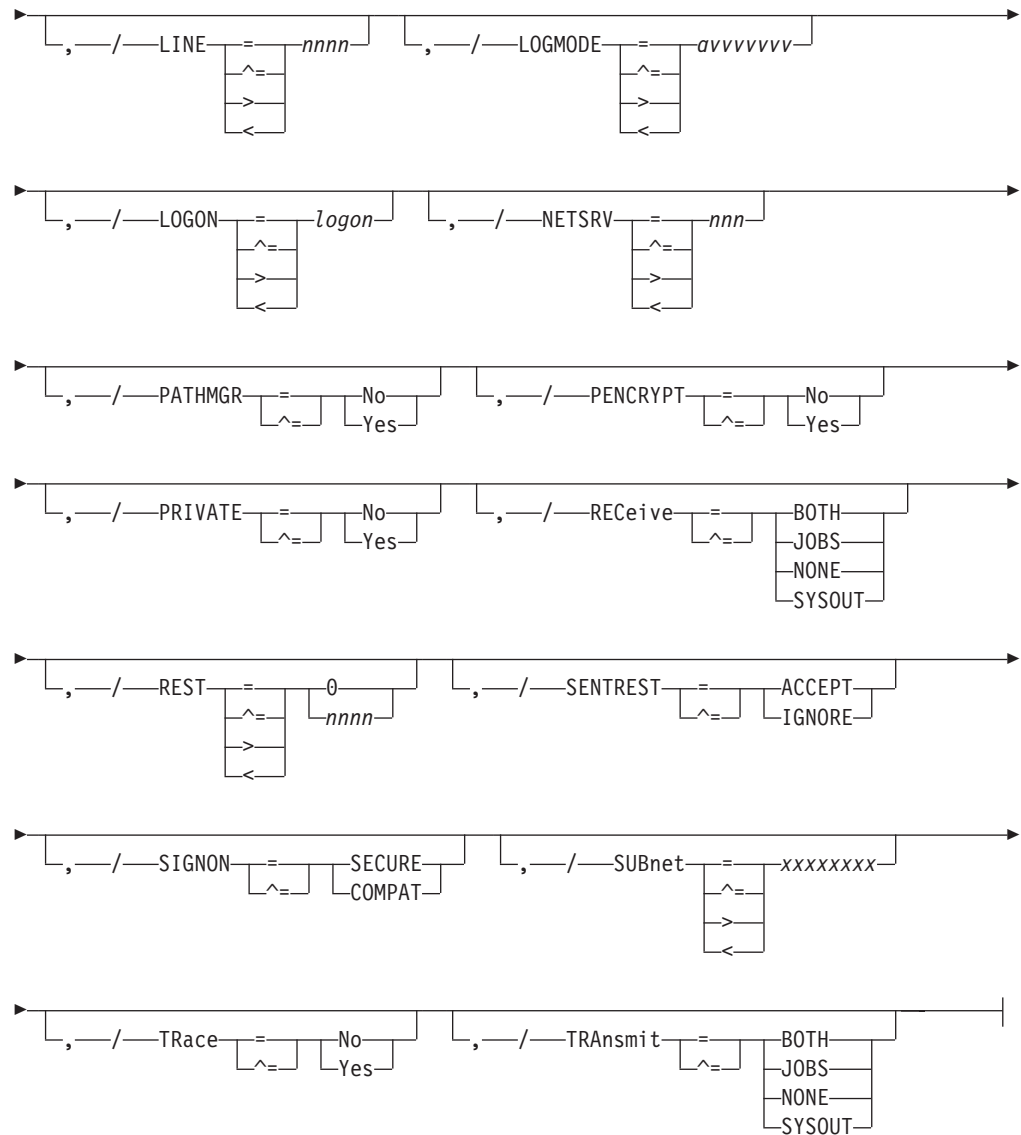


## NODE(xxxxxxxx)



### Selection limiting keywords:





**Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter Description for NODE(xxxxxxxx)**

**AUTH=**

Specifies the level of command authority for this node in relation to another node.

**Note:** This parameter has no effect when the associated resource class and profile in RACF 1.9 or higher are active. For more information on JES2 security, see *z/OS JES2 Initialization and Tuning Guide*.

**NET=**

Specifies the node's network authority.

**Yes** Specifies that the node has the command authority of locally attached consoles.

**No** Specifies that this node can only enter commands that affect

## NODE(xxxxxxxx)

devices (assuming DEVICE=Yes) and jobs (assuming JOBS=Yes). If all AUTH subparameters are No, the node being defined can enter only display commands to this member (the defining node).

### Device=

Specifies this node's authority over devices on this member.

- Yes Specifies that the node has command authority to affect devices on this member.
- No Specifies that the node cannot enter commands that affect devices on this member.

### Job=

Specifies this node's authority over jobs on this member.

- Yes Specifies that the node can enter commands that affect jobs.
- No Specifies that the node cannot enter commands that affect jobs on this member.

### System=

Specifies this node's authority over all members at the node being defined. If NET=No, this parameter has no effect.

- Yes Specifies that the node can enter commands that affect system functions on these members.
- No Specifies that the node cannot enter commands that affect system functions.

**Modification:** \$T NODE(xxxxxxxx) operator command.

### COMPACT= nn|0

Specifies the number (nn) of the compaction table to be used for outbound compaction in communicating with this node. The compaction table number must be in the range of 0 to 99, where 0 denotes no compaction.

The value specified here will be used as a default if no value for COMPACT is specified on the APPL(jxxxxxxxx) initialization statement for an SNA NJE networking node.

This parameter defaults to 0, indicating no compaction.

**Modification:** \$T NODE(xxxxxxxx) operator command.

### CONNECT= (YES|NO, *interval*)

Specifies whether NJE connections, which specify CONNECT=DEFAULT on the APPL, LINE, or SOCKET statements associated with this node, are automatically attempted. The *interval* is the approximate time (in minutes) between attempted connections. The valid range for *interval* is 0-1440; the default value is 0. A value of 0 indicates that the default interval (from NJEDEF CONNECT=) is used. The default CONNECT value is NO.

**Note:** This parameter starts all connections that point to the node, through LINE NODE=, APPL NODE=, or SOCKET NODE=, plus the line that NODE(n) LINE= points to if any.

### DIRECT=YES|NO

Specifies whether the node must be directly attached:

#### YES

Indicates that only direct connections to this node will be considered when computing path information.

**NO** Indicates that the node can be reached either through direct or indirect paths. For example, store-and forward.

DIRECT has MAS scope. The values can be changed on any start other than a hot start, and will affect all MAS members regardless of whether the node is active or inactive.

**ENDNODE=Yes|No**

Specifies whether (Yes) or not (No) the node is to be eligible for use in store-and-forward operations. This parameter has MAS scope.

**Yes**

**Local node:** If you are defining your node (the local node) and you do not want the node to be eligible for use in store-and-forward operations, code ENDNODE=Yes. This ensures that path manager connect records are not sent from your node to adjacent nodes.

Where possible, IBM suggests that other nodes also specify ENDNODE=Yes on their initialization statements for your node. If all nodes in the network define your node as an end node, the possibility of your node being used for store-and-forward operations is reduced.

**Non-local node:** If you are defining a remote node and the installation personnel at that node have defined the node as an end node, code ENDNODE=Yes.

**No Local node:** If you are defining your node (the local node) and the node is to be eligible for use in store-and-forward operations, code ENDNODE=No or omit the parameter.

If you specify ENDNODE=No for this node, IBM suggests that other nodes specify ENDNODE=No on their initialization statements for your node.

**Attention:** If your node provides the only gateway into a subnet, IBM suggests that you define your node as eligible for store-and-forward operations. To do otherwise prevents other nodes from communicating with the subnet.

**Non-Local node:** If you are defining a remote node and the installation personnel at that node have defined the node as eligible for store-and-forward operations, code ENDNODE=NO or omit the parameter.

**Modification:** To modify the ENDNODE= specification for the local node, you must perform a hot start. To modify the ENDNODE= specification for other nodes, use the \$T NODE(xxxxxxxx) operator command. The values can be changed on any start other than a hot start, and will affect all MAS members regardless of whether the node is active or inactive.

**HOLD=JOBS|NONE**

HOLD=JOBS specifies that the node, as specified as OWNNODE on the NJEDEF statement will hold jobs received from the specified node(s).

HOLD=NONE specifies received jobs will not be held.

**Modification:** \$T NODE(xxxxxxxx) operator command.

**LINE=nnnn**

Specifies a line to be dedicated to the NJE session associated with this node. Range is 0-65535.

## NODE(xxxxxxxx)

**Note:** If there are multiple SNA paths to this node, use the LINE= parameter on the APPL initialization statement; if there are multiple TCP/IP paths to this node, use the LINE=parameter on the SOCKET initialization statement.

**Default:** 0 (No line is dedicated.)

**Modification:** \$T NODE(xxxxxxxx) operator command, if the node is not active.

### LOGMODE=avvvvvvv

Specifies the logon mode table entry name for this application. This name will determine which entry in the VTAM application logon mode table is to be used to provide a set of session parameters for the application program if the program participates as the secondary end of a session. This parameter is valid only for NJE applications. The name specified should follow the VTAM naming conventions for a logon mode table entry name. See *z/OS Communications Server: SNA Programming* for more information about the logon mode table.

The default value of the name are blanks, and VTAM defaults are used for the session parameters.

**Modification:** \$T NODE(xxxxxxxx) operator command, if the node is not active.

### LOGON=nn

Specifies the number of the logon DCT to be used in communication with this node.

### NAME=xxxxxxxx

Specifies the 1- to 8-character name that symbolically defines the node. A DESTID statement defining this name is not required.

**Restrictions:**If the XCFGRPNM parameter is not coded on the MASDEF statement, the node name should follow the XCF naming conventions. To avoid using the names IBM uses for its XCF groups, do not begin names with the letters A through I or the character string SYS. Also, do not use the name UNDESIG, which is reserved for use by the system programmer in your installation.

### Note:

1. When using the spool offload facility, be certain that the node name of the offloaded member is known to the reloading member. If these names do not match, unpredictable routing of jobs and SYSOUT can occur on the reloading member. Any unresolved routing will result in SYSOUT or jobs executing and printing locally.
2. If a non-numeric subscript is specified for NODE, that is NODE(xxxxxxxx) or NODE(xx\*), the subscript must match the specification on this parameter.
3. You should not use RMTnnnn, RMnnnn and Rnnnn as symbolic names.
4. Before defining a node name that starts with a numeric character, ensure that all nodes in your network support node names that start with numeric values.
5. When naming a node, avoid 1- to 4-digit number such as '3' and '234'. This can cause confusion when the name is used in commands or displayed in messages. Consider the following initialization statements and series of commands:

```
NODE(3)   NAME=246
NODE(246) NAME=POKIPSY
```

If you enter:

```
$T NODE(3)
```

JES2 modifies the third node (NAME=246).

If you enter:

```
$T NODE(POKIPSY)
```

JES2 modifies the 246th node (NAME=POKIPSY).

However, if you enter:

```
$T NODE(246)
```

it might not be obvious that JES2 modifies the third node (NODE(3) NAME=246), not NODE(246) NAME=POKIPSY.

Therefore, if you must use 1- to 4-digit names, to reduce any possibly of confusion, pad the number on the left with 0s. The above example becomes:

```
NODE(3)   NAME=00000246
NODE(246) NAME=POKIPSY
```

Now \$T NODE(246) modifies the 246th node (NODE(246) NAME=POKIPSY), and \$T NODE(00000246) modifies the third node (NODE(3) NAME=00000246).

This parameter has MAS scope.

The default value of this parameter is Nnnnn where nnnn is the node number.

**Modification:** \$T NODE(nnnn) operator command. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used. This specification cannot be changed if the NODE(xxxxxxxx) or NODE(xx\*) form of the NODE statement is to be used. The values can be changed on any start other than a hot start, and affect all MAS members regardless of whether the node is active or inactive.

**NETSRV=nnn**

Specifies the device number of the NETSRV that is to be used to establish a TCP/IP NJE connection to this node.

**Default** 0 (no NETSRV is to be dedicated).

**Modification:** Operator command.

**Password=( [SEND=word1,]VERi fy=word2) | word**

Specifies passwords for verification each time one node signs on to another. There are two ways of specifying the parameter:

- Password = ([SEND=word1,]VERi fy=word2) allows you to specify unique passwords to be used between nodes that communicate with each other in the network. This method provides enhanced security for the transmission of information between nodes, and is the preferable way of specifying Password=.
- Password=word allows a node to send a common password to all nodes with which it might communicate. Although it is recommended that you define all nodes using Password=(SEND=word1,VERi fy=word2), the Password=word method provides compatibility with previous releases of JES2.

Detailed descriptions for both methods follow.

## NODE(xxxxxxxx)

### **Password=( [SEND=word1,]VERi fy=word2)**

Use Password=(SEND=word1,VERi fy=word2) to specify unique passwords between nodes in the network.

#### **SEND=word1**

Specifies a unique 1- to 8-character password that will be sent to the node by OWNNODE when it is signing on to the node, to verify that OWNNODE is the correct node.

#### **VERi fy=word2**

Specifies the 1- to 8-character password that OWNNODE will expect back from the node.

### **Password=word**

Specifies a 1- to 8-character password that is to be used when the node is signing on to any other node.

#### **Note:**

1. If all nodes in your network use the Password=(SEND=word1,VERi fy=word2) method of password verification, it is unnecessary to include this Password= parameter on the NODE(xxxxxxxx) initialization statement for OWNNODE in this initialization stream. However, if some nodes use the Password=(SEND=word1,VERi fy=word2) specification and others use the Password=word specification, you must include a PASSWORD=(VERi fy=word2) specification for the OWNNODE.
2. Using Password=word is similar to specifying Password=(VERi fy=word2) for OWNNODE. The result is that OWNNODE will send the same password to all nodes to which it may sign on.
3. If both Password specifications are omitted, no password verification of the node will be performed unless the operator sets a password through the JES2 \$T N command.
4. To prevent disclosing the passwords, protect the data set containing the initialization statements. If RACF 1.9 or higher is used, protection can be provided by specifying UACC=NONE for the data set.
5. Be certain to record the passwords in effect, because no facility exists to display the current value.

This parameter has no default.

**Modification:** \$T NODE(xxxxxxxx) operator command.

### **PATHMGR=Yes | No**

Specifies whether (Yes) or not (No) connection records should be sent to the directly adjacent node defined by this statement. You must specify PATHMGR=No when connecting to adjacent non-JES2 nodes. A CONNECT statement is not necessary for connecting to adjacent non-JES2 nodes. This parameter has MAS scope.

**Modification:** \$T NODE(xxxxxxxx) operator command, if the node is not active. The values can be changed on any start other than a hot start, and will affect all MAS members regardless of whether the node is active or inactive.

### **PENCRYPT=Yes|No**

Specifies whether (Yes) or not (No) this node supports password encryption.

If PENCRYPT=Yes, JES2 encrypts the password for any job sent across the network to this node. The encryption scheme JES2 uses is the data encryption



system (DES) that exists in RACF. If the destination node's security product can not interpret passwords using this scheme, the job(s) will fail.

If PENCRIPT=No, JES2 does not encrypt the password for jobs sent across the network to this node.

**Modification:** \$T NODE(xxxxxxxx) operator command.

**PRIVATE=Yes | No**

Specifies whether or not the information about the connection between the local node and the directly adjacent node defined by this statement is to be kept private; that is, the information is only known to this node and the directly adjacent node. Yes specifies that the information is not to be sent to other nodes, No specifies that the information is sent to other nodes. The information about the connection is always sent to other members of this MAS. This parameter is ignored if the node is not a directly adjacent node. This parameter has MAS scope.

**Modification:** \$T NODE(xxxxxxxx) operator command, if the node is not active. The values can be changed on any start other than a hot start, and will affect all MAS members regardless of whether the node is active or inactive.

**RECeive=JOBS|SYSOUT|NONE|BOTH**

Specifies what the node, as specified as OWNNODE= on the NJEDEF statement, will receive from the specified adjacent node.

**JOBS**

Indicates that OWNNODE can only receive JOBS from the specified node(s).

**SYSOUT**

Indicates that OWNNODE can only receive SYSOUT from the specified node(s).

**NONE**

Indicates that OWNNODE will accept no data (JOBS or SYSOUT) from the specified node(s).

**BOTH**

Indicates that OWNNODE will accept both JOBS and SYSOUT from the specified node(s).

For example, NODE(5) REC=BOTH allows OWNNODE to accept both JOBS and SYSOUT from NODE5

**Modification:** \$T NODE(xxxxxxxx) operator command.

**REST=nnnn|0**

Specifies an integer (0-2000) that represents the resistance rating of the connection as viewed by the installation manager and coordinated with other installations. If the node is specified as PATHMGR=NO, and no CONNECT statement is specified for this node, this value will be the total resistance of the direct connection to this node plus the resistance of the node. See *z/OS JES2 Initialization and Tuning Guide* for details concerning resistance selection. The value specified here will be used as a default if no APPL is defined for a SNA NJE networking node (that is, the APPL is dynamically defined). For BSC, node REST= is not used. LINE resistance is used instead. For BSC, this value is specified on the REST= parameter of the LINEnnnn statement.

**Modification:** \$T NODE(xxxxxxxx) operator command.

## NODE(xxxxxxxx)

### **SENTREST=ACCEPT | IGNORE**

The total resistance of a connection is comprised of the partial resistance of the local node *plus* the partial resistance of the node to which you are making a connection.

When a connection is established between the local node and another node (that is, the node you specify on this NODE(xxxxxxxx) statement), SENTREST=ACCEPT specifies that the partial resistance sent to the local node during signon processing is to be added to the partial resistance calculated by the local node to determine the total resistance of the connection. SENTREST=IGNORE specifies that only the partial resistance calculated at the local node is to be used to calculate the total resistance of the connection. The partial resistance sent by the other node is ignored. This keyword only applies if PATHMGR=NO.

This keyword is useful when the node to which the connection is being made cannot control the resistance being sent during signon processing.

**Modification:** \$T NODE(xxxxxxxx) operator command.

### **SIGNON=SECURE | COMPAT**

Specifies the type of signon security to be used when NJE connections to this node are established:

#### **COMPAT**

Specifies that node and line passwords, where applicable, are to be exchanged and verified by the NJE signon process.

#### **SECURE**

Specifies that encrypted session keys are to be exchanged rather than node and line passwords.

**Modification:** \$T NODE(nnn) operator command.

**Note:** For nodes connected through BSC, the N= parameter **MUST** be specified on the \$SN command for a secure signon to be processed.

### **SUBnet=xxxxxxxx**

Specifies the name of the subnet in which this node belongs. Connection records between two nodes in the same subnet are not passed between nodes outside that subnet.

This parameter has no default. It has MAS scope.

**Modification:** \$T NODE(xxxxxxxx) operator command. The values can be changed on any start other than a hot start, and will affect all MAS members regardless of whether the node is active or inactive.

### **TRace= Yes | No**

Specifies whether network connect control (NCC) records to and from the direct connection to the specified member of this node should be traced (trace IDs 21 through 24).

**Modification:** \$T NODE(xxxxxxxx) operator command.

### **TRANsmi t=JOBS | SYSOUT | NONE | BOTH**

Specifies what the node, as specified as OWNNODE= on the NJEDEF statement, will transmit to the specified adjacent node.

#### **JOBS**

Indicates that OWNNODE can only transmit JOBS to the specified node(s).

**SYSOUT**

Indicates that OWNNODE can only transmit SYSOUT to the specified node(s).

**NONE**

Indicates that OWNNODE will transmit no data (JOBS or SYSOUT) to the specified node(s).

**BOTH**

Indicates that OWNNODE will transmit both JOBS and SYSOUT to the specified node(s).

For example, NODE(5) TRA=BOTH allows OWNNODE to transmit both JOBS and SYSOUT to NODE5.

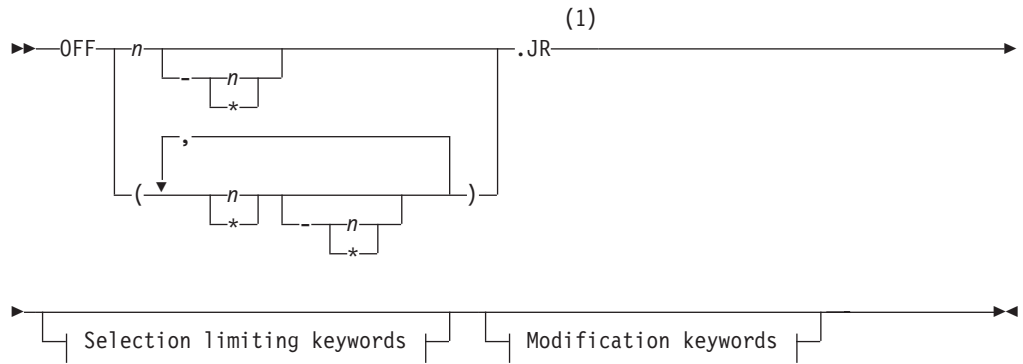
**Modification:** \$T NODE(xxxxxxxx) operator command.

**OFF(n).JR - Offload Job Receiver**

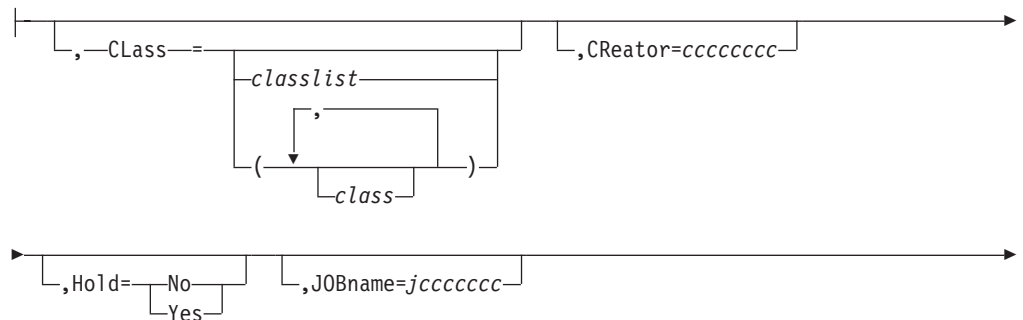
The OFF(n).JR initialization statement describes the offload job receiver associated with an individual offload device. An offload job receiver is a logical device that controls the loading of pre-execution jobs from an offload data set.

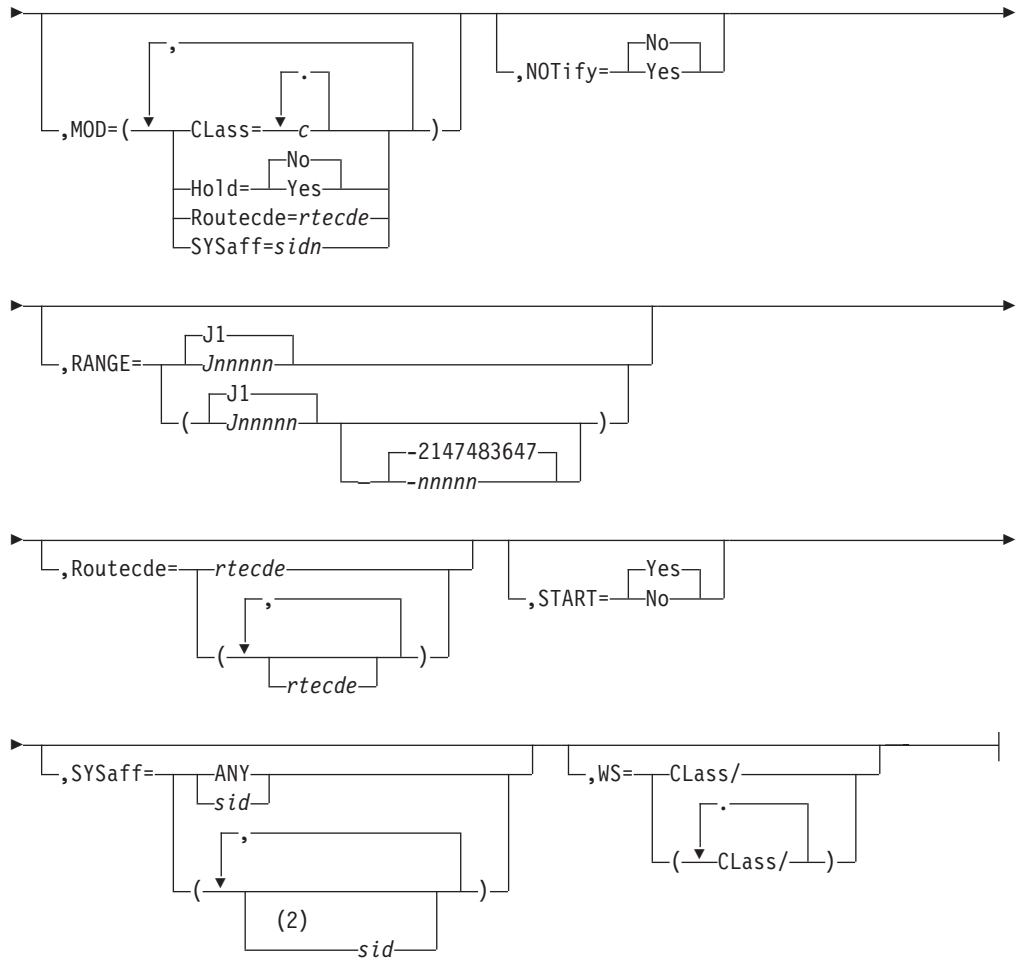
Specifying n from 1 to 8 associates this offload job receiver with a specific offload device as described by a corresponding OFFLOAD(n) initialization statement. The OFFLOAD(n) initialization statement defines the offload data set.

**Format Description for OFF(n).JR**

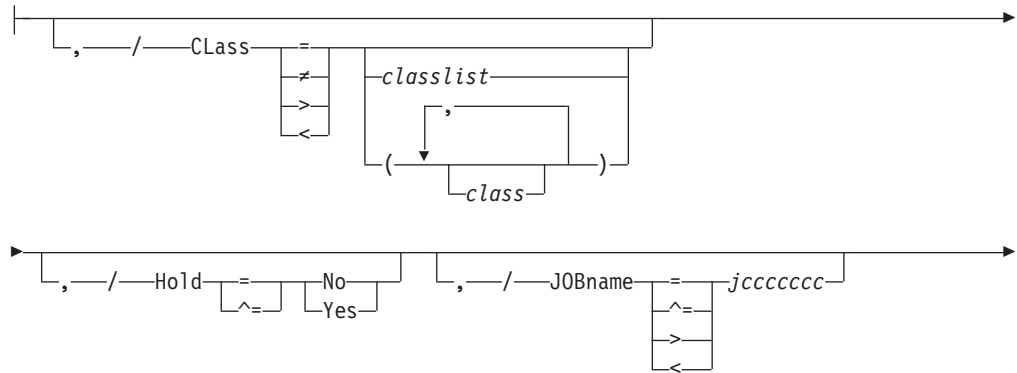


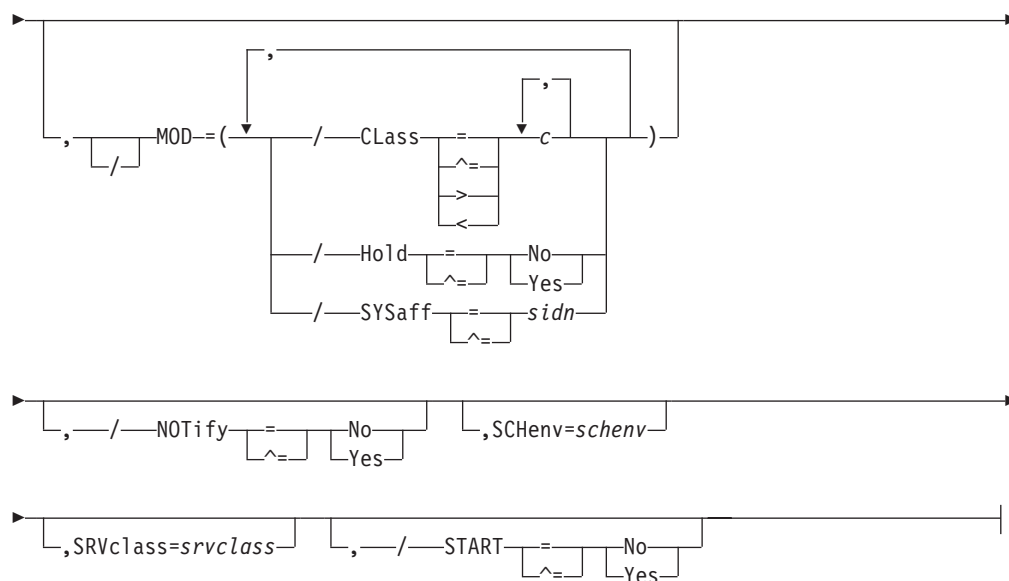
**Modification keywords:**





**Selection limiting keywords:**



**Notes:**

- 1 Omit the comma between initialization statement and first keyword
- 2 SYSaff can be coded up to 32 times

**Parameter Description for OFF(n).JR****CREATOR=ccccccc**

Specifies the 1- to 8-character userid whose job(s) are to be loaded from the offload data set. Wildcard specifications are allowed on this parameter. If you allow this parameter to default, JES2 can load jobs for all userids.

**Modification:** \$T OFF(n).JR operator command.

**Class=classlist | (class, class)**

Specifies the classes which are associated with the initiator. Classes associated with the initiator but ineligible to select work are not displayed in the list (but are matched on a filter).

The *classlist* variable specifies a list of single character job classes A-Z and 0-9: for example, 'ABCDEF'. A maximum of 36 classes can be specified.

The *class* variable specifies a comma-separated list of job classes or job class groups (each 1-8 characters in length). A maximum of eight items can be specified in the list: for example, (CLASS1, CLASS2, CLASS3).

Wildcards can also be specified: see "Subscript ranges" on page 2 for details.

**Modification:** \$T I[nnnn] operator command.

**Hold=Yes | No**

Specifies whether jobs in HOLD status can be loaded. If you allow this parameter to default and HOLD is not in the work selection list, JES2 can select all jobs, whether held or not, for loading. If you allow this parameter to default and HOLD is in the work selection list, no jobs can be loaded.

**Yes**

Indicates that only jobs that are in HOLD status can be loaded.

**No** Indicates that only jobs that are not in HOLD status can be loaded.

**Modification:** \$T OFF(n).JR operator command.

**JOBname=jcccccc**

Specifies the 1- to 8-character job name of the job(s) to be loaded from the offload data set. Wildcard specifications are allowed on this parameter. If you allow this parameter to default, JES2 can select all jobs regardless of jobname, for loading.

**Modification:** \$T OFF(n).JR operator command.

**MOD=**

Specifies those characteristics of the pre-execution jobs that are to be automatically modified when these jobs are loaded from the offload data set. Use commas to separate individual modification characteristics and enclose the list in parenthesis if more than one is specified.

**Class=c1[...cn]**

Specifies the execution class for all pre-execution jobs loaded by this device.

If you do not select a class, Class will not be modified.

**Hold=Yes|No**

Specifies whether jobs are held for conversion after reloading.

If you do not specify this parameter, Hold will not be modified.

**Routecde=rtcode**

Specifies the destination from which jobs loaded by this device are run.

**ANYLOCAL | LOCAL**

Indicates that the jobs are to be run at the local node.

**destid**

Specifies the name of a node, or an alias for the name of a node, where the jobs are to be run.

**Note:** If destid is used, it must be previously defined on a DESTID statement in the initialization stream.

**Nnnnn | nodename**

Indicates that the jobs are to be run at the specified node. The node can be specified using the binary node identifier (nnnn), or the EBCDIC nodename.

**Default:** null (Routecde will not be modified)

**Modification:** Operator command.

**SYSaff=sidn**

Specifies the member affinity (sysid) for all pre-execution jobs loaded by this device.

If you do not select a value, member affinity will not be modified.

**NOTify=Yes|No**

Specifies whether a notification message is sent to the TSO/E userid specified on either the JOB statement or the /\*NOTIFY control statement.

**Yes**

Indicates that a notification message is sent when a pre-execution job is loaded from the offload data set.

**No** Indicates that a notification message is not sent when a pre-execution job is loaded from the offload data set.

**Modification:** \$T OFF(n).JR operator command.

**RANGE=Jnnnnn[-nnnnn] | J1-2147483647**

Specifies the job ID range of those jobs that can be loaded from the offload data set. If you code this parameter, you can specify one or two values:

- If you specify one value, that value becomes both the low and the high end of the range.
- If you specify two values, the first value is the low end of the range and the second value the high end. The two values can be equal. If they are not equal, the second value must be larger than the first value.

**Modification:** \$T OFF(n).JR operator command.

**Routecode=rtcode**

Specifies the execution node selection criteria for jobs to be loaded. Use commas to separate individual route codes and enclose the list in parenthesis if more than one route code is specified. Valid values for *rtcode* are:

**ANYLOCAL | LOCAL**

Indicates that only jobs routed to the local node for execution can be selected.

**destid**

Indicates that only jobs routed to the specified destid for execution can be selected. The destid can be the name of a node, or an alias for the name of a node.

**Nnnnn | nodename**

Indicates that only jobs routed to the specified node for execution can be selected. The node can be specified using the binary node identifier (nnnn) or the EBCDIC nodename.

**Modification:** \$T OFF(n).JR operator command.

**SCHenv=schenv**

Specifies the 1 to 16 byte scheduling environment. Only those jobs with this SCHenv will be selected.

**Modification:** \$T OFF(n).JR operator command.

**SRVclass=svclass**

Specifies the 1 to 8 byte service class name. Only those jobs with this service class will be selected.

**Modification:** \$T OFF(n).JR operator command.

**START=Yes|No**

Specifies the initial status of this receiver when its corresponding offload device is started for a receive operation, that is, when a \$S OFFLOAD(n),TYPE=RECEIVE command is issued.

**Yes**

Indicates that this receiver is started when a corresponding \$S OFFLOAD(n) command is issued.

**No** Indicates that this receiver is not started when a corresponding \$S OFFLOAD(n) command is issued. This receiver can later be started individually by issuing the \$S OFF(n).JR command and stopped as required by issuing the \$P OFF(n).JR command.

**Modification:** \$S OFF(n).JR operator command or \$P OFF(n).JR operator command.

**SYSaff=sid1[,...sid32] | ANY**

Specifies the member affinity for jobs that are selected for loading. Use commas to separate individual members and enclose the list in parenthesis if more than one member ID is specified.

**sidn**

Indicates the specific member ID. As many as 32 IDs can be indicated.

**ANY**

Indicates that the offload receiver can reload a job with any member affinity.

**Modification:** \$T OFF(n).JR operator command.

**WS=(Class/)**

Specifies the job selection criteria for this device. If a criterion is specified in the work selection list, job selection is based on the corresponding parameter specification on this initialization statement. If the job selection criterion is not listed here, the criterion is not considered during work selection.

**Note:**

1. A slash is required in this work selection list; all specifications are required to match and must be listed before a slash. Any criteria listed after the slash will be rejected by JES2.
2. As with other work selection lists, priority for a criterion which specifies multiple values (as do Class and Routecde) is in left to right priority order.

**Class**

Specifies that a match must be found for one of the job classes currently set for this device. If several classes are specified, the order of the class list is in left to right priority order.

**Creator**

Specifies that the current creator must match the creator specified for this device.

**Hold**

Specifies that the current hold specification is considered as a selection criterion.

**JOBname**

Specifies that the current job name must match the job name specified for this device.

**RANGE**

Specifies that the current job number must be within the range specified for this device.

**Routecde**

Specifies that one of the current route codes must match. If several route codes are specified, the order of the list is in right to left priority order.

**SYSaff**

Specifies that the job's member affinity must match one of the member affinities currently set for this device.

If you do not specify a value, the default value is WS=(Class/).



**Note:** Embedded comments are not allowed within the WS= parameter specification.

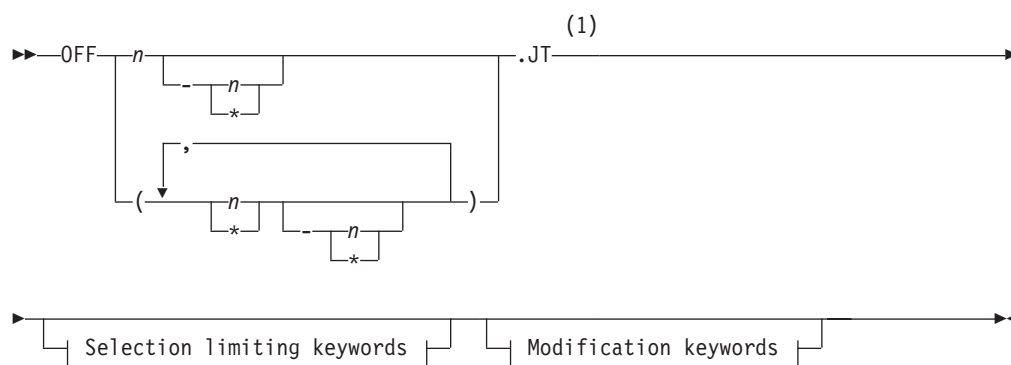
**Modification:** \$T OFF(n).JR operator command.

## OFF(n).JT - Offload Job Transmitter

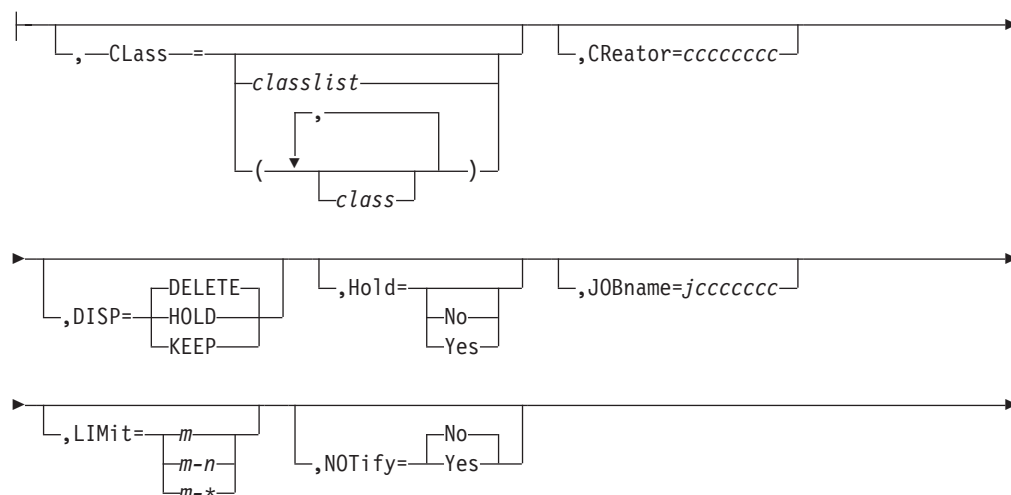
The OFF(n).JT initialization statement describes the offload job transmitter associated with an individual offload device. An offload job transmitter is a logical device that controls the dumping of pre-execution jobs to an offload data set.

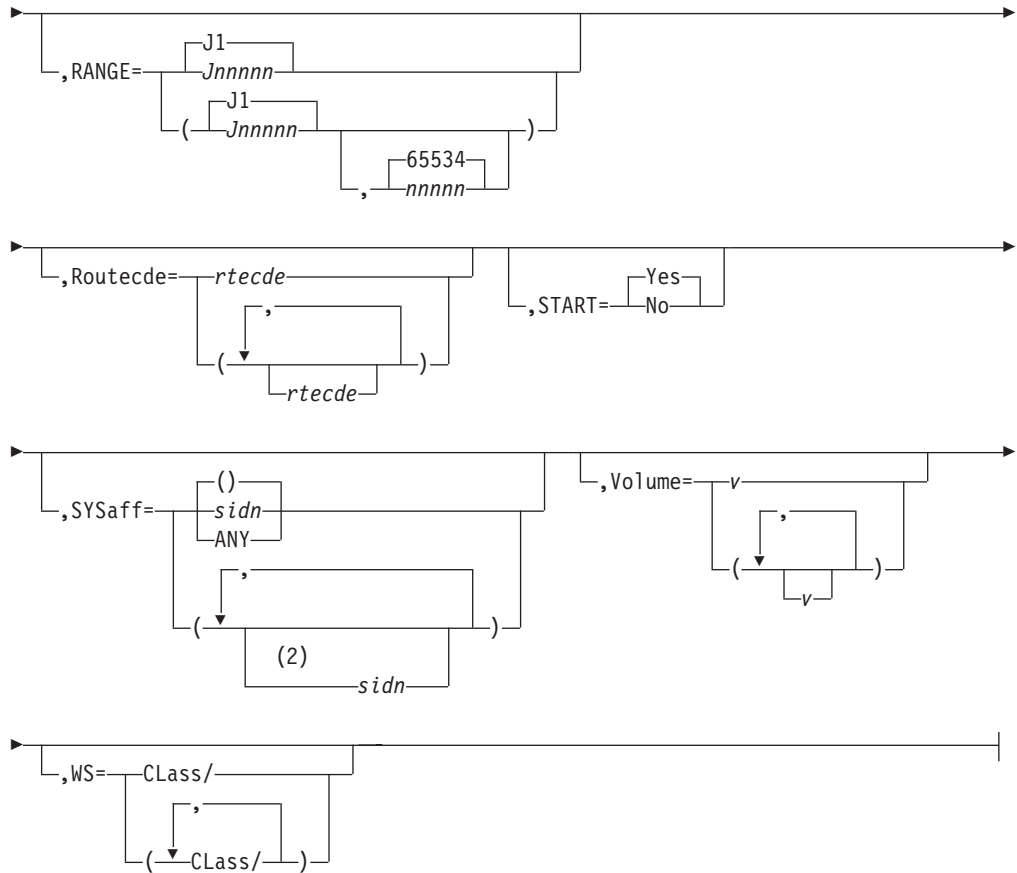
Specifying *n* from 1 to 8 associates this offload job transmitter with a specific offload device as described by a corresponding OFFLOAD(*n*) initialization statement. The OFFLOAD(*n*) initialization statement defines the offload data set.

### Format Description for OFF(n).JT

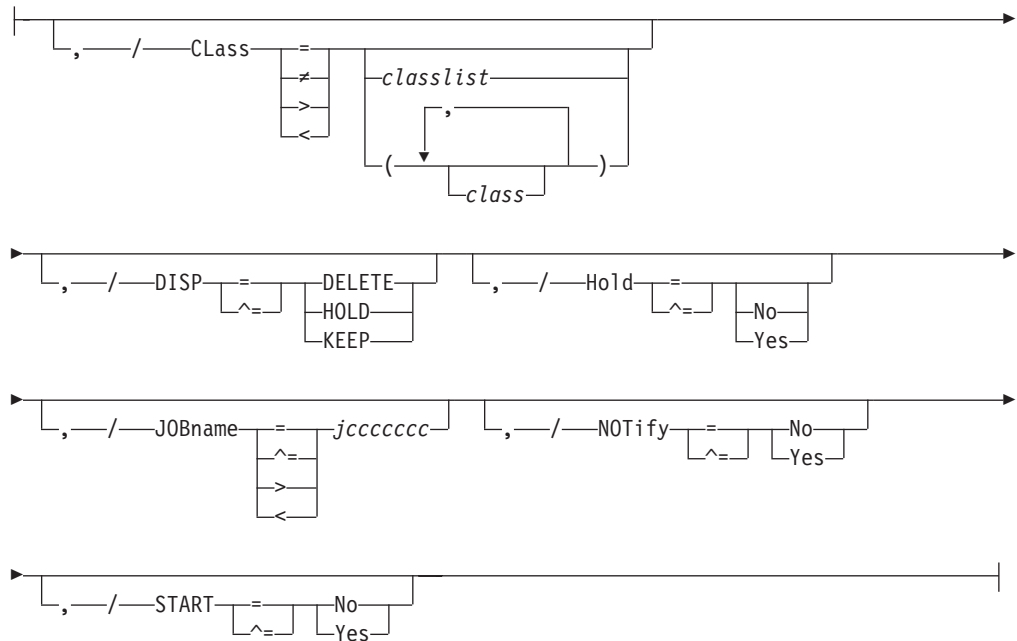


#### Modification keywords:





**Selection limiting keywords:**



**Notes:**

- Omit the comma between initialization statement and first keyword

2 SYSaff can be coded up to 32 times

## Parameter Description for OFF(n).JT

### **CREATOR=ccccccc**

Specifies the 1- to 8-character userid whose job(s) are to be selected by this job transmitter. Wildcard specifications are allowed on this parameter. If you allow this parameter to default, JES2 can select jobs for all userids.

**Modification:** \$T OFF(n).JT operator command.

### **CLASS=classlist | (class, class)**

Specifies the classes which are associated with the initiator. Classes associated with the initiator but ineligible to select work are not displayed in the list (but are matched on a filter).

The *classlist* variable specifies a list of single character job classes A-Z and 0-9: for example, 'ABCDEF'. A maximum of 36 classes can be specified.

The *class* variable specifies a comma-separated list of job classes or job class groups (each 1-8 characters in length). A maximum of eight items can be specified in the list: for example, (CLASS1,CLASS2,CLASS3).

Wildcards can also be specified: see "Subscript ranges" on page 2 for details.

**Modification:** \$T I[nnnn] operator command.

### **DISP=HOLD|KEEP|DELETE**

Specifies the disposition of all jobs that are selected for transmitting to the offload data set as follows:

#### **KEEP**

Indicates that selected job(s) will not change status after being transmitted to the offload data set.

#### **HOLD**

Indicates that selected job(s) are put into HOLD status after being transmitted to the offload data set.

#### **DELETE**

Indicates that the selected job(s) are purged after being transmitted to the offload data set.

**Modification:** \$T OFF(n).JT operator command.

### **HOLD=Yes|No**

Specifies whether jobs in HOLD status (that is, jobs that have been held by specifying a \$H J command, TYPRUN=HOLD, or JCL HOLD) can be transmitted. Jobs that have been previously held (in a held class) do not apply to this parameter; such jobs are not considered here.

If you allow this parameter to default and HOLD is not in the work selection list, JES2 can select all jobs, whether held or not, for transmission. If you allow this parameter to default and HOLD is in the work selection list, no jobs can be transmitted.

#### **Yes**

Indicates that only jobs that are in HOLD status can be selected.

**No** Indicates that only jobs that are not in HOLD status can be selected.

**Modification:** \$T OFF(n).JT operator command.

### **JOBNAME=jcccccc**

Specifies the 1- to 8-character job name of the job(s) to be transmitted to the

## OFF(n).JT

offload data set. Wildcard specifications are allowed on this parameter. If you allow this parameter to default, JES2 can select all jobs, regardless of jobname, for transmission.

**Modification:** \$T OFF(n).JT operator command.

### **LIMit**=*m*|*m-n*|*m-\**

Specifies the limits (in records) set by this device for the amount of input records in a job.

For both variables *m* and *n*, you can specify a range of values 0-4294967295. *m* and *n* can be equal. If they are not equal, *n* must be larger than *m*.

If you code only *m*, that value becomes both the lower and upper limit. If *m-\** is specified, the upper limit is set to the default value of 4294967295.

**Default:** If you omit this parameter, JES2 uses the defaults *m*=0 and *n*=4294967295.

**Modification:** \$T OFF(n).JT(n) command.

### **NOTify**=Yes|No

Specifies whether a notification message is sent to the TSO/E userid specified on either the JOB statement or the /\*NOTIFY control statement.

#### **Yes**

Indicates that a notification message is sent when a pre-execution job is transmitted to the offload data set.

**No** Indicates that a notification message is not sent when a pre-execution job is transmitted to the offload data set.

**Modification:** \$T OFF(n).JT operator command.

### **RANGE**=Jnnnnn[-nnnnn] | J1-999999

Specifies the job ID range of those jobs that can be transmitted to the offload data set. If you code this parameter, you can specify one or two values:

- If you specify one value, that value becomes both the low and the high end of the range.
- If you specify two values, the first value is the low end of the range and the second value the high end. The two values can be equal. If they are not equal, the second value must be larger than the first value.

**Modification:** \$T OFF(n).JT operator command.

### **Route**code=**rtcode**

Specifies the execution node selection criteria for jobs to be transmitted. Use commas to separate individual route codes and enclose the list in parentheses if more than one route code is specified. If you allow this parameter to default, JES2 can select all jobs, regardless of execution node, for transmission. Valid values for rtcode are:

#### **ANYLOCAL** | **LOCAL**

Indicates that only jobs on the local node can be selected.

#### **destid**

Specifies the name of a node, or an alias for the name of a node, from which jobs can be selected.

**Note:** If **destid** is used, it must be previously defined on a DESTID statement in the initialization stream.

**Nnnnn | nodename**

Indicates that only jobs which are to run on the specifically indicated node(s) can be selected. The nodes can be specified using the binary node identifier (nnnn) or the EBCDIC nodename.

**Modification:** \$T OFF(n).JT operator command.

**START=Yes|No**

Specifies the initial status of this transmitter when its corresponding offload device is started for a transmit operation, that is when a \$S OFFLOAD(n),TYPE=TRANSMIT command is issued.

**Yes**

Indicates that this transmitter is started when a corresponding \$S OFFLOAD(n) command is issued.

**No** Indicates that this transmitter is not started when a corresponding \$S OFFLOAD(n) command is issued. This transmitter can later be started individually by issuing the \$S OFF(n).JT command and stopped, as required, by issuing the \$P OFF(n).JT command.

**Modification:** \$S OFF(n).JT operator command or \$T OFF(n).JT operator command.

**SYSAff=**

Specifies the member affinity for jobs that are selected for offloading. Use commas to separate individual members and enclose the list in parenthesis if more than one member ID is specified.

**sidn**

Indicates the specific member ID. As many as 32 IDs can be indicated.

**ANY**

Indicates that the offload job transmitter can transmit a job with any member affinity.

If you do not specify a value, the default value of this parameter is SYSAff=().

**Modification:** \$T OFF(n).JT operator command.

**Volume=(v1[,v2][,v3][,v4])**

Specifies the 5- or 6-character volume serial of a volume containing a spool data set. Only jobs using tracks on this volume(s) can be selected for dumping. As many as four volumes can be specified. Use commas to separate individual volume IDs and enclose the list in parenthesis if more than one ID is specified.

If you do not specify a value, the default value of this parameter is Volume=().

**Modification:** \$T OFF(n).JT operator command.

**WS=(Class/)**

Specifies the job selection criteria for this device. If a criterion is specified in the work selection list, job selection is based on the corresponding parameter specification on this initialization statement. If the job selection criterion is not listed here, the criterion is not considered during work selection.

A slash can be used within the work selection list to further specify work selection. The use of a slash has the following general meaning: 1) those criterion listings several specifications is prioritized in a left to right priority order when placed to the left of the slash; 2) the placement of a criterion to the left of the slash indicates a required exact match of work selection and job criteria; and 3) placement of a criterion to the right of the slash indicates a

preferred (but not required match) of work selection and job criteria. Exceptions to these rules are noted in the following descriptions.

**Class**

Specifies that a match must be found for one of the job classes currently set for this device. If specified to the left of the slash, the order of the class list is in left to right priority order. If specified to the right of the slash, an exact match is still required, but the list has no priority order.

**Creator**

Specifies that the current creator is preferred. If specified to the left of the slash, an exact match is required.

**Hold**

Specifies that the current hold specification is considered as a selection criterion. If specified to the left of the slash, an exact match is required.

**JOBname**

Specifies that the current job name is preferred. If specified to the left of the slash, an exact match is required.

**Priority**

Specifies that job priority is considered. The higher the priority value, the higher priority this criterion receives. The priority specification receives greater importance relative to its left to right placement in the criteria string.

**RANGE**

Specifies that the current job range is preferred. If specified to the left of the slash, an exact match is required.

**Route code**

Specifies that one of the current route codes must match. If specified to the left of the slash, an exact match is required and priority order is indicated from left to right. If specified to the right of the slash, an exact match is still required; however, no priority order is indicated.

**SYSaff**

Specifies that the current member affinity specification is preferred. If specified to the left of the slash, an exact match is required.

**Volume**

Specifies that one of the currently specified volumes must match. If specified to the left of the slash, an exact match is required and priority order is indicated from left to right. If specified to the right of the slash, an exact match is still required; however, no priority order is indicated.

If you do not specify a value, the default value of this parameter is WS=(Class/).

**Note:** Embedded comments are not allowed within the WS= parameter specification.

**Modification:** \$T OFF(n).JT operator command.

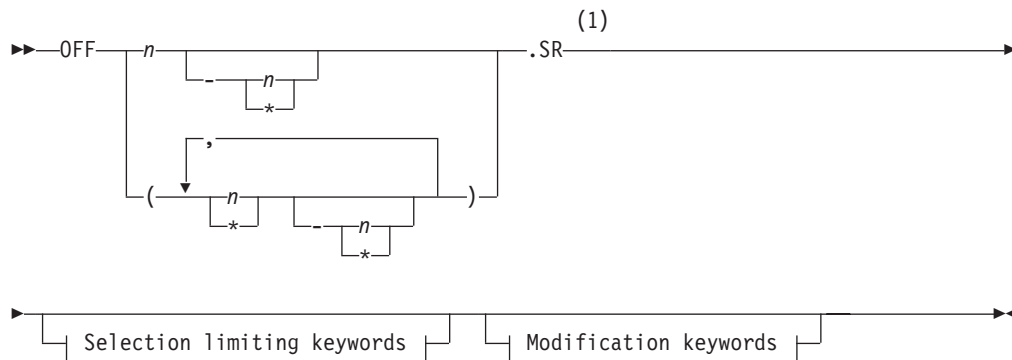
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## **OFF(n).SR - Offload SYSOUT Receiver**

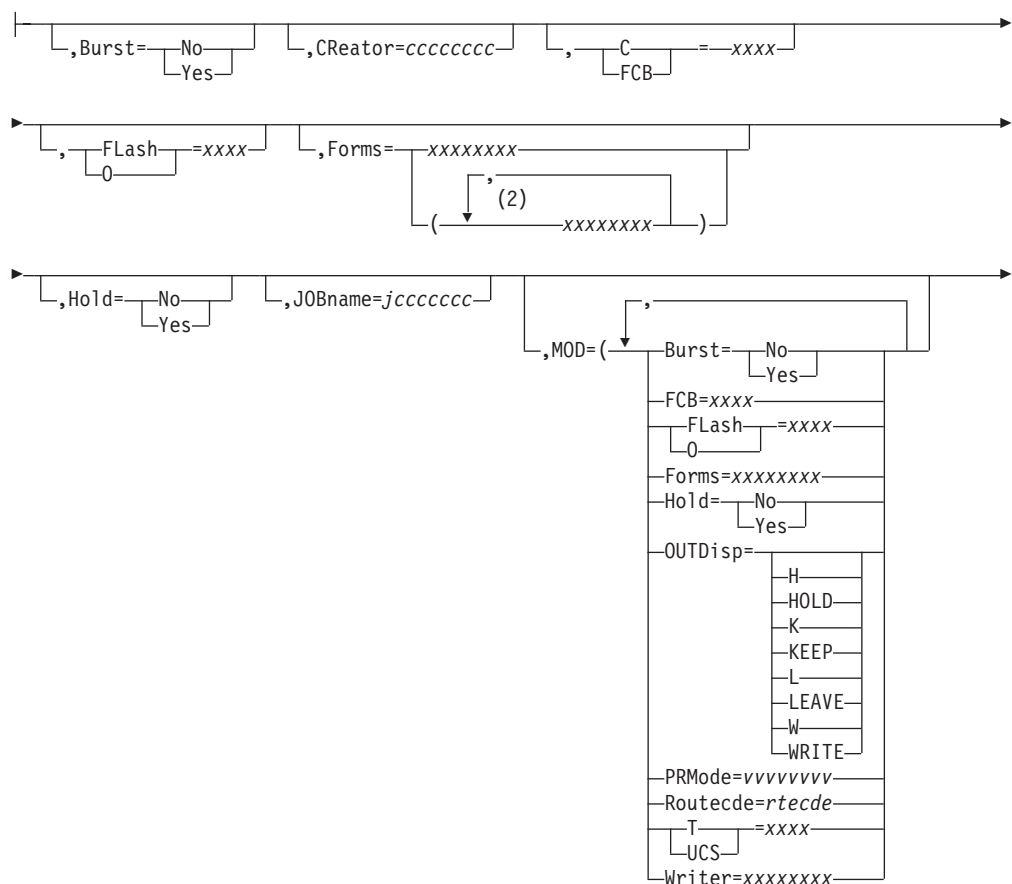
The OFF(n).SR initialization statement describes the offload SYSOUT receiver associated with an individual offload device. An offload SYSOUT receiver is a logical device that controls the loading of output from an offload data set.

Specifying n from 1 to 8 associates this offload SYSOUT receiver with a specific offload device as described by a corresponding OFFLOAD(n) initialization statement. The OFFLOAD(n) initialization statement defines the offload data set.

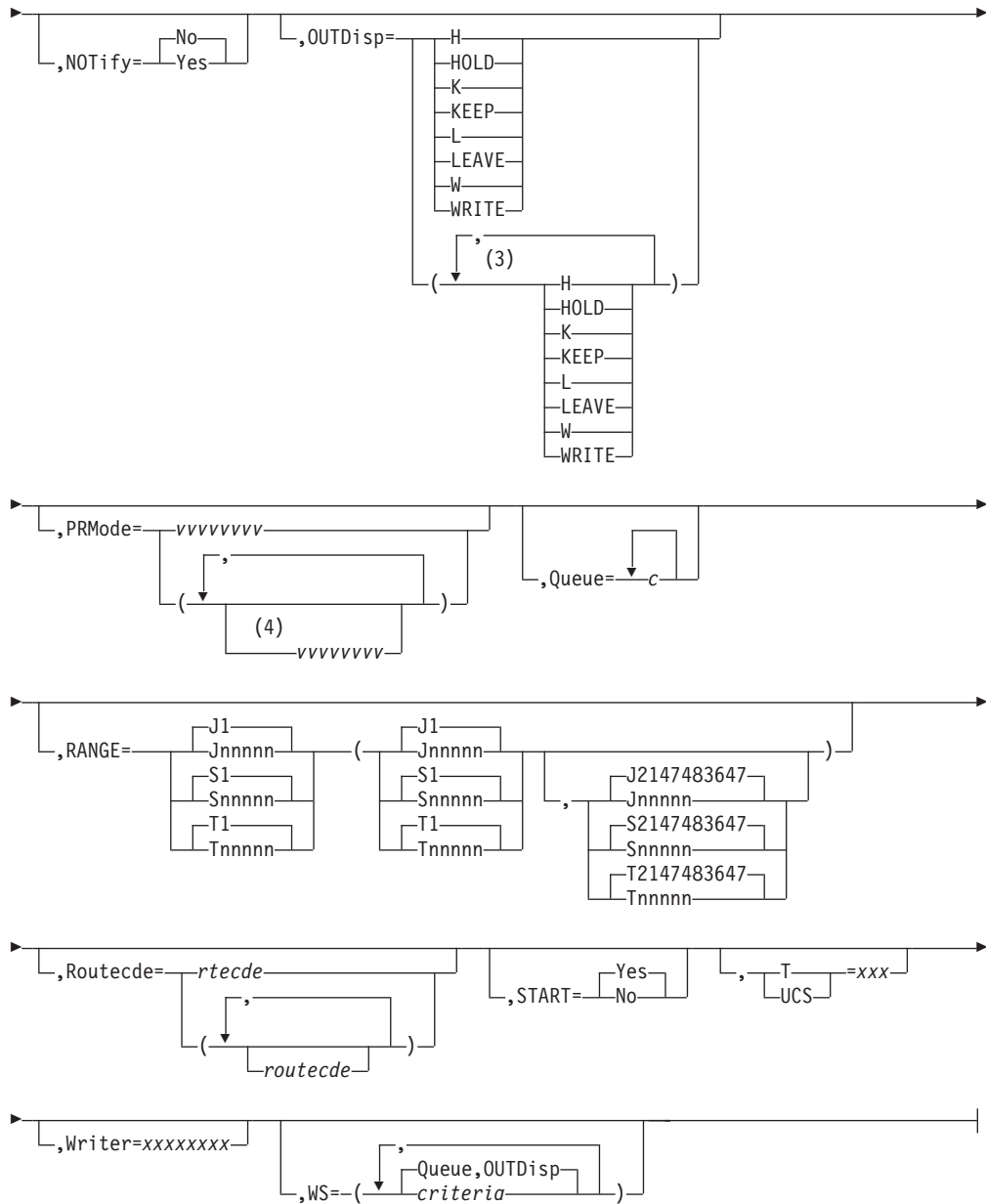
### Format Description for OFF(n).SR



#### Modification keywords:



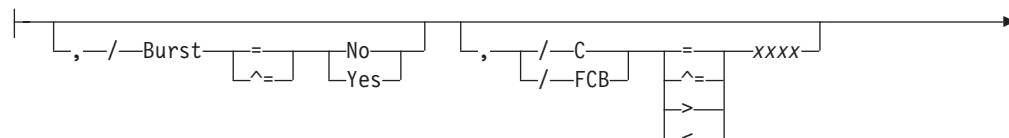
# OFF(n).SR



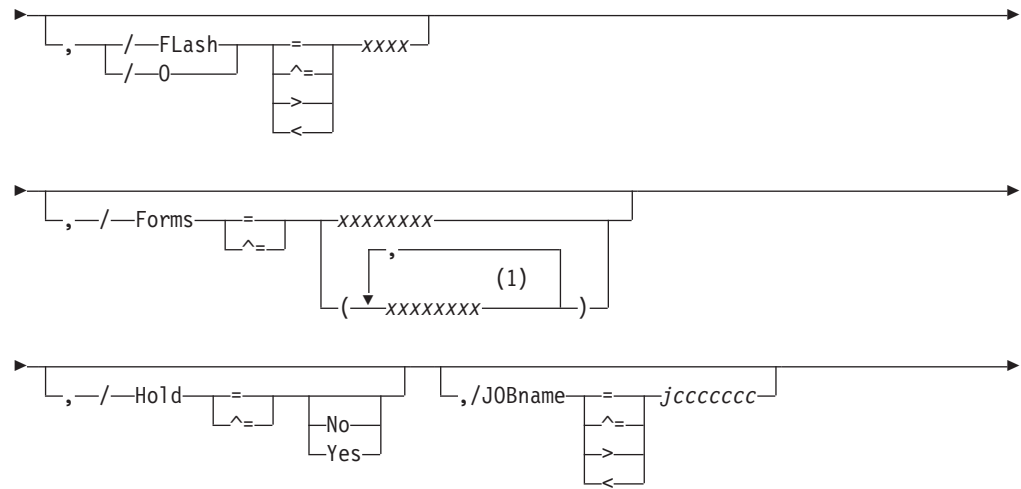
## Notes:

- 1 Omit the comma between initialization statement and first keyword
- 2 Forms can be coded up to 8 times
- 3 OUTDisp can be coded up to 4 times
- 4 PRMode can be coded up to 8 times

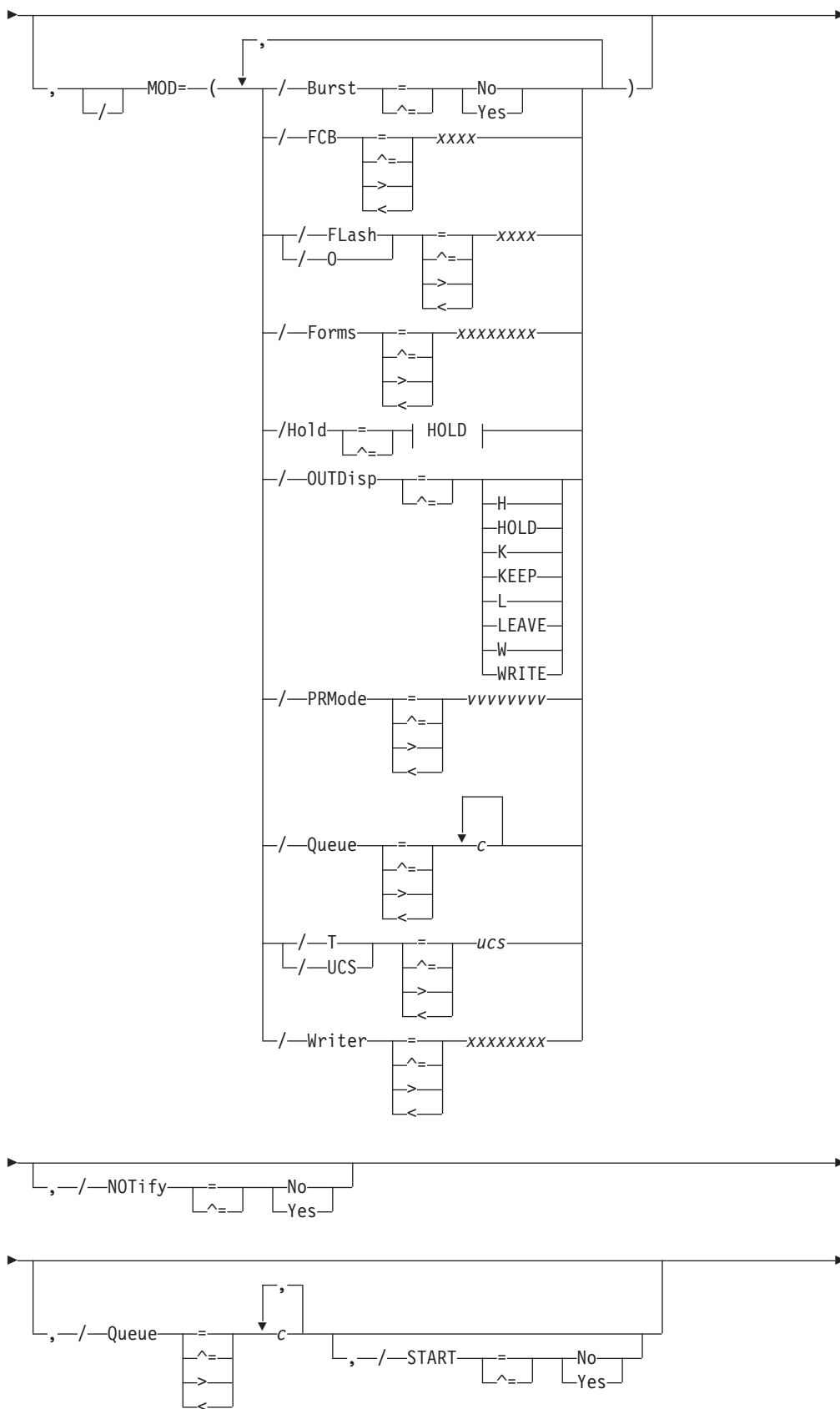
## Selection limiting keywords:

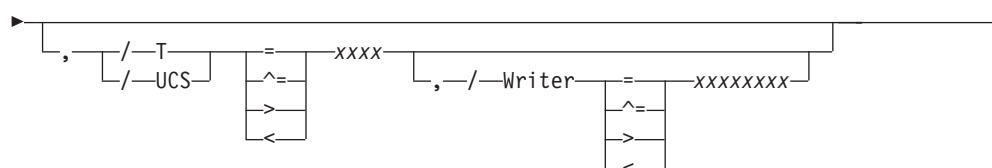






OFF(n).SR



**HOLD****Notes:**

- 1 *form* can be coded up to 8 times

**Parameter Description for OFF(n).SR****Burst=Yes|No**

Specifies the burst specification for which output is selected.

If you allow this parameter to default, JES2 can select all output, regardless of burst specification, for loading.

**Yes**

Indicates that the printed output is to be burst into separate sheets.

**No** Indicates that the printed output is not to be burst into separate sheets.

**Modification:** \$T OFF(n).SR operator command.

**Creator=ccccccc**

Specifies the 1- to 8-character userid whose output is to be loaded from the offload data set. Wildcard specifications are allowed on this parameter. If you allow this parameter to default, JES2 can load jobs for all userids.

**Modification:** \$T OFF(n).SR operator command.

**FCB|C=xxxx**

Specifies the 1- to 4-character name forms control image buffer or carriage control tape.

If you allow this parameter to default, JES2 can select all output, regardless of its FCB, for loading.

**Modification:** \$T OFF(n).SR operator command.

**Flash|0=xxxx**

Specifies a 1- to 4-character flash name for output loaded from the offload data set.

If you allow this parameter to default, JES2 can select all output, regardless of the flash specification, for loading.

**Modification:** \$T OFF(n).SR operator command.

**Forms=xxxxxxxx, . . . ,xxxxxxxx**

Specifies the 1- to 8- character forms specification for which output is selected. Wildcard specifications are allowed on this parameter.

If you allow this parameter to default, JES2 can select all output, regardless of the forms specification, for loading.

**Modification:** \$T OFF(n).SR operator command.

**Hold=Yes|No**

Specifies whether output for held jobs are to be reloaded.

If you allow this parameter to default and HOLD is not in the work selection list, JES2 can select all output, whether held or not, for reloading. If you allow this parameter to default and HOLD is in the work selection list, no output can be reloaded.

**Yes**

Specifies that output from held jobs can be selected by this device.

**No** Specifies that output from held jobs cannot be selected by this device.

**Modification:** \$T OFF(n).SR operator command.

**JOBname=jcccccc**

Specifies the 1- to 8-character job name of the job(s) to be loaded from the offload data set. Wildcard specifications are allowed on this parameter.

If you allow this parameter to default, JES2 can select all output, regardless of its jobname, for loading.

**Modification:** \$T OFF(n).SR operator command.

**MOD=**

Specifies those characteristics of the post-execution jobs that are to be automatically modified when post-execution jobs are loaded from the offload data set. Use commas to separate individual modification characteristics and enclose the list in parenthesis if more than one is specified.

**Burst=Yes|No**

Specifies whether job output from this device is to be burst (page-separated).

**FCB=xxxx**

Specifies a valid forms control buffer image or carriage control tape for output loaded from the offload data set.

**FLash|0=xxxx**

Specifies a valid flash name for output loaded from the offload data set.

**Forms=xxxxxxxx, . . . ,xxxxxxxx**

Specifies a valid forms name for output loaded from the offload data set.

**Hold=Yes|No**

Specifies whether all jobs are held after loading.

**Yes**

Specifies that all jobs are held before output processing.

**No** Specifies that all jobs are released before output processing.

**OUTDisp=disposition**

Specifies that output selected by this offload SYSOUT receiver should have its disposition changed to this value. You can specify one of the following valid dispositions:

**HOLD|H**

Hold the output. JES2 does not process the output until you either change the disposition to WRITE or KEEP, or release the output. When the output is released, the disposition changes to WRITE.

**Note:** This specification is honored when the output reaches the destination node.

**KEEP | K**

Process the output, then keep a copy of it on spool. After processing, the disposition of this output becomes LEAVE.

**LEAVE | L**

JES2 does not process the output until you change the disposition to WRITE or KEEP, or release the output. When the output is released, the disposition changes to KEEP.

**WRITE | W**

Process the output then purge it.

This modification defaults to the current disposition.

**PRMode=vvvvvvvv**

Specifies a valid processing mode for output loaded from the offload data set.

**Queue=c1[...cn]**

Specifies a valid output class (A-Z, 0-9) for all output loaded from the offload data set. A maximum of 15 classes can be specified on this parameter. If you need to exceed the limit of 15 classes, specify Queue=, (that is, null) and do not code Queue in the WS= list on this statement; this allows **all** defined classes to be reloaded.

**Routecde=rtcode**

Specifies a destination for all output loaded from the offload data set.

See the Routecde= parameter on 236 for a description of the different ways of specifying route codes.

**UCS|T=xxxx**

Specifies a valid print train or character arrangement table for all output loaded from the offload data set.

**Writer=xxxxxxxx**

Specifies an external writer name for output loaded from the offload data set.

**NOTify=Yes|No**

Specifies whether a notification message is sent to the userid specified on either the JOB statement or the /\*NOTIFY control statement.

**Yes**

Indicates that a notification message is sent when a post-execution job is offloaded to the offload data set.

**No** Indicates that a notification message is not sent when a post-execution job is offloaded to the offload data set.

**Modification:** \$T OFF(n).SR operator command.

**OUTDisp=(disposition[,...disposition])**

Specifies the disposition(s) that the output must have in order to be eligible for processing by this offload receiver. The operator can specify one to four of the following valid dispositions:

**HOLD | H**

Hold the output. JES2 does not process the output until you either

## OFF(n).SR

change the disposition to WRITE or KEEP, or release the output. When the output is released, the disposition changes to WRITE.

### KEEP | K

Process the output, then keep a copy of it on spool. After processing, the disposition of this output becomes LEAVE.

### LEAVE | L

JES2 does not process the output until you change the disposition to WRITE or KEEP, or release the output. When the output is released, the disposition changes to KEEP.

### WRITE | W

Process the output then purge it. If there is a piece of output with an OUTDISP of WRITE, the offloader will select it.

See *z/OS JES2 Initialization and Tuning Guide* for more information about specifying output disposition and how JES2 determines output disposition defaults.

**Default:** The offload receiver will select on WRITE, HOLD, KEEP, and LEAVE.

**Modification:** \$T OFF(n).SR operator command

### PRMode=(vvvvvvvv[,vvvvvvvv...])

Specifies the processing mode for which output can be selected. Use commas to separate individual processing modes and enclose the list in parenthesis if more than one processing mode is specified. Wildcard specifications are allowed on this parameter.

If you allow this parameter to default, JES2 can select all output, regardless of its processing mode, for loading.

**Modification:** \$T OFF(n).SR operator command.

### Queue=c1[...cn]

Specifies the class(es) for which output can be selected. As many as 15 classes can be specified.

If you allow this parameter to default, JES2 can select all output, regardless of its class, for loading.

**Modification:** \$T OFF(n).SR operator command.

### RANGE={J|S|T} nnnnnn[-nnnnnn] |J1-2147483647

Specifies the range (1-2147483647) of IDs for jobs (J), started tasks (S), or TSUs (T) of those jobs that can be loaded from the offload data set. If you code this parameter, you can specify one or two values:

- If you specify one value, that value becomes both the low and the high end of the range.
- If you specify two values, the first value is the low end of the range and the second value the high end. The two values can be equal. If they are not equal, the second value must be larger than the first value.

**Modification:** \$T OFF(n).SR operator command.

### Routecde=rtcode

Specifies a destination for a piece of output. Its meaning depends on whether it is used as a subparameter of MOD= or not:

- If it is **not** used as a subparameter of MOD=, Routecde= means that output sent to the specified destination(s) can be selected.

- If `Routecde=` is used as a subparameter of the `MOD=` parameter, it specifies the destination(s) to which you want this output to go.

The maximum size of a route code is 18 characters. Use parentheses if more than one route code is specified. You can specify a route code in any of the forms listed. Note that a slash, a colon, or a matched set of parentheses can be used instead of a period anywhere a period appears as a separator in a route code. For example, you could specify `node.remote`, `node:remote`, `node/remote`, or `node(remote)` for an explicit route code. Wildcard specifications are allowed on this parameter for userids only.

```
node
NnnnnnRmmmmm
Ummmmm
destid
node.remote
node.user
node.Ummmmm
node.destid
remote
user
node.*
*
```

**Note:** If `destid` is used, it must be previously defined on a `DESTID` statement in the initialization stream. Explanations of the different forms of specifying route codes follow.

#### **LOCAL | ANYLOCAL**

Indicates routing to the local node.

#### **Nnnnnn**

Indicates routing to the node specified by its binary node identifier. The value specified for `nnnnn` can range from 1 to 32767.

#### **destid**

Indicates routing to the specified node(s). You can specify the name of a node, or an alias for the name of a node, for `destid`.

#### **nodename**

Indicates routing to the node specified by its EBCDIC node name.

#### **NnnnnnRmmmmm**

Indicates routing to the remote `Rmmmmm` at the node `Nnnnnn`. If the node is the local node, `Nnnnnn` may be omitted. Values specified for both `nnnnn` and `mmmmm` can range from 1 to 32767.

**Note:** `NnnnnnRmmmmm` is restricted to a maximum of eight characters. Therefore, the combined number of digits `nnnnn` plus `mmmmm` cannot exceed six. Valid combinations are `NnnnnnRmm`, `NnnnnRmmm`, `NnnRmmmmm`.

#### **Ummmmm**

Indicates special local routing. The special routing numbers range from 1 to 32767.

**destid**

Indicates routing to the specified node(s). If destid is specified alone, it refers to both the node and the remote.

**node.remote**

Indicates routing to a remote at the specified node.

**node.user**

Indicates routing to a user at the specified node.

**node.Ummmmm**

Indicates special local routing at the specified node. The special routing numbers range from 1 to 32767.

**node.destid**

Indicates a destination at the specified node. The destid refers to both the node and the remote. The node specified in the destid must be the same as the node portion of the route code.

**remote**

Indicates routing to a remote. Remote can be specified in any of the following ways:

**Rmmmmm**

Indicates routing to the specified remote. Rmmmmm can also be specified as RMmmmmm or RMTmmmmm. The value specified for mmmmm can range from 1 to 32767.

**destid**

Indicates routing to a destid referring to a remote.

**user**

Indicates routing to a specified userid.

If Routecde= is not used as a subparameter of MOD=, a generic userid can be specified. A generic userid is a userid that ends in an asterisk (\*), and refers to all userids that begin with any characters preceding the \*. Note that the \* can only be specified in the last position of the userid.

A userid at the local node must be in the form of a valid TSO/E userid. (It must begin with an alphabetic (A-Z) or a special character ( @ # or \$ ) and the remaining characters can be alphabetic, numeric, or special characters.) Userids at non-local nodes may contain any characters except separators (a period, a colon, a slash, or a set of parentheses), delimiters (a comma, or a blank), or an asterisk (\*).

**node.\***

If Routecde= is not used as a subparameter of MOD=, node.\* indicates that all output destined for the specified node is selected, regardless of the userid or remote specified. If Routecde= is used as a subparameter of MOD=, node.\* indicates that the node name is to be modified to the specified node name, but the remote node will remain the same.

- \* If Routecde= is not used as a subparameter of MOD=, \* indicates that all output specified for the local node is selected, regardless of the userid or remote specified. If Routecde is used as a subparameter of MOD=, \* indicates that the node number will be changed to the local node. However, the remote number originally specified will remain the same.

**Modification:** \$T OFF(n).SR operator command.



**START=Yes|No**

Specifies the initial status of this receiver when its corresponding offload device is started for a receive operation, that is when a \$S OFFLOAD(n),TYPE=RECEIVE command is issued.

**Yes**

Indicates that this receiver is started when a corresponding \$S OFFLOAD(n) command is issued.

**No** Indicates that this receiver is not started when a corresponding \$S OFFLOAD(n) command is issued. This receiver can later be started individually by issuing the \$S OFF(n).SR command and stopped, as required, by issuing the \$P OFF(n).SR command.

**Modification:** \$S OFF(n).SR operator command or \$T OFF(n).SR operator command.

**UCS|T=xxxx**

Specifies the 1- to 4-character print train (universal character set) for output to be dumped.

If you allow this parameter to default, JES2 can select all output, regardless of its UCS, for loading.

**Modification:** \$T OFF(n).SR operator command.

**Writer=xxxxxxxx**

Specifies the 1- to 8-character writer name for which output can be selected. Wildcard specifications are allowed on this parameter.

If you allow this parameter to default, JES2 can select all output, regardless of its writer, for loading.

**Modification:** \$T OFF(n).SR operator command.

**WS=(Queue,OUTDisp)**

Specifies the selection criteria for this device. If a criterion is specified in the work selection list, output selection is based on the corresponding parameter specification on this initialization statement. If the selection criterion is not listed here, the criterion is not considered during work selection.

**Note:**

1. A slash is not required in this work selection list; all specifications are required to match and are assumed to be listed before a slash. You can code a slash if criteria are listed before it or use WS=(/) to specify a null work selection list.
2. As with other work selection lists, priority for a criterion which specifies multiple values (as do Queue, PRMode, and Routecde) is in left to right priority order.

**Burst**

Specifies that the current burst specification is required.

**CREator**

Specifies that the creator is preferred.

**FCB|C**

Specifies that the current FCB specification is required. "C" can be used rather than FCB; however, its use is not recommended.

## OFF(n).SR

### **FLash|O**

Specifies that the current flash specification is preferred. "O" can be used rather than FL or FLASH; however, its use is not recommended.

### **Forms**

Specifies that the current forms specification is preferred.

### **Hold**

Specifies that the current hold specification is considered as a selection criterion.

### **JOBname**

Specifies that the current job name must match the job name specified for this device.

### **OUTDisp**

Specifies that the disposition of the output must match the disposition specified on the OUTDisp= parameter in order for the output to be selected by this SYSOUT receiver.

### **PRMode|PMD**

Specifies that the current data set processing mode must match.

### **Queue**

Specifies that the data set's output class must match one of the current output classes set for this device.

### **RANGE**

Specifies that the current job number must be within the range specified for this device.

### **Route code**

Specifies that the data set's route code must match one of the currently set route codes. If specified, an exact match is required and priority order is indicated from left to right.

### **UCS|T**

Specifies that the data set's UCS specification must match the UCS set for this device.

### **Writer**

Specifies that the writer name of the output data set must match the writer name currently set for this device.

**Note:** Embedded comments are not allowed within the WS= parameter specification.

**Modification:** \$T OFF(n).SR operator command.

## Examples for OFF(n).SR

**OUTDISP=WRITE, WS=(OUTD/), DISP=DELETE**

The offloader will select output with any OUTDISP and delete it after the offloader has completed.

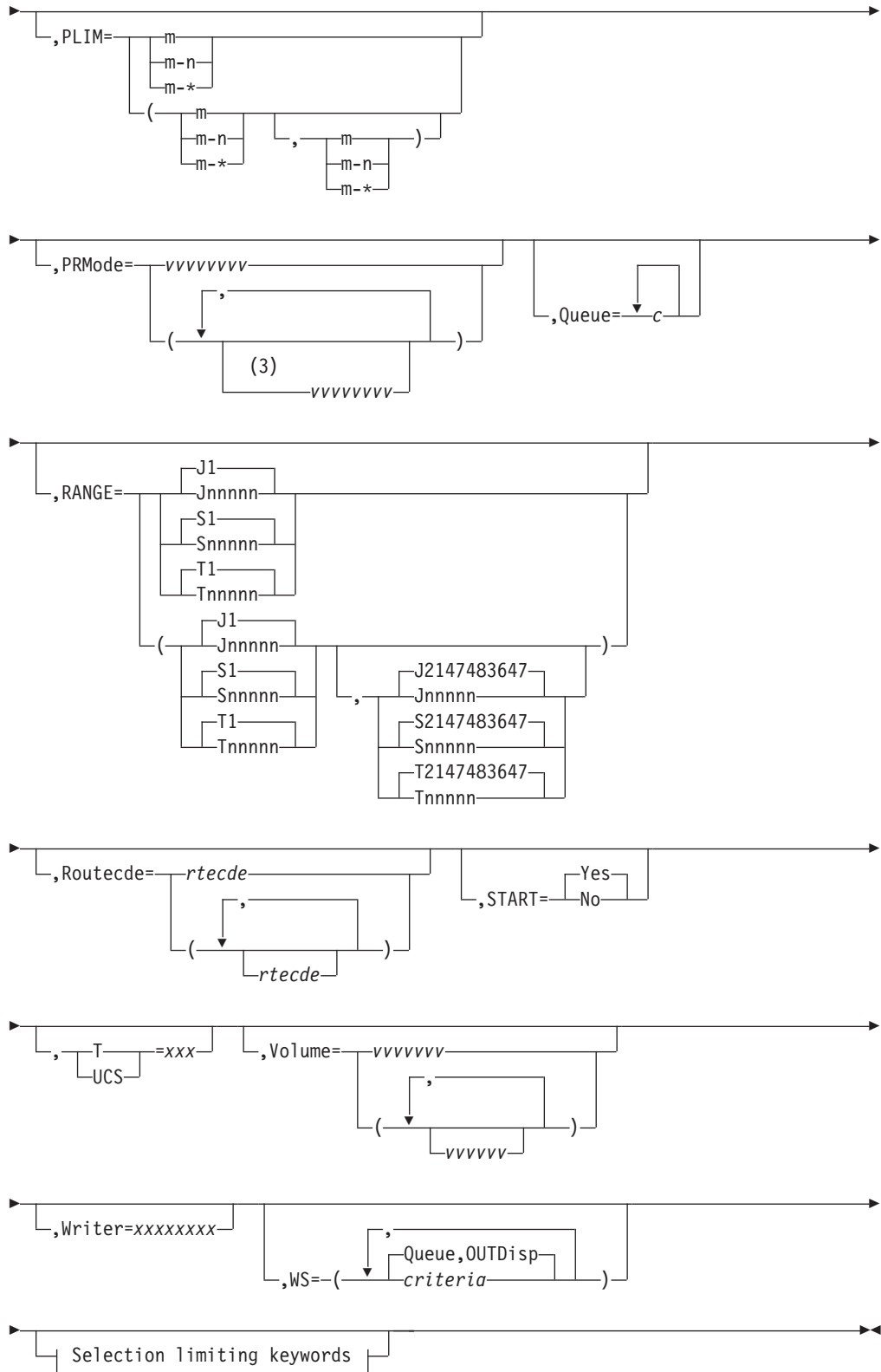
---

## OFF(n).ST - Offload SYSOUT Transmitter

The OFF(n).ST initialization statement describes the offload SYSOUT transmitter associated with an individual offload device. An offload SYSOUT transmitter is a logical device that controls the offloading of output to an offload data set.



# OFF(n).ST

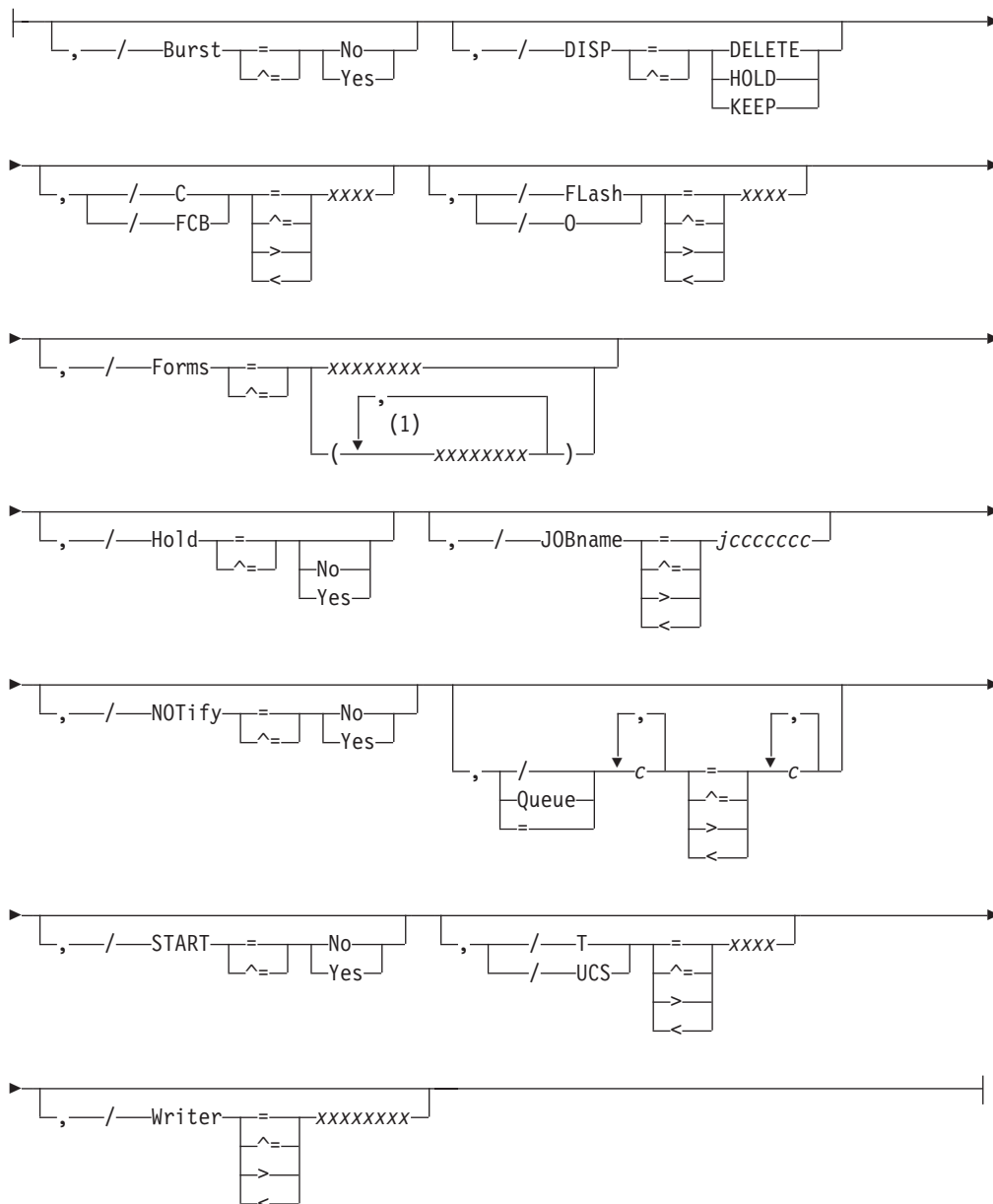


## Notes:

- 1 Form can be coded up to 8 times
- 2 OUTDisp can be coded up to 4 times

3 PRMode can be coded up to 8 times

**Selection limiting keywords:**



**Notes:**

1 form can be coded up to 8 times

**Parameter Description for OFF(n).ST**

**Burst=Yes|No**

Specifies the burst specification for which output is selected.

If you allow this parameter to default, JES2 can select all output, regardless of its burst specification, for transmission.

**Yes**

Indicates that the printed output is to be burst into separate sheets.

## OFF(n).ST

**No** Indicates that the printed output is not to be burst into separate sheets.

**Modification:** \$T OFF(n).ST operator command.

### **Creator=ccccccc**

Specifies the 1- to 8-character userid whose output is to be offloaded to the offload data set. Wildcard specifications are allowed on this parameter. If you allow this parameter to default, JES2 can select all output, regardless of its userid, for transmission.

**Modification:** \$T OFF(n).ST operator command.

### **DISP=KEEP|HOLD|DELETE**

Specifies the disposition of all output that is selected for offload to the offload data set as follows:

#### **KEEP**

Indicates that selected output will not change status after offloading to the offload data set.

#### **HOLD**

Indicates that selected held output remains held after offloading to the offload data set, or HOLD indicates that selected non-held output is marked as non-selectable after offloading to the offload data set. The operator must issue a \$T O command to release jobs specified here as "HOLD".

**Note:** Marking this output as non-selectable is not the same as putting a job in HOLD status.

#### **DELETE**

Indicates that the selected output groups are deleted after offloading to the offload data set.

**Modification:** \$T OFF(n).ST operator command.

### **FCB|C=xxxx**

Specifies the 1- to 4-character name forms control image buffer or carriage control tape.

If you allow this parameter to default, JES2 can select all output, regardless of its FCB, for transmission.

**Modification:** \$T OFF(n).ST operator command.

### **Flash|0=xxxx**

Specifies the 1- to 4-character name of a particular flash for which output is selected.

If you allow this parameter to default, JES2 can select all output, regardless of its flash specification, for transmission.

**Modification:** \$T OFF(n).ST operator command.

### **Forms=xxxxxxxx**

Specifies the 1- to 8-character forms specification for which output is selected. Wildcard specifications are allowed on this parameter.

If you allow this parameter to default, JES2 can select all output, regardless of its forms specification, for transmission.

**Modification:** \$T OFF(n).ST operator command.

**Hold=Yes|No**

Specifies whether SYSOUT for held jobs can be transmitted to the offload data set. Output for held jobs is output from jobs that the operator placed on hold using the \$H command.

If you allow this parameter to default and HOLD is not in the work selection list, JES2 can select all output, whether held or not, for transmission. If you allow this parameter to default and HOLD is in the work selection list, no output can be transmitted.

**Yes**

Specifies that output for held jobs can be transmitted to the offload data set.

**No** Specifies that output for held jobs cannot be transmitted to the offload data set.

**Modification:** \$T OFF(n).ST operator command.

**JOBname=jcccccc**

Specifies the 1-8 character job name of the job(s) to be offloaded to the offload data set. Wildcard specifications are allowed on this parameter.

If you allow this parameter to default, JES2 can select all output, regardless of its jobname, for transmission.

**Modification:** \$T OFF(n).ST operator command.

**LIMit=m|m-n|m-\***

Specifies the amount of output (in records) for which output can be selected.

For both variables *m* and *n*, you can specify a range of values 0-4294967295. *m* and *n* can be equal. If they are not equal, *n* must be larger than *m*.

If you code only *m*, that value becomes both the lower and upper limit. If *m-\** is specified, the upper limit is set to the default value of 4294967295.

**Default:** If you omit this parameter, JES2 uses the default values *m*=0 and *n*=4294967295.

**Modification:** \$T OFF(n).ST operator command.

**NOTify=Yes|No**

Specifies whether a notification message is sent to the userid specified on either the JOB statement or the /\*NOTIFY control statement.

**Yes**

Indicates that a notification message is sent when a post-execution job is offloaded to the offload data set.

**No** Indicates that a notification message is not sent when a post-execution job is offloaded to the offload data set.

**Modification:** \$T OFF(n).ST operator command.

**OUTDisp=(disposition[,...disposition])**

Specifies the disposition(s) that the output must have in order to be eligible for processing by this offload transmitter. The operator can specify one to four of the following valid dispositions:

**HOLD|H**

Hold the output. JES2 does not process the output until you either change the disposition to WRITE or KEEP, or release the output. When the output is released, the disposition changes to WRITE.

**Note:** This specification is honored when the output reaches the destination node.

**KEEP | K**

Process the output then keep a copy of it on spool. After processing, the disposition of this output becomes LEAVE.

**LEAVE | L**

JES2 does not process the output until you change the disposition to WRITE or KEEP, or release the output. When the output is released, When the output is released, the disposition changes to KEEP.

**WRITE | W**

Process the output then purge it. If there is a piece of output with an OUTDISP of WRITE, the offloader will select it.

See *z/OS JES2 Initialization and Tuning Guide* for more information about specifying output disposition and how JES2 determines output disposition defaults.

**Default:** Only output with dispositions WRITE and KEEP are selected by this offload transmitter if you do not specify values for OUTDisp=.

**Modification:** \$T OFF(n).ST operator command

**PLIM=m|m-n|m-\***

Specifies the amount of output (in pages) for which output can be selected.

For both variables *m* and *n*, you can specify a range of values from 0-4294967295. *m* and *n* can be equal. If they are not equal, *n* must be larger than *m*.

If you code only *m*, that value becomes both the lower and upper limit. If *m-\** is specified, the upper limit is set to the default value of 4294967295.

**Default:** If you omit this parameter, JES2 uses the default values *m*=0 and *n*=4294967295.

**Modification:** \$T OFF(n).ST operator command.

**PRMode=(vvvvvvvv[,vvvvvvv...])**

Specifies the processing mode for which output can be selected. Use commas to separate individual processing modes and enclose the list in parenthesis if more than one processing mode is specified. Wildcard specifications are allowed on this parameter.

If you allow this parameter to default, JES2 can select all output, regardless of the processing mode, for transmission.

**Modification:** \$T OFF(n).ST operator command.

**Queue=c1[...cn]**

Specifies the class(es) (A-Z, 0-9) for which output can be selected. A maximum of 15 classes can be specified on this parameter. If you need to exceed the limit of 15 classes, specify Queue=, (that is, null) and do not code Queue in the WS= list on this statement; this allows **all** defined classes to be transmitted.

**Modification:** \$T OFF(n).ST operator command.

**RANGE={J|S|T} nnnnnn[-nnnnn] | J1-999999**

Specifies the job ID range (J), started task range (S), or TSU range (T) of those jobs that can be loaded from the offload data set. Use the Jnnnnn form for job



routing, the Snnnnn form for STC routing, and the Tnnnnn form for TSU job routing. If you code this parameter, you can specify one or two values:

- If you specify one value, that value becomes both the low and the high end of the range.
- If you specify two values, the first value is the low end of the range and the second value the high end. The two values can be equal. If they are not equal, the second value must be larger than the first value.

**Modification:** \$T OFF(n).ST operator command.

#### **Route code=rtcode**

Specifies the one to four destination selection criteria for which output can be selected. If more than one route code is specified, enclose the list in parentheses.

The maximum size of a route code is 18 characters. Wildcard specifications are allowed on this parameter for userids only. You can specify a route code in any of the forms listed below. Note that a slash, a colon, or a matched set of parentheses can be used instead of a period anywhere a period appears as a separator in a route code. For example, you could specify node.remote, node:remote, node/remote, or node(remote) for a route code.

```
node
NnnnnnRmmmmm
Ummmmm
destid
node.remote
node.user
node.Ummmmm
node.destid
remote
user
node.*
*
```

**Note:** If destid is used, it must be previously defined on a DESTID statement in the initialization stream. Explanations of the different forms of specifying route codes follow:

#### **LOCAL | ANYLOCAL**

Indicates that output routed to the local node is selected.

#### **Nnnnnn**

Indicates that output routed to the node specified by its binary node identifier is selected. The value specified for nnnnnn can range from 1 to 32767.

#### **destid**

Indicates that output routed to the specified node(s) is selected. You can specify the name of a node, or an alias for the name of a node, for destid.

#### **nodename**

Indicates that output routed to the node specified by its EBCDIC node name is selected.

#### **NnnnnnRmmmmm**

Indicates that output routed to the remote Rmmmmm at the node Nnnnnn

is selected. If the node is the local node, Nnnnnn may be omitted. Values specified for both nnnnn and mmmmm can range from 1 to 32767.

**Note:** NnnnnRmmmm is restricted to a maximum of eight characters. Therefore, the combined number of digits *nnnnn* plus *mmmm* cannot exceed six. Valid combinations are NnnnnRmm, NnnRmmm, NnnRmmmm.

**Ummmm**

Indicates that output for special local routing is selected. The special routing numbers range from 1 to 32767.

**destid**

Indicates that output routed to the specified node(s) is selected. If destid is specified alone, it refers to both the node and the remote.

**node.remote**

Indicates that output routed to a remote at the specified node is selected.

**node.user**

Indicates that output routed to a user at the specified node is selected.

**node.Ummmm**

Indicates that output for special local routing at the specified node is selected. The special routing numbers range from 1 to 32767.

**node.destid**

Indicates that output to be routed to a destination at the specified node is selected. The destid refers to both the node and the remote. The node specified in the destid must be the same as the node portion of the route code.

**remote**

Indicates that output routed to a remote is selected. Remote can be specified in any of the following ways:

**Rmmmm**

Indicates that output routed to the specified remote is selected. Rmmmm can also be specified as RMmmmm or RMTmmmm. The value specified for mmmmm can range from 1 to 32767.

**destid**

Indicates that output routed to a destid referring to a remote is selected.

**user**

Indicates that output routed to a userid, or a generic userid, is selected. A generic userid is a userid that ends in an asterisk (\*), and refers to all userids that begin with any characters preceding the \*. Note that the \* can only be specified in the last position of the userid.

A userid at the local node must be in the form of a valid TSO/E userid. (It must begin with an alphabetic (A-Z) or a special character ( @ # \$ ), and the remaining characters may be alphabetic, numeric, or special characters.) Userids at non-local nodes may contain any characters except separators (a period, a colon, a slash, or a set of parentheses), delimiters (a comma, or a blank), or an asterisk (\*).

**node.\***

Indicates that all output destined for the specified node is selected, regardless of the userid or remote specified.

- \* Indicates that all output specified for the local node is selected, regardless of the userid or remote specified.

If you allow this parameter to default, JES2 can select all output, regardless of the route code, for transmission.

**Modification:** \$T OFF(n).ST operator command.

#### **START=Yes|No**

Specifies the initial status of this transmitter when its corresponding offload device is started for a transmit operation, that is when a \$S OFFLOAD(n),TYPE=TRANSMIT command is issued.

##### **Yes**

Indicates that this transmitter is started when a corresponding \$S OFFLOAD(n) command is issued.

- No** Indicates that this transmitter is not started when a corresponding \$S OFFLOAD(n) command is issued. This transmitter can later be started individually by issuing the \$S OFF(n).ST command and stopped, as required by issuing the \$P OFF(n).ST command.

**Modification:** \$S OFF(n).ST operator command or \$T OFF(n).ST operator command.

#### **UCS|T=xxxx**

Specifies the 1- to 4-character print train (universal character set) for output to be transmitted.

If you allow this parameter to default, JES2 can select all output, regardless of its UCS, for transmission.

**Modification:** \$T OFF(n).ST operator command.

#### **Volume=(v1[,v2][,v3][,v4])|()**

Specifies the 5- or 6-character volume serial of a volume containing a spool data set. Only jobs using tracks on this volume(s) can be selected for dumping. As many as four volumes can be specified. Use commas to separate individual volume IDs and enclose the list in parenthesis if more than one ID is specified.

**Modification:** \$T OFF(n).ST operator command.

#### **Writer=xxxxxxxx**

Specifies the 1- to 8-character writer name for which output can be selected. Wildcard specifications are allowed on this parameter.

If you allow this parameter to default, JES2 can select all output, regardless of the writer, for transmission.

**Modification:** \$T OFF(n).ST operator command.

#### **WS= (Queue,OUTDisp)**

Specifies the selection criteria for this device. If a criterion is specified in the work selection list, output selection is based on the corresponding parameter specification on this initialization statement. If the criterion is not listed here, the criterion is not considered during work selection.

A slash can be used within the work selection list to further specify work selection. The use of a slash has the following general meaning: 1) those criterion listing several specifications is prioritized in a left to right priority order when placed to the left of the slash; 2) the placement of a criterion to the left of the slash indicates a required exact match of work selection and job criteria; and 3) placement of a criterion to the right of the slash indicates a

preferred (but not required match) of work selection and job criteria. Exceptions to these rules are noted in the following descriptions.

**Note:** Embedded comments are not allowed within the WS= parameter specification.

**Burst**

Specifies that the current burst specification is preferred. If specified to the left of the slash, an exact match is required.

**Creator**

Specifies that the creator is preferred. If specified to the left of the slash, an exact match is required.

**FCB|C**

Specifies that the current FCB specification is preferred. If specified to the left of the slash, an exact match is required.

**Flash|0**

Specifies that the current flash specification is preferred. If specified to the left of the slash, an exact match is required.

**Forms**

Specifies that the current forms specification is preferred. If specified to the left of the slash, an exact match is required.

**Hold**

Specifies that the current hold specification is preferred. If specified to the left of the slash, an exact match is required.

**JOBname**

Specifies that the current job name is preferred. If specified to the left of the slash, an exact match is required.

**LIMit**

Specifies that the current output quantity limit is preferred. If specified to the left of the slash, output to be transmitted must fall within the specified range.

This subparameter has no effect as a work selection value for files received from a node that does not provide a page count for its files. For more information, see the sending node's reference documentation.

**OUTDisp**

Specifies that the disposition of the output must match the disposition specified on the OUTDisp= parameter in order for the output to be selected by this SYSOUT transmitter.

**Priority**

Specifies that JOE priority is considered. The higher the priority value, the higher priority this criterion receives. The priority specification receives greater importance relative to its left to right placement in the criteria string.

The offload SYSOUT transmitter uses priority to select the best output group. Then, all output groups in the same job that meet the required selection criteria are offloaded together, regardless of priority. Priority is not used to order JOEs within a job on the offload data set.

**PRMode|PMD**

Specifies that one of the current process modes must match. If specified to the left of the slash, an exact match is required and priority order is

indicated from left to right. If specified to the right of the slash, an exact match is still required; however, no priority order is indicated.

**Queue**

Specifies that the current class specification must match. If specified to the left of the slash, an exact match is required and priority order is indicated from left to right. If specified to the right of the slash, an exact match is still required; however, no priority order is indicated.

**RANGE**

Specifies that the current job range is preferred. If specified to the left of the slash, the current job number must be within the range specified for this device.

**Route code**

Specifies that one of the current route codes must match. If specified to the left of the slash, an exact match is required and priority order is indicated from left to right. If specified to the right of the slash, an exact match is still required; however, no priority order is indicated.

**UCS|T**

Specifies that the current universal character set is preferred. If specified to the left of the slash, an exact match is required.

**Volume**

Specifies that one of the currently specified volumes must match. If specified to the left of the slash, an exact match is required and priority order is indicated from left to right. If specified to the right of the slash, an exact match is still required; however, no priority order is indicated.

**Writer**

Specifies that the current writer name is preferred. If specified to the left of the slash, an exact match is required.

**Modification:** \$T OFF(n).ST operator command.

## Examples for OFF(n).ST

**OUTDISP=WRITE, WS=(OUTD/), DISP=DELETE**

The offloader will select output with any OUTDISP and delete it after the offloader has completed.

---

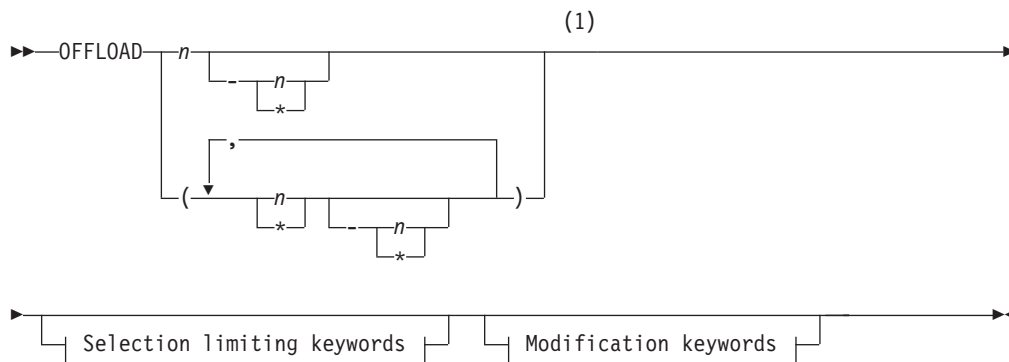
## OFFLOAD(n) - Offload Device

The OFFLOAD(n) initialization statement defines the logical offload device used for both offloading (transmitting) and reloading (receiving) operations. This statement defines the offload data set to which pre-execution jobs and SYSOUT data sets are offloaded and from which these jobs and SYSOUT are reloaded.

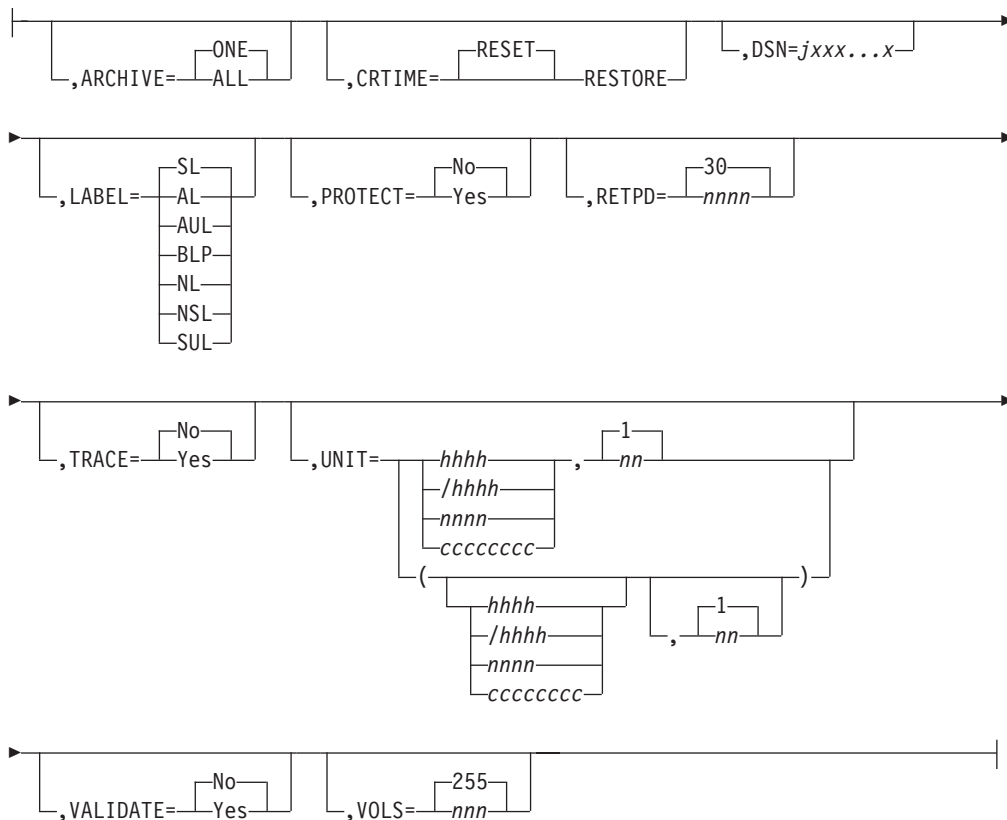
Specifying n from 1 to 8 associates this offload data set with the specific offload job transmitter (OFF(n).JT), SYSOUT transmitter (OFF(n).ST), job receiver (OFF(n).JR), and SYSOUT receiver (OFF(n).SR). Offload devices are initialized at the multi-access spool member level; therefore, if one member has started a specific offload device, it cannot be started by another member while in use by any other member.

# OFFLOAD(n)

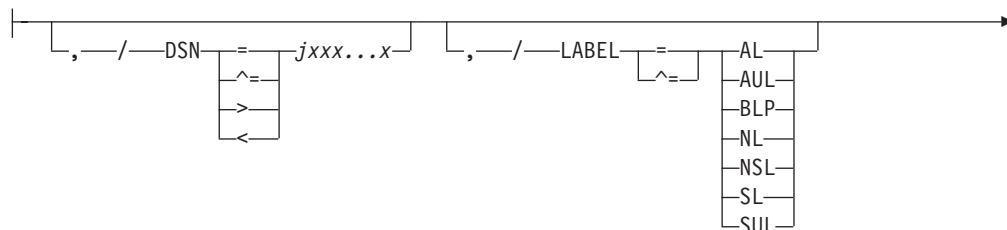
## Format Description for OFFLOAD(n)

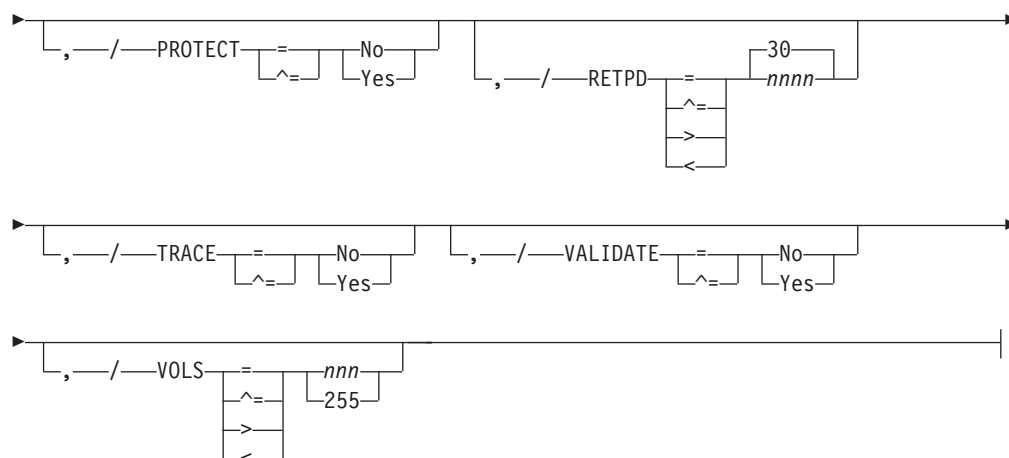


### Modification keywords:



### Selection limiting keywords:



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter Description for OFFLOAD(n)****ARCHIVE=ONE | ALL**

Specifies which offload devices JES2 prevents from reselecting jobs for offload that have a disposition of DISP=KEEP or DISP=HOLD.

**ONE**

JES2 prevents a specific offload device from reselecting a job with DISP=KEEP or DISP=HOLD when it was offloaded by that device.

**ALL**

JES2 prevents **all** offload devices from reselecting a job with DISP=KEEP or DISP=HOLD when it is offloaded by any device.

**Modification:** \$T OFFLOAD(n) operator command (if the device is drained).

**CRTIME**

Specifies the creation time to be associated with jobs and output on reload:

**RESET**

Indicates that the time to be assigned is the time of the reload

**RESTORE**

Indicates that the time to be assigned is the original creation time (before the data was offloaded).

**Modification:** \$TOFFLOAD(n) operator command.

**DSName=jxxx...x**

Specifies the offload data set used to define this offload device. The data set name can be 1- to 44-alphanumeric characters. A period (.) or a hyphen (-) can be included for any character except the first. This parameter does not support the use of a generation data set (GDG) or a partitioned data set (PDS). See "Spool Offload Facility" in *z/OS JES2 Initialization and Tuning Guide* for more information concerning offload data set allocation.

**Modification:** \$T OFFLOAD(n) operator command (if the device is drained).

**LABEL=NL|SL|NSL|SUL|BLP|AL|AUL**

Specifies the type of label processing that is required for the tape that is to be allocated for a non-cataloged spool offload data set.

## OFFLOAD(n)

Type	Meaning
------	---------

NL	No label
----	----------

SL	IBM standard label
----	--------------------

NSL	Non-standard label
-----	--------------------

SUL	IBM standard label and user-defined label
-----	---

BLP	Bypass label processing
-----	-------------------------

AL	American National Standard label
----	----------------------------------

AUL	American National Standard label and American National Standard user-defined label
-----	--

**Modification:** \$T OFFLOAD(n) operator command (if the device is drained).

**PROTECT=Yes|No**

Specified whether the spool offload data set requires System Authorization Facility (SAF) protection.

**Modification:** \$T OFFLOAD(n) operator command (if the device is drained).

**RETPD=nnnn | 30**

Specifies the retention period (0-9999), in days, this offload data set is to be retained.

**Modification:** \$T OFFLOAD(n) operator command (if the device is drained).

**TRACE=Yes|No**

Specifies whether or not trace records are to be cut for data read or written by this offload device. See specific trace ids for more information.

**Modification:** \$T OFFLOAD(n) operator command.

**UNIT=({hhhh | /hhhh | nnnn | ccccccc},nn | 1)**

**hhhh | /hhhh**

Specifies a 3- or 4-digit hexadecimal device number. Device numbers can be specified by any of the following formats:

UNIT=hhh

UNIT=/hhh

UNIT=/hhhh

where hhh and hhhh represent the device numbers. A slash (/) must precede a 4-digit device number.

**nnnn**

Specifies a device type.

**ccccccc**

Specifies a 1- to 8-character group name assigned to the device or group of devices that are to be used to receive non-cataloged spool offload data sets.

**nn** Specifies the number (1-59) of devices, that are allocated to mount the volumes containing the offload data set. If you do not specify a second value, JES2 allocates 1 device.

**Note:** If enough devices are not available to satisfy the value specified here, the allocation will fail.

Generally, the medium used for spool offload is tape; however, the assigned unit can be a DASD device. If a DASD device is specified, and the data set



specified does not exist, then the size of the data set is determined from your installation's default as specified on the SPACE parameter in the ALLOCxx parmlib member. However, the default size will likely be too small for an offload data set. Therefore, when using DASD as your spool offload media, IBM suggests that the data set be pre-allocated with a space parameter value large enough to hold the data being offloaded. If the data set becomes full, the spool offload subtask will abnormally end.

UNIT= is only honored on an OFFLOADn TYPE=TRANSMIT operation. Therefore, if you do not specify UNIT=, the offload data set must be pre-cataloged if JES2 is to dynamically allocate a new data set. If the data set is not pre-cataloged and UNIT= is not specified, no data set is allocated.

For an OFFLOAD TYPE=RECEIVE operation, JES2 requires that the data set be pre-cataloged regardless of the UNIT= specification because the catalog information overrides the UNIT= specification.

**Modification:** \$T OFFLOAD(n) operator command (if the device is drained).

The second value, nn, specifies the number (1-59) of devices that will be allocated to the offload data set.

#### VALIDATE=Yes|No

Specifies the action JES2 takes if it determines that the first record of the offload data set is not LRECL=80.

##### Yes

JES2 drains the offload device and issues \$HASP595 OFFLOADn ERROR READING FIRST RECORD - DRAINING OFFLOAD DEVICE.

**No** JES2 continues to read from the offload data set, but skips to the next job header. JES2 then issues \$HASP595 OFFLOADn ERROR READING FIRST RECORD - SKIPPING FOR JOB HEADER. The offload device continues to read from the offload data set and passes the records to the appropriate receiver(s). However, the receiver(s) discards all records until it encounters a job header at which time it continues to process jobs normally.

**Modification:** \$T OFFLOAD operator command (if the device is drained).

#### VOLS=nn|255

Specifies the volume count (1-255) to be used for the spool offload data set.

**Note:** If your spool offload data set is to be a system-managed DASD data set, specify a VOLS= value no greater than 59.

**Modification:** \$T OFFLOAD operator command (if the device is drained).

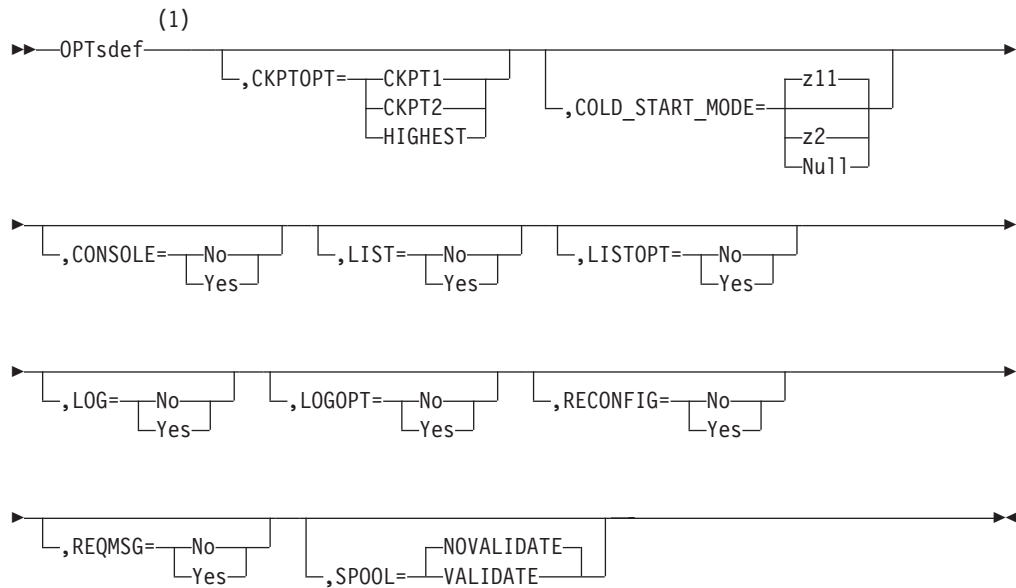
---

## OPTsdef - Start Options Processing Definitions

Use the OPTsdef statement to display or override various JES2 start options. **Most of these options can only be overridden when the JES2 initialization process is in CONSOLE mode.** The default values for each option are taken from the value specified when JES2 is started (MVS START command or JES cataloged procedure EXEC statement). See *z/OS JES2 Initialization and Tuning Guide* for the default that JES2 uses if the option is not specified when JES2 is started or on the OPTsdef statement.

**Note:** Only the LIST, LOG, and SPOOL parameters can be specified in the initialization deck.

## Format Description for OPTsdef



### Notes:

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for OPTsdef

### CKPTOPT=CKPT1|CKPT2|HIGHEST

Specifies which checkpoint data set JES2 reads as the source for building the JES2 work queues during a restart. CKPT1 and CKPT2 refer to the CKPT1= and CKPT2= parameters on the CKPTDEF initialization statement, respectively. HIGHEST indicates that you will allow JES2 to read the checkpoint data based on the level tokens associated with the checkpoint data sets. (See the CKPTDEF statement in this chapter and *z/OS JES2 Initialization and Tuning Guide* for further discussion on selecting an appropriate checkpoint data set.)

**Note:** The method used by JES2 to determine the highest data set to read from, is not foolproof. If you are in a recovery scenario and know that one of the checkpoint data sets does NOT have the current checkpoint information, then you should specify the CKPTn option that reads from the data set that does contain current checkpoint information.

**Modification:** Hot start.

### COLD\_START\_MODE = z2 | z11 | Nu11

Specifies the checkpoint mode (\$ACTIVATE LEVEL) for JES2 to use for COLD starts. By default, JES2 does COLD starts in z11 mode. To set JES2 COLD starts to z2 mode, specify COLD\_START\_MODE=Z2.

Set this parameter in your initialization deck to ensure that any unplanned COLD starts are done in the intended mode.

If this parameter is specified, initialization issues the following warning messages if JES2 is warm started with a COLD\_START\_MODE that does not match the mode of the read checkpoint:

\$HASP442 INITIALIZATION STATEMENTS CONFLICTING WITH SAVED VALUES FOLLOW:  
 \$HASP496 OPTSDEF COLD\_START\_MODE=Z11 SAVED VALUE OF Z2 WILL BE USED

If COLD\_START\_MODE is not specified, no warning message is issued.

**Note:** The JES2 start parameter UNACT overrides the COLD\_START\_MODE parameter and causes JES2 to start in z2 mode.

**Modification:** Hot start.

#### **CONSOLE=Yes|No**

Displays (or changes) the value of the CONSOLE start option. If set to YES, the operator will be prompted for additional initialization statements after the initialization deck is processed. See the *z/OS JES2 Initialization and Tuning Guide* for further information on the interaction of this initialization statement and the CONSOLE initialization control statement.

**Modification:** Hot start.

#### **LIST=Yes|No**

Specifies whether or not to copy subsequent initialization statements to the HASPLIST DD statement.

**Modification:** Hot start.

#### **LISTOPT=Yes|No**

Displays (or changes) the value of the LISTOPT start option. If YES, the initialization statements are printed if a device is specified.

**Modification:** Hot start.

#### **LOG=Yes|No**

Specifies whether or not to copy subsequent initialization statements to the printer specified by the HARDCPY console.

**Modification:** Hot start.

#### **LOGOPT=Yes|No**

Displays (or changes) the value of the LOGOPT start option. If Yes, the initialization statements are logged if a device is specified.

**Modification:** Hot start.

#### **RECONFIG=Yes|No**

Displays (or changes) the value of the RECONFIG start option. If Yes, the operator can specify RECONFIG to cause JES2 to use the checkpoint data set definitions as defined in the initialization data set, thereby overriding any/all previous checkpoint data set forwarding. (See *z/OS JES2 Initialization and Tuning Guide* for a full discussion of checkpoint data set forwarding and reconfiguration.)

**Modification:** Hot start.

**Note:** This parameter **must never** be specified in the PARMLIB member.

#### **REQMSG=Yes|No**

Displays (or changes) the value of the REQ|NOREQ start option. If Yes, the \$HASP400 ENTER REQUESTS message is displayed, prompting the operator for the \$\$ command.

**Modification:** Hot start.

#### **SPOOL=VALIDATE|NOVALIDATE**

Specifies whether or not JES2 validates the track group map. VALIDATE will

recover potentially lost track groups. NOVALIDATE is faster but will not recover any track groups that are potentially lost.

**Note:** On an all-member warm start, you can use this parameter or the SPOOL=VALIDATE start option to request that JES2 validate the track group map. This is typically not needed unless you receive indications from JES2 such as the following:

- Persistent JES2 disastrous errors (\$HASP095, error code \$DIS)
- LOGREC symptom records that point to track group allocation or purge problems.

Not all symptom records warrant your use of SPOOL=VALIDATE. Some of the symptom records are considered informational only. See *z/OS JES2 Diagnosis* for a list of the symptom records and an indication of their severity.

Immediate spool validation can then be useful as an immediate validation of the track group map in conjunction with ongoing track group validation cycle wherein all track groups are validated once every 7 days.

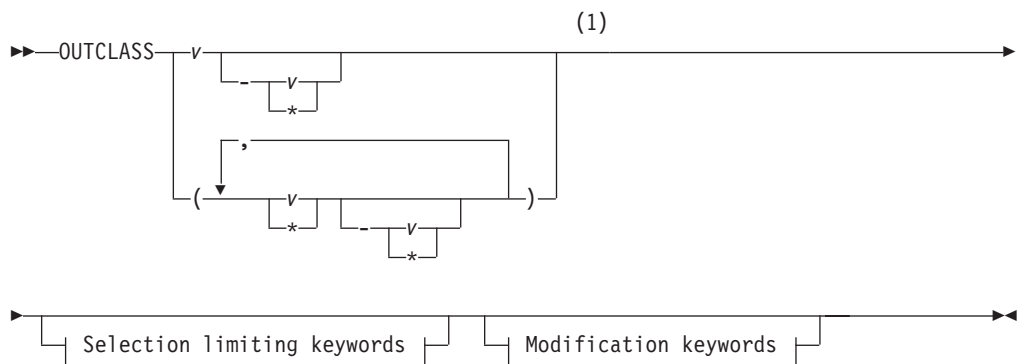
**Modification:** All-member warm start.

## OUTCLASS(v) - SYSOUT Class Characteristics

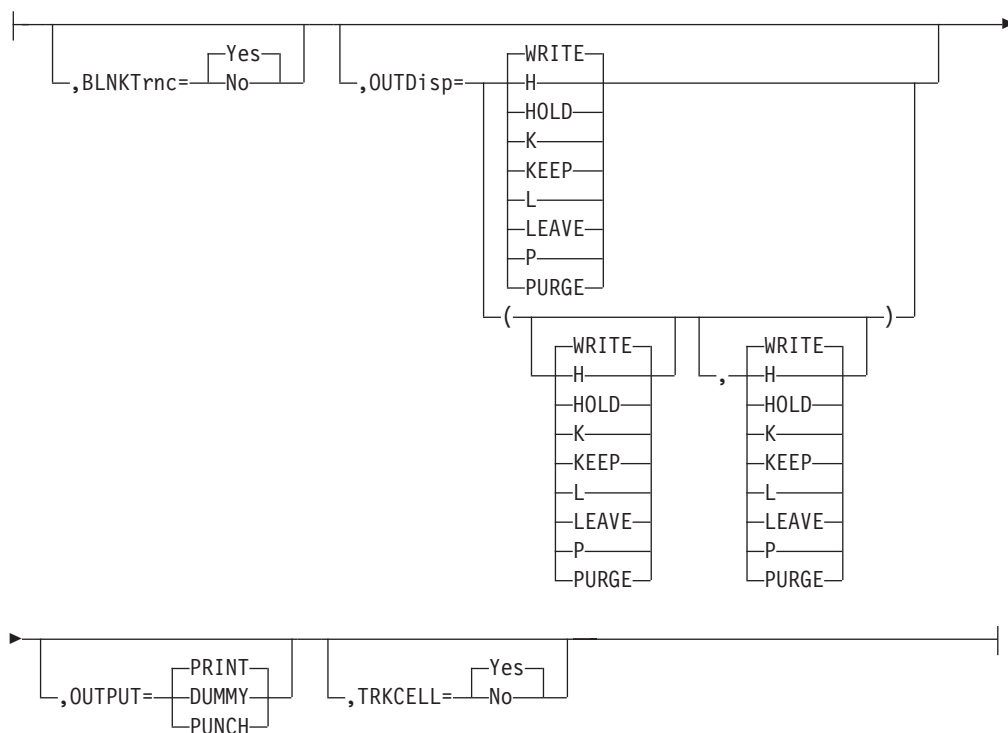
The OUTCLASS(v) statement specifies the SYSOUT class characteristics for a specific output class (v), a range of output classes (v-vn), or a generic range (v-\*) of output classes. Valid class specifications are A-Z and 0-9.

**Note:** If you modify OUTCLASS(v) parameter values and then restart JES2 with a hot start, the parameter values in effect before termination will be used.

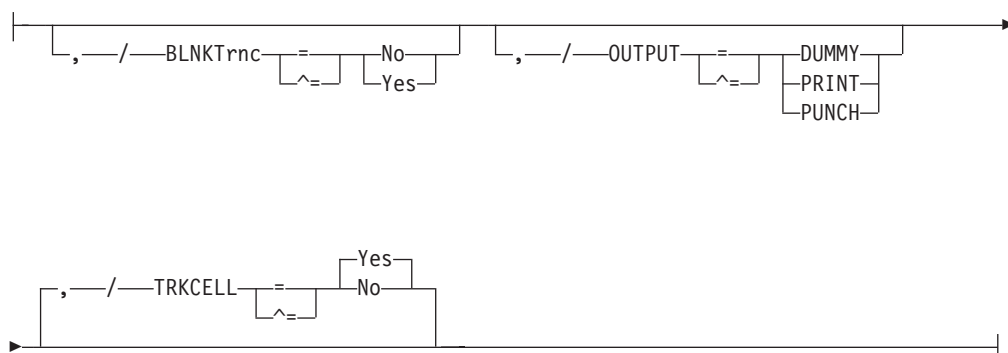
### Format Description for OUTCLASS(v)



**Modification keywords:**



**Selection limiting keywords:**



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter Description for OUTCLASS(v)**

**BLNKTRNC=Yes|No**

Specifies whether (Yes) or not (No) JES2 truncates trailing blanks for non-page-mode data sets in this output class. Specifying `BLNKTRNC=Yes` for all non-page-mode data sets provides a significant saving in spool volume space. Non-page-mode data sets include line-mode data printed on PSF printers. If you specify this parameter for composed-text page data sets (for example, output created by the Document Composition Facility), it has no effect. Note that the `PRMODE=` parameter, on both the JCL and JES2 output device initialization statements, does not affect blank truncation.

Specify `BLNKTRNC=No` for:

- Data sets that require right-hand blank padding to print properly.
- Data sets containing double-byte font characters.
- Output JES2 writes to JES2 spool. (JES2 will still truncate trailing blanks in RJE data transmissions.)

**Performance Considerations:** Specify BLNKTRNC=Yes (or permit this parameter to default) for all non-page-mode data sets to provide a significant saving in spool volume space.

**Modification:** Single-member warm start.

**OUTDISP=([normal][,abnormal])|(WRITE,WRITE)**

Specifies the default output disposition for the SYSOUT data sets in this class, depending on the successful completion of the job.

**normal**

Specifies the output disposition if the job does not abend.

**abnormal**

Specifies the output disposition if the job abends.

Valid output dispositions are:

**HOLD**

Hold the output. JES2 does not process the output until you either change the disposition to WRITE or KEEP, or release the output. When the output is released, the disposition changes to WRITE.

**Note:** This specification is honored when the output reaches the destination node.

**KEEP** Process the output then keep a copy of it on spool. After processing, the disposition of this output becomes LEAVE.

**LEAVE**

JES2 does not process the output until you change the disposition to WRITE or KEEP, or release the output. When the output is released, the disposition changes to KEEP.

**PURGE**

Purge the output immediately.

**WRITE**

Process the output then purge it.

See *z/OS JES2 Initialization and Tuning Guide* for more information about specifying output disposition and how JES2 determines output disposition defaults.

**Modification:** Operator command. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.

**OUTPUT=PUNCH|PRINT|DUMMY**

Any class may be specified for either print or punch. This parameter defines the installation's standard for output classes so that appropriate print and punch accounting can be maintained. PUNCH specifies that this output class normally is to be punched. DUMMY specifies that JES2 is to process this output class as a dummy data set (the class will still be allocated spool space but will be marked nonprintable to JES2).

If you do not specify this parameter, JES2 specifies that this output class normally is printed. For classes B and K, however, JES2 specifies that this output class normally is punched.

**Modification:** Single-member warm start.

**Note:** Users of the TSO/E Interactive Data Transmission Facility should not use the parameter default of PRINT, rather these users should set the parameter to PUNCH in order that incoming files are correctly recognized.

**TRKCELL=Yes|No**

TRKCELL=Yes specifies that physical records of each data set of this SYSOUT class are to be specially grouped on the spool volume(s), and are to be read from the spool volume in blocks. (See the TRKCELL= parameter on the SPOOLDEF statement for additional information.)

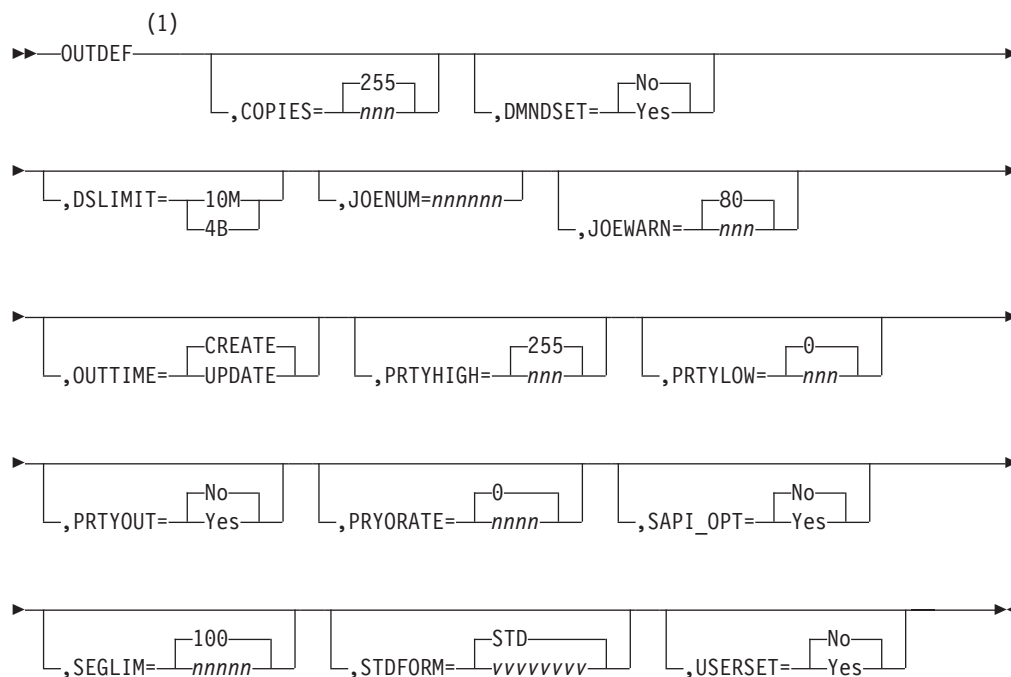
**Performance Considerations:** Specify track celling (TRKCELL=Yes) for all SYSOUT classes processed by 3800 printers to increase device performance.

**Modification:** Single-member warm start.

## OUTDEF - Job Output Definition

The OUTDEF statement defines the job output characteristics of the JES2 member.

### Format Description for OUTDEF



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for OUTDEF

**Note:** The BRODCAST parameter is obsolete. JES2 OUTDEF processing always processes as if BRODCAST=YES is in effect.

### **COPIES=nnn|255**

Specifies the maximum number (1-255) of job output copies that can be requested in the accounting field of your JOB statement or on a /\*JOBPARM control statement. If the number of copies requested is greater than the value of COPIES, the request is reduced to the value of COPIES. No error message is produced. The setting of this parameter does not affect requests for multiple copies of data sets through the JCL OUTPUT or DD statements or /\*OUTPUT control statement.

**Modification:** \$T OUTDEF operator command.

### **DMNDSET=Yes|No**

Specifies whether inline printer setup will be allowed for data sets whose SYSOUT class matches the job message class.

If DMNDSET=Yes, all SYSOUT data sets that are not specified for special processing in any other way (for example, HOLD) and whose class matches the message class, will be printed on one printer with appropriate setup messages to the operator as the data sets are printed.

If DMNDSET=No is specified or if the SYSOUT class does not match the message class, separate class work queues will be created for each unique setup required. Thus, data sets can be printed simultaneously on all printers available, or deferred until a printer is set up to process all work for the separate class.

See the USERSET= parameter on this statement and *z/OS JES2 Initialization and Tuning Guide* for a discussion of the interrelationship of these two parameters.

**Modification:** Single-member warm start.

### **DSLIMIT=10M|4B**

The SPOOL data set limit of 10M specifies that any job is limited to 10 Million (9999999) SPOOL data sets for the entire lifetime of the job. After this limit is reached, attempts to create additional SPOOL data sets will fail. Specifying DSLIMIT=4B allows jobs to create additional SPOOL data sets—up to 4 Billion (4294967296) data sets.

**Note:** The DSLIMIT setting does not have any effect on the first 10M (9,999,999) SPOOL data sets that are created by a job.

**Modification:** \$T OUTDEF operator command.

### **JOENUM=nnnnnn**

Specifies the number (must be no greater than 1000000) of job output elements (JOEs) to be generated. JOEs are required for unique combinations of:

- SYSOUT class, setup characteristics, process mode, and other output criteria that appear in a job that is queued for output whether the SYSOUT is in held status or ready to be printed.
- Forms ID, UCS ID, and FCB ID, and groupid for all jobs currently queued for output.

When determining the number of JOEs, remember that multiple JOEs can be concurrently active for the 3800 printer's output, and that a JOE is not freed until the 3800 stacks its associated output.



**Note:** Use this parameter to increase the limit for the JNUM resource that is reported on the HASP050 message.

**Performance Considerations:** If the value specified for JOENUM= is too small, jobs will wait a considerable time for printing. Although a value as small as 10 will be accepted; a value smaller than the default degrades throughput. (JES2 calculates the default as the JOBNUM= parameter value on the JOBDEF initialization statement times 2.5.) If the value is too large, the processor time and the number of page faults needed to search the elements increases. The default value should keep printers and punches busy without tying up too much virtual storage. As a rough approximation, you can determine the starting value of JOEs per job as twice the number of output classes per job. (For further discussion of the factors affecting the number of job output elements, see *z/OS JES2 Initialization and Tuning Guide*.)

If you use the \$T OUTDEF command to increase JOENUM=, only do so when you can allow your system to experience temporary performance degradation while all JES2 systems read the checkpoint data set.

**Modification:** \$T OUTDEF operator command to increase or decrease the number of JOEs.

#### JOEWARN=nnn|80

Specifies the percentage (1–99) of use of job output elements at which the operator will be alerted through message \$HASP050. If you specify 0, no alert will be given.

**Modification:** \$T OUTDEF operator command. Note that this parameter cannot be modified through a hot start, quick start or single-member warm start.

#### OUTTIME=CREATE|UPDATE

Specifies whether JES2 will save the timestamp that indicates the creation time of an output's JOE, or whether it will instead save the time when the JOE was last updated. You can use a \$O command to change the disposition of all output based on the time elapsed between the current time and the JOE time. Changing held output's disposition based on its age releases spool space and job queue elements (JQEs) occupied by output that is no longer needed. For more information on the \$O command, see *z/OS JES2 Commands*.

##### CREATE

JES2 fills in the JOE time only when the job creates the output.

##### UPDATE

JES2 updates the JOE time every time the JOE is updated.

**Modification:** \$T OUTDEF operator command.

#### PRTYHIGH=nnn|255

Specifies the upper priority limit (0-255) to be associated with the JES2 job priority aging feature. A job's output will not be priority-aged if its priority is (or becomes) greater than or equal to the value specified in this parameter. If the job is on the \$HARDCPY queue, the job queue element is not aged; only the job output element is aged.

**Modification:** \$T OUTDEF operator command. Note that this parameter cannot be modified through a hot start, quick start or single-member warm start.

#### PRTYLOW=nnn|0

Specifies the lower priority limit (0-255) to be associated with the JES2 job

## OUTDEF

priority-aging feature. A job's output will not be priority-aged unless its priority is initially equal to or greater than this value. If the job is on the \$HARDCPY queue, the job queue element is not aged; only the job output element is aged. (See the PRYORATE= parameter; the PRYORATE= specification controls the priority aging rate of jobs scheduled for execution and output.)

**Modification:** \$T OUTDEF operator command. Note that this parameter cannot be modified through a hot start, quick start or single-member warm start.

### **PRTYOUT=Yes|No**

Specifies whether the priority specification (PRTY= keyword) on the JCL OUTPUT statement is supported (Yes) or ignored (No).

**Modification:** \$T OUTDEF operator command.

### **PRYORATE=nnnn|0**

Specifies the number (0-1440) of time periods into which a 24-hour day is to be divided for use in increasing a job's output priority by the JES2 output priority-aging feature.

For example, if 3 is specified, a job's output priority will be increased by one for every 8 hours it remains in the system. However, a job's output priority will not be increased unless it is at least equal to the value specified in the PRTYLOW= parameter; nor will a job's output priority be increased above the value specified in the PRTYHIGH= parameter. If 0 is specified, the values specified in the PRTYLOW= and PRTYHIGH= parameters are ignored. See *z/OS JES2 Initialization and Tuning Guide* for a discussion of output priority aging.

**Modification:** \$T OUTDEF operator command. Note that this parameter cannot be modified through a hot start, quick start or single-member warm start.

### **SAPI\_OPT={No|Yes}**

Enables (Yes) or disables (No) SAPI POST work selection optimization. For details see *z/OS JES2 Initialization and Tuning Guide*.

**No** Disables SAPI POST work selection optimization. POST code reverts to the z/OS version 1.13 level of JES2 work selection processing.

**Yes** Enables SAPI POST work selection optimization.

**Modification:** \$T OUTDEF operator command.

**Scope: Single Member.**

### **SEGLIM=nnnnn|100**

Specifies the maximum number of output segments (1-99999) JES2 creates for a SYSOUT data set. When the number of segments exceeds this number, JES2 no longer segments the SYSOUT. SEGLIM=1 prohibits SYSOUT segmentation. SEGLIM=99999 allows practically unlimited SYSOUT segmentation. See *z/OS JES2 Initialization and Tuning Guide* for more information about dividing output into segments.

**Modification:** \$T OUTDEF operator command. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.

**STDFORM=vvvvvvvv|STD**

Specifies a 1- to 8-character identifier to be used as a default forms ID when a forms ID is not specified. It also specifies the default initial setup of all printers and punches at JES2 initialization.

**Note:** Special characters (for example, the period (.) ) are not allowed.

**Modification:** Single-member warm start.

**USERSET=Yes|No**

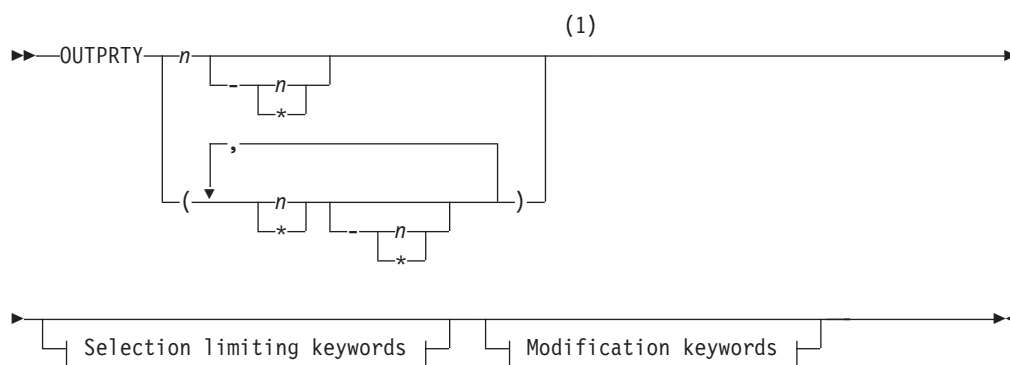
Specifies whether the user is permitted (Yes) or not permitted (No) to create demand setup JOEs through use of the JCL OUTPUT statement. If Yes is specified, JES2 will form demand setup output groups according to the user's definition. See the DMNDSET= parameter on this statement and *z/OS JES2 Initialization and Tuning Guide* for the relationship between this parameter and user-defined output data set groups.

**Modification:** Single-member warm start.

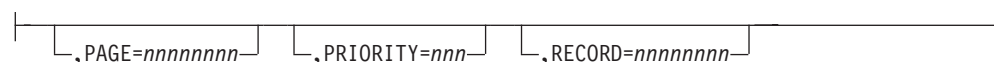
## OUTPRTY(n) - Job Output Priority

The OUTPRTY(n) statement defines the association between the job output scheduling priorities and the quantity (records or pages) of output. Specify n in OUTPRTY(n) as a value, 1 through 9.

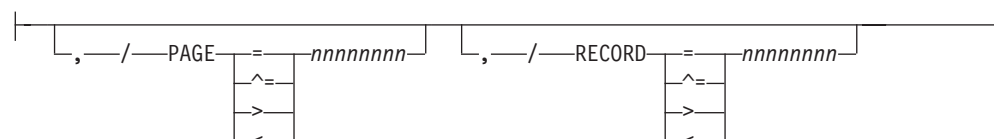
### Format Description for OUTPRTY(n)



**Modification keywords:**



**Selection limiting keywords:**



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

## OUTPRTY(n)

### Parameter Description for OUTPRTY(n)

#### PAGE =nnnnnnnn

Specifies the output page counts (1-16777215) that are associated with the priorities specified in the PRIORITY= parameter.

See the TIME= parameter on the JOBPRTY(n) statement and the PRIORITY= parameter on this statement for additional information.

If this parameter is not specified, the following are used as default values:

OUTPRTY(n)	PRIORITY=	RECORD=	PAGE=
(1)	144	2000	50
(2)	128	5000	100
(3)	112	15000	300
(4)	96	16777215	16777215
(5)	80	.	.
(6)	64	.	.
(7)	48	.	.
(8)	32	.	.
(9)	16	16777215	16777215

**Modification:** \$T OUTPRTY(n) Operator command.

#### PRIORITY =nnn

Specifies the output selection priority (0-255) for the output interval specified by the corresponding RECORD= and PAGE= parameters. When job output elements (JOEs) are built for a job, each JOE is assigned a priority based on the total number of output lines, cards, or pages represented by the JOE.

- If a JOE represents a total of "t" lines or cards, the JOE's priority is PRIORITY(ln), where ln is the smallest number for which t<=RECORD.
- If a JOE represents a total of "t" pages, the JOE's priority is PRIORITY(pg), where pg is the smallest number for which t<=PAGE.
- If a JOE represents a combination of both line and page data, the JOE's priority will be computed by the following formula:

$$\frac{\text{PRIORITY}(\text{ln}) + \text{PRIORITY}(\text{pg})}{2}$$

Where:

PRIORITY(ln) = the output selection priority calculated for the output line count

PRIORITY(pg) = the output selection priority calculated for the output page count

Fractions are truncated for the calculated priority value.

If you override all nine OUTPRTY(n) values and any output exceeds all RECORD= or PAGE= values you specify, JES2 assigns that output the lowest priority (0). You should specify at least one OUTPRTY(n) to handle extremely large output such as the defaults for OUTPRTY(4) through OUTPRTY(9). See the RECORD= and PAGE= parameters on this statement for additional information.

If this parameter is not specified, the following are used as default values:

OUTPRTY(n)	PRIORITY=	RECORD=	PAGE=
(1)	144	2000	50
(2)	128	5000	100
(3)	112	15000	300
(4)	96	16777215	16777215
(5)	80	.	.
(6)	64	.	.
(7)	48	.	.
(8)	32	.	.
(9)	16	16777215	16777215

**Modification:** \$T OUTPRTY(n) operator command.

**RECORD =nnnnnnnn**

Specifies the output line counts (1-16777215) that are associated with the priorities specified in the PRIORITY parameter.

See the PRIORITY= parameter above for additional information.

If this parameter is not specified, the following are used as default values:

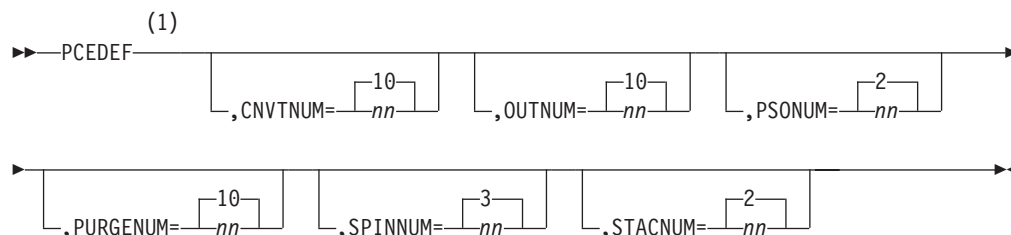
OUTPRTY(n)	PRIORITY=	RECORD=	PAGE=
(1)	144	2000	50
(2)	128	5000	100
(3)	112	15000	300
(4)	96	16777215	16777215
(5)	80	.	.
(6)	64	.	.
(7)	48	.	.
(8)	32	.	.
(9)	16	16777215	16777215

**Modification:** \$T OUTPRTY(n) operator command.

## PCEDEF - Processor Control Element Definition

The PCEDEF statement defines the number of processors for certain JES2 functions.

### Format Description for PCEDEF



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for PCEDEF

### CNVTNUM=nn|10

Specifies the number (1-25) of converter processors defined to JES2.

**Considerations:** Specifying 2 or more conversion processors alleviates constraints in converter processing. However, when you define multiple converter PCEs, or if you accept the default of ten converter PCEs, jobs will not always be queued for execution in the order in which they were submitted. Setting CNVTNUM=1 can be a way to run jobs in the order in which they were submitted; either you must have a single member MAS to do this or if you have a multi-member MAS, the system affinity of each job must be the same. With CNVTNUM=1, the system can "hang" depending on the characteristics of the job stream. See *z/OS JES2 Initialization and Tuning Guide* for more information on job queuing and how to control job execution sequence.

**Modification:** Hot start.

### OUTNUM=nn|10

Specifies the number (1-25) of output processors defined to JES2.

**Performance Considerations:** To alleviate constraint in output processing, use this parameter to define up to 10 output processors (PCEs) per JES2 member. This will provide improved throughput of JES2 output processing if output queuing is constrained. The use of multiple output processors causes JES2 to build more JOEs per unit of time, further increasing checkpoint I/O efficiency. JES2 will, however, consume more system resources (JES2 buffers, processor cycles, and spool I/O) in a shortened period of time.

**Modification:** Hot start.

### PSONUM=nn|2

Specifies the number (1-10) of PSO processors defined to JES2.

**Modification:** Hot start.

### PURGENUM=nn|10

Specifies the number (1-25) of purge processors defined to JES2.

The number of purge processors specified affects the calculation of the number of SMF buffers specified by the BUFNUM parameter on the SMFDEF statement. See page 370 for a description of the BUFNUM parameter.

**Modification:** Hot start.

### SPINNUM=nn|3

Specifies the number (3-10) of spin processors defined to JES2.

**Modification:** Hot start.

### STACNUM=nn|2

Specifies the number (1-10) of TSO/E STATUS/CANCEL processors defined to JES2.

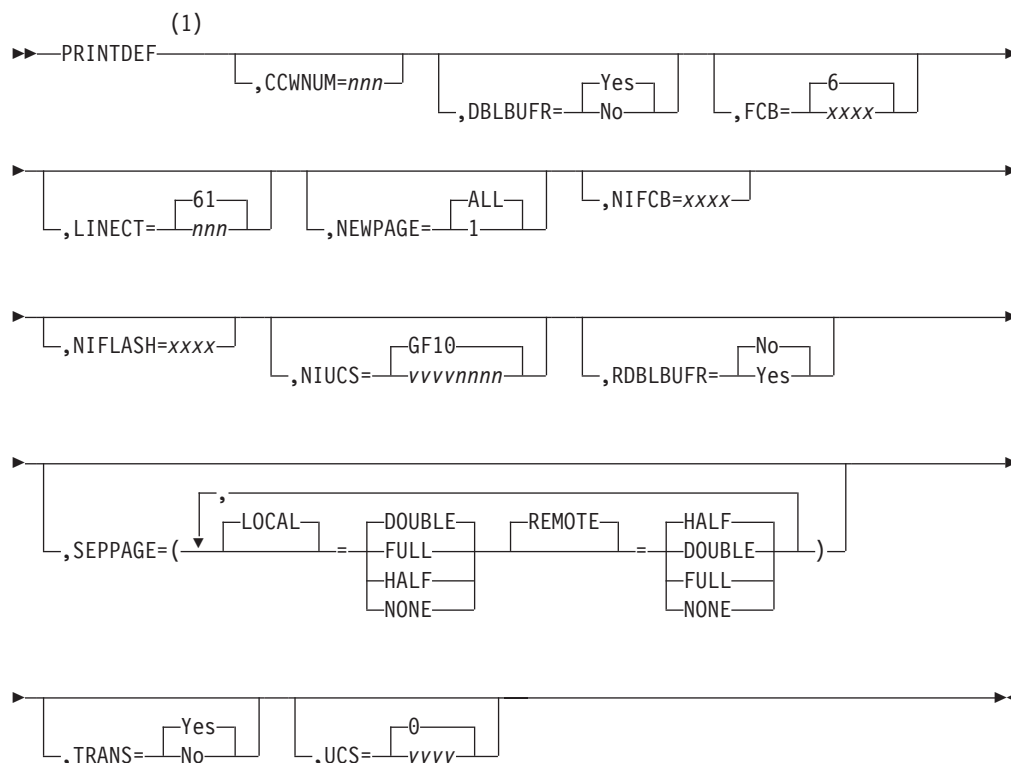
**Modification:** Hot start.

---

## PRINTDEF - Local Print Environment Definition

The PRINTDEF statement defines the JES2 print environment.

## Format Description for PRINTDEF



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for PRINTDEF

**CCWNUM=nnn**

Specifies the maximum number (1-233) of channel command words (CCWs) to be used per channel program area for local impact printers.

**Performance Considerations:** The value of CCWNUM= should be chosen such that all print lines in a spool buffer can normally be printed with a single channel command chain. Compute this value from the following formula:

$$CCWNUM = (BUFSIZE= \text{parameter on SPOOLDEF}) / \text{average line length}$$

Estimate the average line length, allowing for truncation of trailing blanks by JES2.

If the value is too small, the number of EXCPs (and therefore the processor time) for printing is increased. If, however, the value is excessive, the size of the address space is unnecessarily increased.

**Note:** This value is ignored for 3800 printers. JES2 uses a CCW area that has a fixed size for 3800 printers.

If you do not specify a value for this parameter, JES2 specifies one using the following algorithm:

$$CCWNUM = (BUFSIZE = \text{parameter on SPOOLDEF}) / 80$$

**Modification:** Single-member warm start.

## PRINTDEF

### DBLBUFR=Yes|No

Specifies whether or not double buffering is to be used for local printers. Double buffering can improve performance by allowing an installation to perform read and write operations concurrently. The DBLBUFR= parameter is ignored by printers operating under the control of a functional subsystem.

**Modification:** Single-member warm start.

### FCB=xxxx|6

Specifies the name of the forms control buffer (FCB) image or the carriage control tape that JES2 initially assumes is mounted on every impact printer. FCB is a 1- to 4-character name that is valid in SYS1.IMAGELIB. The forms control buffer identifier can be modified for each printer by means of the PRT(nnnn) statement or the JES2 \$T command. If this FCB is to be a default FCB, the image in SYS1.IMAGELIB **must** have the default bit turned on.

**Modification:** Single-member warm start.

### LINECT=nnn|61

Specifies the maximum number (0-254) of lines to be printed per page on job output. This value is used if you do not specify a value for a line count in the accounting field of your JOB statement, on a /\*JOBPARM control statement, on the /\*OUTPUT control statement, or on the JCL OUTPUT statement.

- **For MODE=JES printers:** Table 87 shows the interaction and overriding order that JES2 uses when determining the number of lines it will use when writing a checkpoint record for printers set to MODE=JES (that is, non-FSS-mode printers).

*Table 87. Interaction of PRINTDEF and PRT(n) parameters that JES2 uses to calculate the output checkpoint interval*

PRINTDEF LINECT=	PRT(n) CKPTLINE=	"Lines" Setting JES2 Uses to Calculate Checkpoint
> 0	0 (or defaulted)	PRINTDEF LINECT= value
> 0	> LINECT=	PRINTDEF LINECT= value <sup>1</sup>
	< LINECT=	PRT(n) CKPTLINE= value <sup>1</sup>
0	>0	PRT(n) CKPTLINE= value

<sup>1</sup>and if CKPTPAGE=>0, then JES2 calculates total checkpoint lines to be the product of this value times the CKPTPAGE= value

- **For MODE=FSS printers:**
  - If you set CKPTMODE= on PRT(nnnnn), JES2 uses that value to determine if checkpoints are taken based on page count or time.
  - If you set CKPTSEC= on PRT(nnnnn) or allow the default of 0, and CKPTMODE=SEC, this value sets the number of seconds before taking an output checkpoint.

**Note:** A 3800 printer will not print more than 60 lines per 11-inch page at 6 lines per inch or 80 lines per 11-inch page at 8 lines per inch.

LINECT=0 causes automatic page overflow (normally standard in JES2) to be suppressed unless overridden by the JOB statement accounting parameter or a /\*JOBPARM control statement specification.

If a print data set is generated without any ejects (that is, no skips or any channel in the carriage tape), and if 0 is specified in this parameter, or any of the following: the JOB statement accounting field, a /\*JOBPARM control statement, the /\*OUTPUT control statement, or the JCL OUTPUT statement,



the data set is treated as one page when it is advanced, backspaced, interrupted, or warm started while printing.

**Modification:** \$T PRINTDEF operator command.

**NEWPAGE={1|ALL}**

Specifies how a 'skip to channel' is counted as a new page. This is the global specification for any local or remote printer that either:

- Does not specify NEWPAGE= on its PRT(nnnn) initialization statement

-- or --

- Specifies NEWPAGE=DEFAULT on its PRT(nnnn) initialization statement.

**1** Specifies that JES2 treats only skip-to-channel-1 as a new page.

**ALL** Specifies that JES2 treats skip-to-any-channel as a new page.

**Modification:** \$T PRINTDEF operator command.

**NIFCB=xxxx**

Specifies the name of both the forms control buffer image that JES2 initially loads into every non-impact printer and the installation's default FCB for data sets that do not explicitly request an FCB when printed on a non-impact printer. NIFCB is a 1- to 4-character name that is a valid name in SYS1.IMAGELIB. The FCB identifier can be modified for an individual printer by means of the PRT(nnnn) statement or the JES2 \$T command.

If you do not specify a value for this parameter, forms control is unspecified.

**Modification:** Single-member warm start.

**NIFLASH=xxxx**

Specifies the 1- to 4-character name of the initial and default forms flash ID. On printers having a forms flash ID, JES2 will use this default for data sets that do not specify a forms flash ID. The user can override the forms flashing feature by explicitly requesting forms flashing through the JCL DD statement with the SYSOUT parameters, JES2 /\*OUTPUT control statement, the JCL OUTPUT statement or, for individual printers through the PRT(nnnn) initialization statement. By specifying 'NONE' as the forms flashing ID, forms flashing is disabled.

**Note:** If a PAGEDEF= keyword is specified on the JCL OUTPUT statement, the FLASH= parameter on the PRT(nnnn) statement is ignored if the data set is printed on a printer running under the control of a functional subsystem.

If you do not specify a value, forms flashing is unspecified.

**Modification:** Single-member warm start.

**NIUCS=vvvvnnnn|GF10**

Specifies the name of both the character arrangement table that JES2 initially loads into every 3800 printer and the installation's default character arrangement table that is loaded into the printer for data sets that do not specify a character arrangement table. The last position of the writable character generation module (WCGM) in the default table, is reserved for the JES2 member; it must not be used. NIUCS is a 1- to 8-character name that is valid in SYS1.IMAGELIB. The character arrangement table can be modified for an individual printer by means of the PRT(nnnn) statement or the JES2 \$T command.

**Modification:** Single-member warm start.

## PRINTDEF

### **RDBLBUFR=Yes|No**

Specifies whether double (Yes) or single (No) buffering is to be used for remote printers.

**Modification:** Single-member warm start.

**Note:** The specification refers to JES2 regular I/O buffers, not to JES2 teleprocessing buffers.

### **SEPPAGE=( [LOCAL=pgtype] [,REMOTE=pgtype] ) | LOCAL=DOUBLE,REMOTE=HALF)**

Specifies the type of separator page JES2 produces on local and remote printers. The values for *pgtype* are:

#### **NONE**

Suppress the separator page. However, JES2 still prints the JESNEWS data set when the user's security profile allows.

**HALF** Print only the detail box information.

**FULL** Print one full separator page, including jobname and jobid in block letters.

#### **DOUBLE**

Print two full separator pages, including jobname and jobid in block letters.

**Modification:** \$T PRINTDEF operator Command.

### **TRANS=Yes|No**

Specifies whether (Yes) or not (No) character translation is to be used for local and remote printers. Character translation causes JES2 to convert lowercase letters to uppercase and change characters that are unprintable on PN trains to blanks unless an installation supplies its own translation tables using installation Exit 15. You can override this specification for a specific printer by specifying the TRANS= parameter on a PRT(nnnn) or R(nnnn).PR(m) statement.

You can also use installation Exit 15 (Output Data Set/Copy Select) to examine or change translation for data sets, and specify custom print character and CCW translation tables. See *z/OS JES2 Installation Exits* for information about controlling character and channel control word (CCW) translation using installation Exit 15.

#### **Note:**

1. You can use the TRANS= parameter on the PRINTDEF statement to enable character translation for local printers except IBM<sup>®</sup> 3211, IBM 3203, or FSS-mode printers. You can use the TRANS= parameter on the PRT or R(nnnn).PR(m) statement to enable character translation for any non-FSS printer, including IBM 3211 or IBM 3203 printers.
2. For BSC remote printers attached to non-programmable terminals, translation occurs as above if TRANS=Yes; if TRANS=No, JES2 translates non-valid characters to blanks.
3. For BSC remote printers attached to programmable terminals, translation occurs as above if TRANS=Yes. If TRANS=No, translation of incorrect characters to blanks occurs if the remote terminal is defined as not having the transparency feature.
4. For SNA remote printers, JES2 does translation as above if TRANS=Yes; if TRANS=No, JES2 does no translation. **All** characters are considered to be valid, including binary zeros.

**Modification:** Single-member warm start.

**UCS=vvvv|0**

Specifies the name of the print chain, print train, or print band default character set that is mounted on every impact printer for which a specific universal character set (UCS) image is not specified. An alternate UCS image can be specified for individual local printers through the UCS= keyword on the PRT(nnnn) initialization statement or modified through the JES2 \$T PRTnnnn command. For remote printers, an alternate UCS image can be specified through the R(nnnn).PR(m) initialization statement or modified with the JES2 \$T Rnnnn.PRm command.

UCS is a 1- to 4-character name that is valid in SYS1.IMAGELIB. If 0 is specified, JES2 bypasses the UCS loading procedure until a job that requires a specific UCS image is processed. If an incorrect specification is encountered, the UCS loading procedure is bypassed, and a setup message is issued to allow specification of a valid image.

**Modification:** Single-member warm start.

## PROCLIB(xxxxxxxx) - Dynamic PROCLIB definition

The PROCLIB(xxxxxxxx) statement defines a dynamic PROCLIB concatenation to be used during conversion processing for jobs on this member. These concatenations can be added, updated, or deleted through operator commands. Dynamic PROCLIB can override PROCxx DDs in the JES2 start PROC but cannot alter or delete them.

The PROCLIB parameter is primed with the static PROCLIB concatenations from the JES2 PROC. PROCLIB(xxxxxxxx) initialization statements that reference the same DD name as a static PROCLIB DD will alter, not replace, the concatenation that is associated with these static PROCLIB data sets.

**Note:** PROCLIB statement processing only ensures that the data sets specified can be allocated. It does not ensure that they actually exist or can be opened and used as a PROCLIB data set. That processing occurs when the PROCLIB is used by a job during conversion processing.

Table 88 describes PROCLIB commands and their results under various scenarios.

*Table 88. PROCLIB commands and results.* PROCLIB commands and results

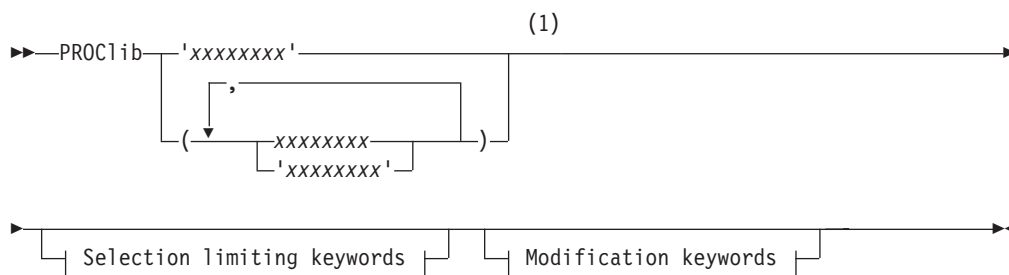
Action	Existing PROCLIB	Results
\$ADD PROCLIB	None	New dynamic PROCLIB added
\$ADD PROCLIB	Dynamic PROCLIB	Error, a dynamic PROCLIB exists
\$ADD PROCLIB	Static PROCLIB	New dynamic PROCLIB created, no data sets copied from the static PROCLIB
\$T PROCLIB	None	Error, no selectable entries to modify
\$T PROCLIB	Dynamic PROCLIB	Appropriate DD entries are modified (starts with existing DDs and makes updates to build a new concatenation)

# PROCLIB

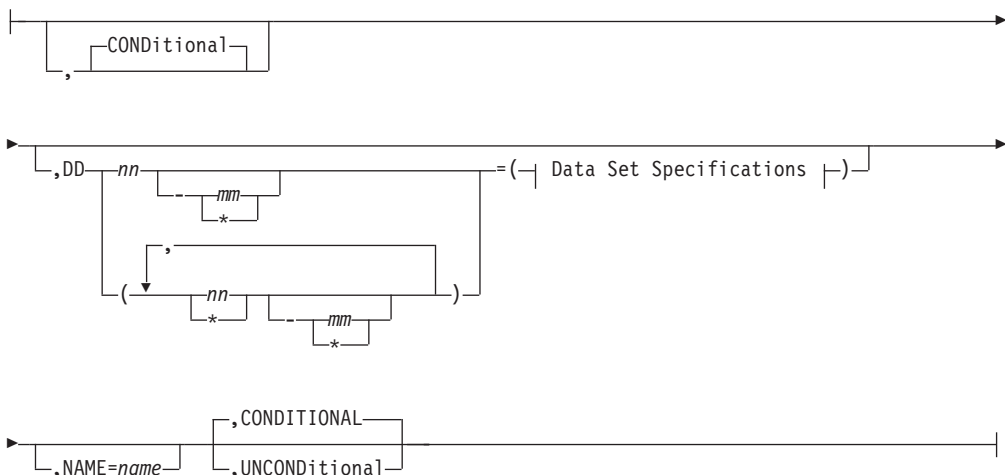
Table 88. PROCLIB commands and results (continued). PROCLIB commands and results

Action	Existing PROCLIB	Results
\$T PROCLIB	Static PROCLIB	A new dynamic PROCLIB is created by copying the existing DDs from the static concatenation to the new dynamic PROCLIB and then makes updates to build a new concatenation
\$DEL PROCLIB	None	Error, no selectable entry to delete
\$DEL PROCLIB	Dynamic PROCLIB	Dynamic PROCLIB is deleted. If there is a static PROCLIB with the same subscript as the dynamic PROCLIB, it becomes active again
\$DEL PROCLIB	Static PROCLIB	Error, cannot delete static PROCLIB

## Format Description for PROCLIB



### Modification keywords:





## PROCLIB

form PROCxx can be referenced by the JOBCLASS PROCLIB= statement. DD names of any format can be referenced on the JECL /\*JOBPARM PROCLIB=ddname statement. If this name matches a DD name in the JES2 start PROC, then this PROCLIB concatenation will be used instead of the one in the JES2 start PROC.

If the PROCLIB DD name matches a static PROCLIB DD name from the JES2 PROC, the PROCLIB statement will logically alter the existing static PROCLIB, not replace it.

**Modification:** \$T PROCLIB(xxxxxxxx) command, warm start or hot start.

### **DD(nnn)=**

Specifies up to 255 data sets to be concatenated to this PROCLIB DD name. Data sets in this list are compacted after each initialization statement is processed. If you specify DD(1), DD(20), and DD(100) for a new PROCLIB concatenation, the resulting concatenation will be renamed to DD(1), DD(2,) and DD(3). If you then set the data set name for DD(2) to null, JES2 will remove it from the concatenation leaving just DD(1) and DD(2) where DD(2) has the old DD(3) data set specification. Though up to 255 data sets can be specified, MVS rules limit any data set concatenation to 255 extents. If any data set has more than one extent, then the total number of data sets that can be supported will be reduced.

**Modification:** \$T PROCLIB(xxxxxxxx) command, warm start or hot start.

### **DSName=jxxx...x**

Specifies a 1-44 character data set name which JES2 will include in this PROCLIB concatenation. This data set must be a partitioned data set (PDS). If this value is coded as null (no operand specified), then the DD(nnn) will be deleted from an existing concatenation.

**Modification:** \$T PROCLIB(xxxxxxxx) command, warm start or hot start.

### **UNIT=hhhh|/hhhh|nnnn|ccccccc**

If the PROCLIB data set to be used is not cataloged, then you must specify the unit information for the device containing the data set in one of the following ways:

#### **hhhh | /hhhh**

specifies a 3 or 4 digit hexadecimal device number. Device numbers can be specified in one of the following formats:

- UNIT=hhh
- UNIT=/hhh
- UNIT=/hhhh

where hhh and hhhh represent the device numbers. A slash (/) must precede a 4 digit device number.

#### **nnnn**

Specifies a device name.

#### **ccccccc**

Specifies a 1-8 character group name assigned to the device or group of devices that contained the non-cataloged initialization data set to be included.

**Modification:** \$T PROCLIB(xxxxxxxx) command, warm start or hot start.

### **VOLser=xxxxxx**

If the PROCLIB data set to be used is not cataloged, then this specifies a 1-6 character volume serial number on which the data set resides.

**Modification:** \$T PROCLIB(xxxxxxxx) command, warm start or hot start.

**UNCONDitional | CONDitional**

Specifies what action JES2 should take if one of the data sets cannot be allocated. If CONDitional is specified (or defaulted) then if any data set cannot be allocated, the entire statement fails. The system will go into console mode to allow the operator to correct the statement. If UNCONDitional is specified, then an error allocating a single data set is ignored. The data set is not added to the concatenation but it remains assigned to the DD(nnn). If the concatenation is displayed, failed DD(nnn) will display the text 'ALLOCATION FAILED' before the data set name. If all the data sets in a concatenation fail to allocate, then the statement fails regardless of whether UNCONDitional was specified.

**Modification:** \$T PROCLIB(xxxxxxxx) command, warm start or hot start.

**NAME=xxxxxxxx**

Intended mostly for \$T command, NAME= allows the name of a PROCLIB concatenation to be changed. For example, specifying PROCLib(TEST01) NAME=PROC01 renames the TEST01 PROCLIB concatenation to PROC01.

**Modification:** \$T PROCLIB(xxxxxxxx) command, warm start or hot start.

## PRT(nnnnn) - Local Printer

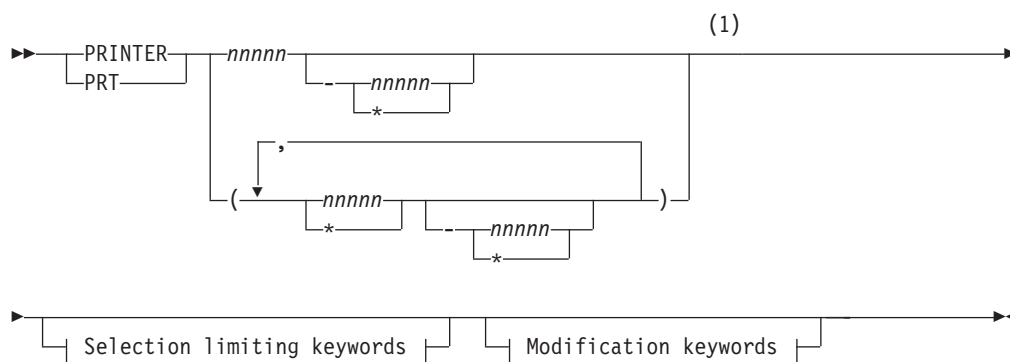
The PRT(nnnnn) statement specifies the characteristics of one local printer. Each printer device is defined by a PRT(nnnnn) statement with a unique value (1-32767) specified for nnnnn. Printer characteristics are defined by the following parameters.

Use the subscript to define printers individually (nnnnn), in an ascending range (n-\*) to indicate from n to 32767 or, in a descending range (\*-n) to indicate 32767 to n, or \* to indicate all printers.

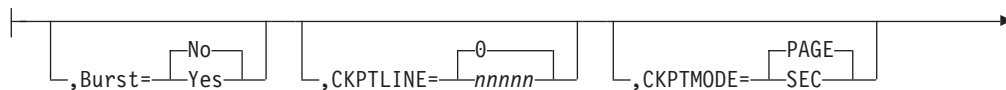
### Adding Printer Attributes

This statement and all its parameters (except START=) can be added after initialization with the \$ADD PRT(nnnnn) operator command.

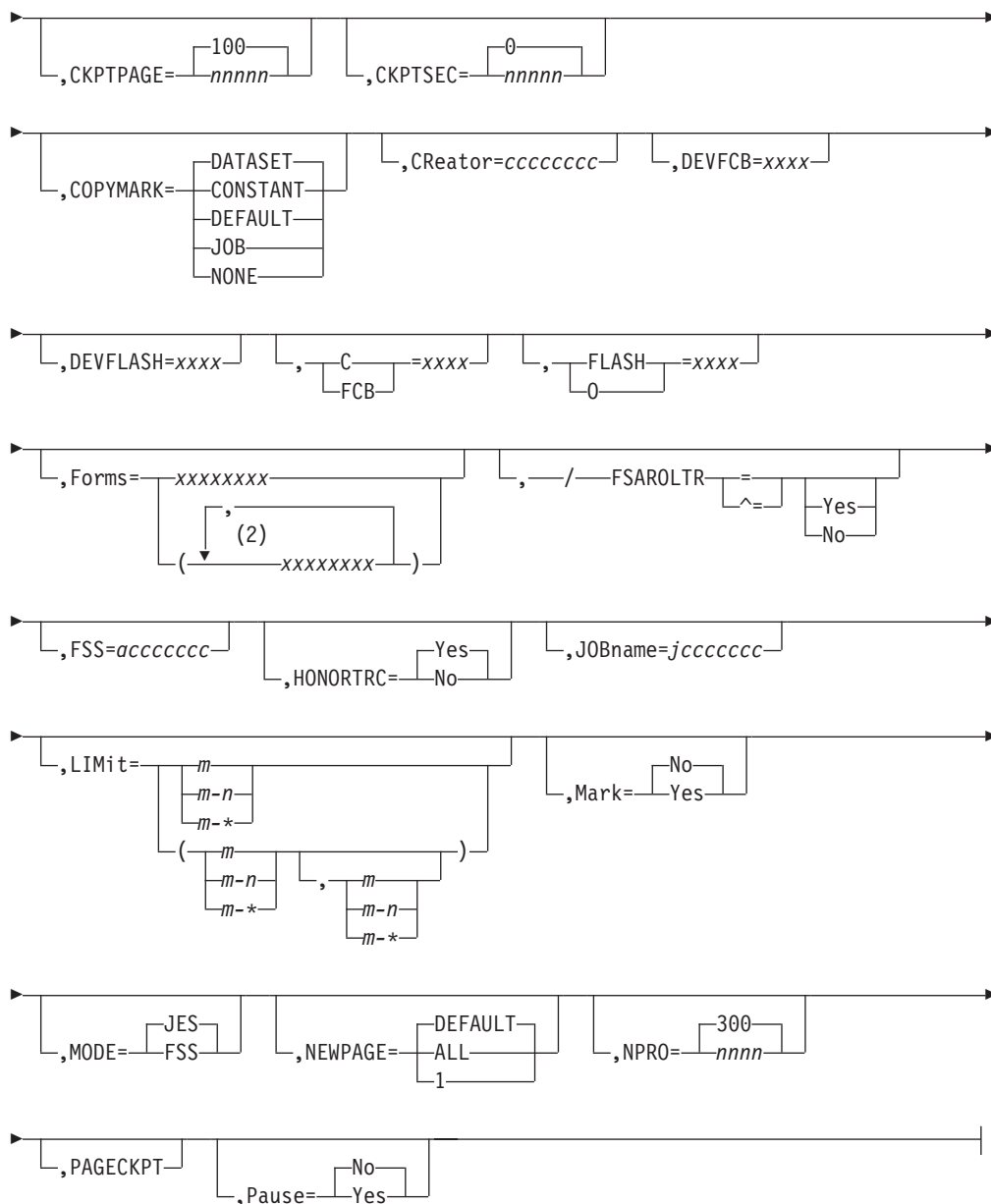
### Format Description for PRT(nnnnn)



**Modification keywords:**

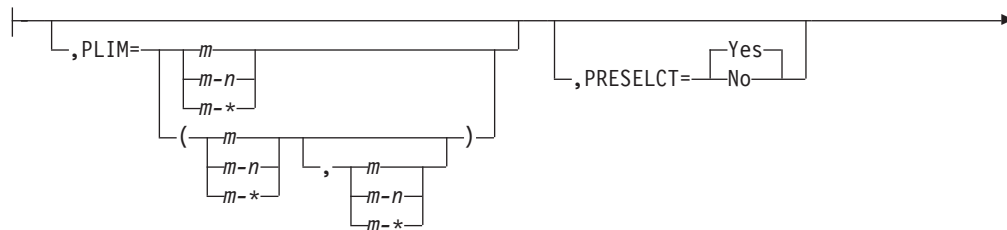


# PRT(nnnnn)

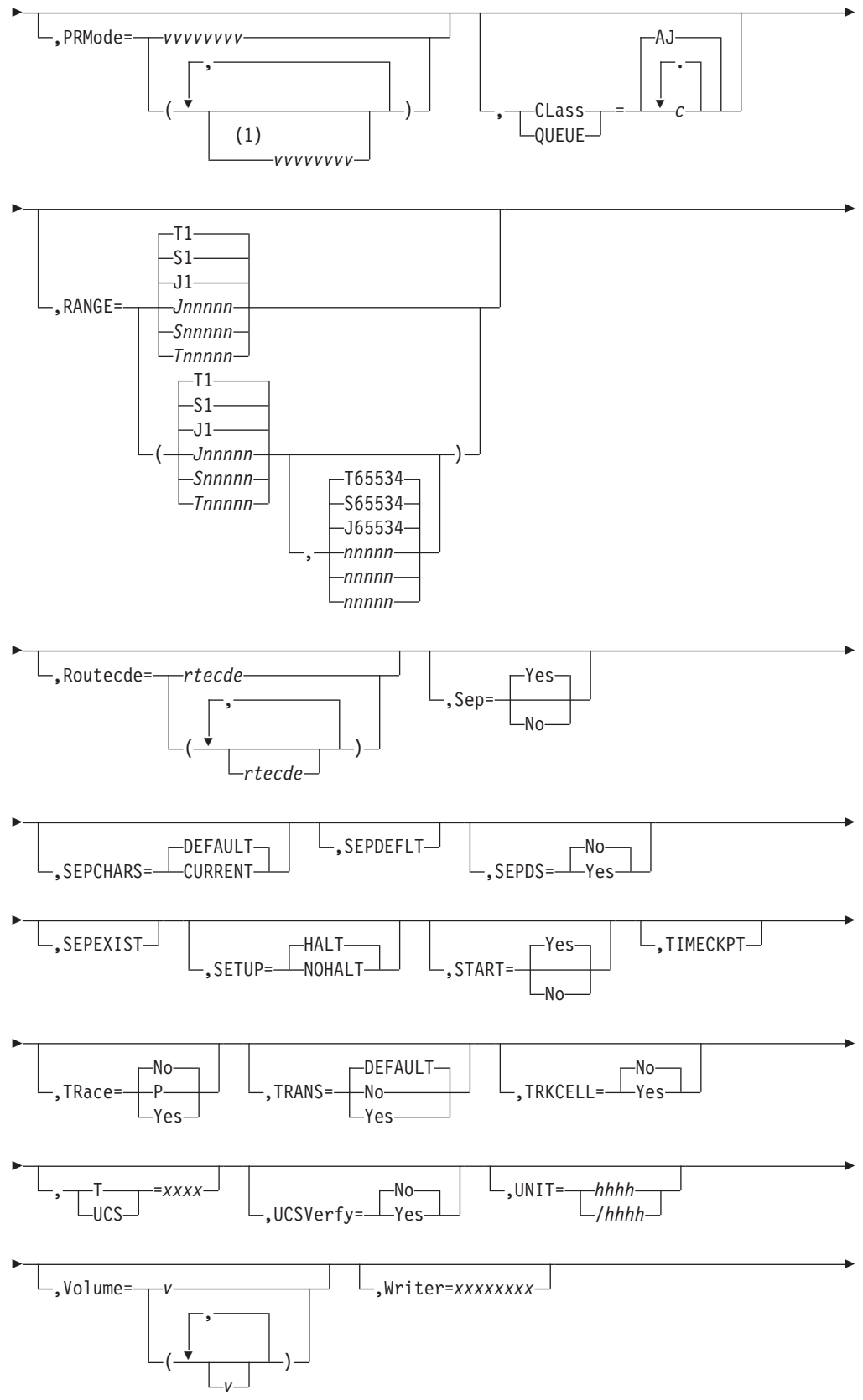


## Notes:

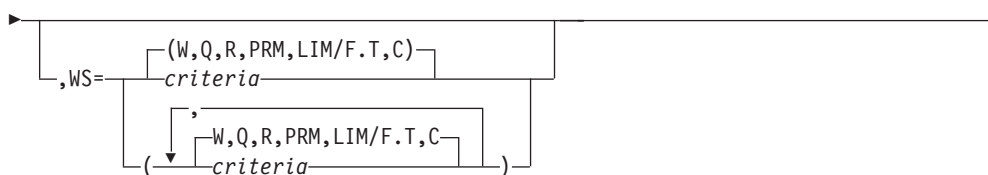
- 1 Omit the comma between initialization statement and first keyword
- 2 *Forms* can be coded up to 8 times







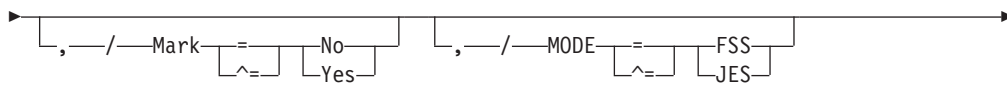
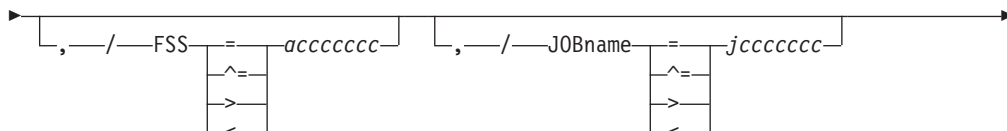
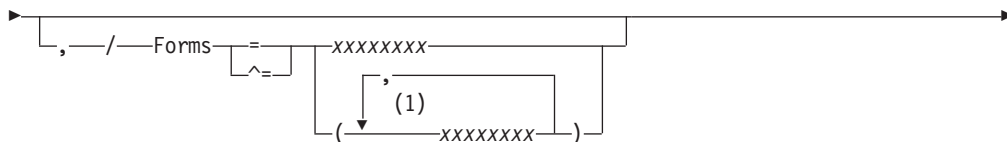
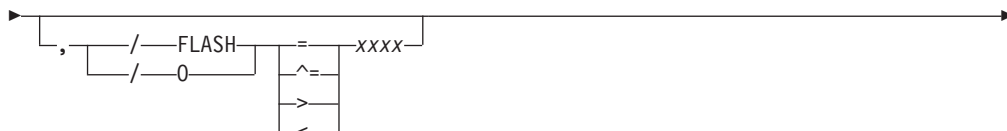
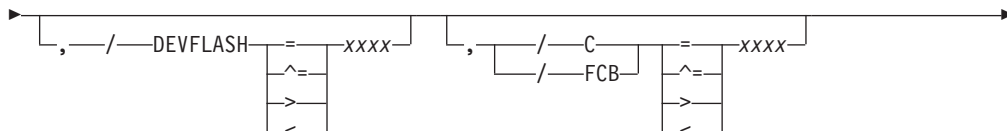
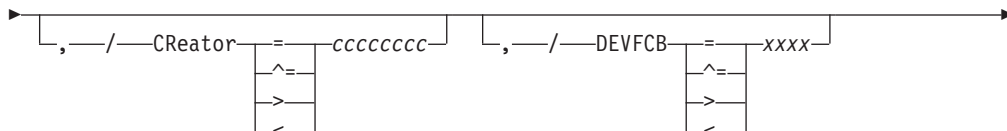
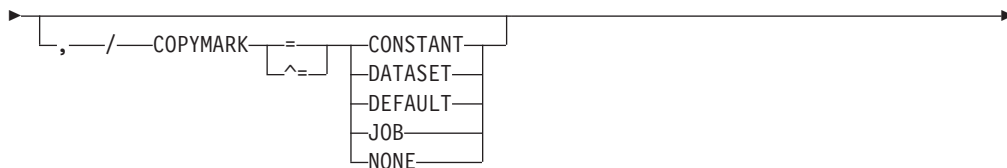
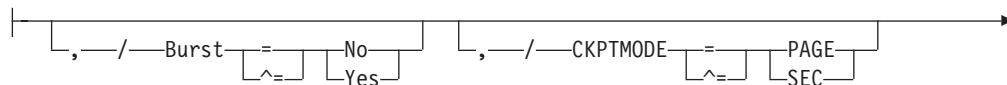
# PRT(nnnnn)

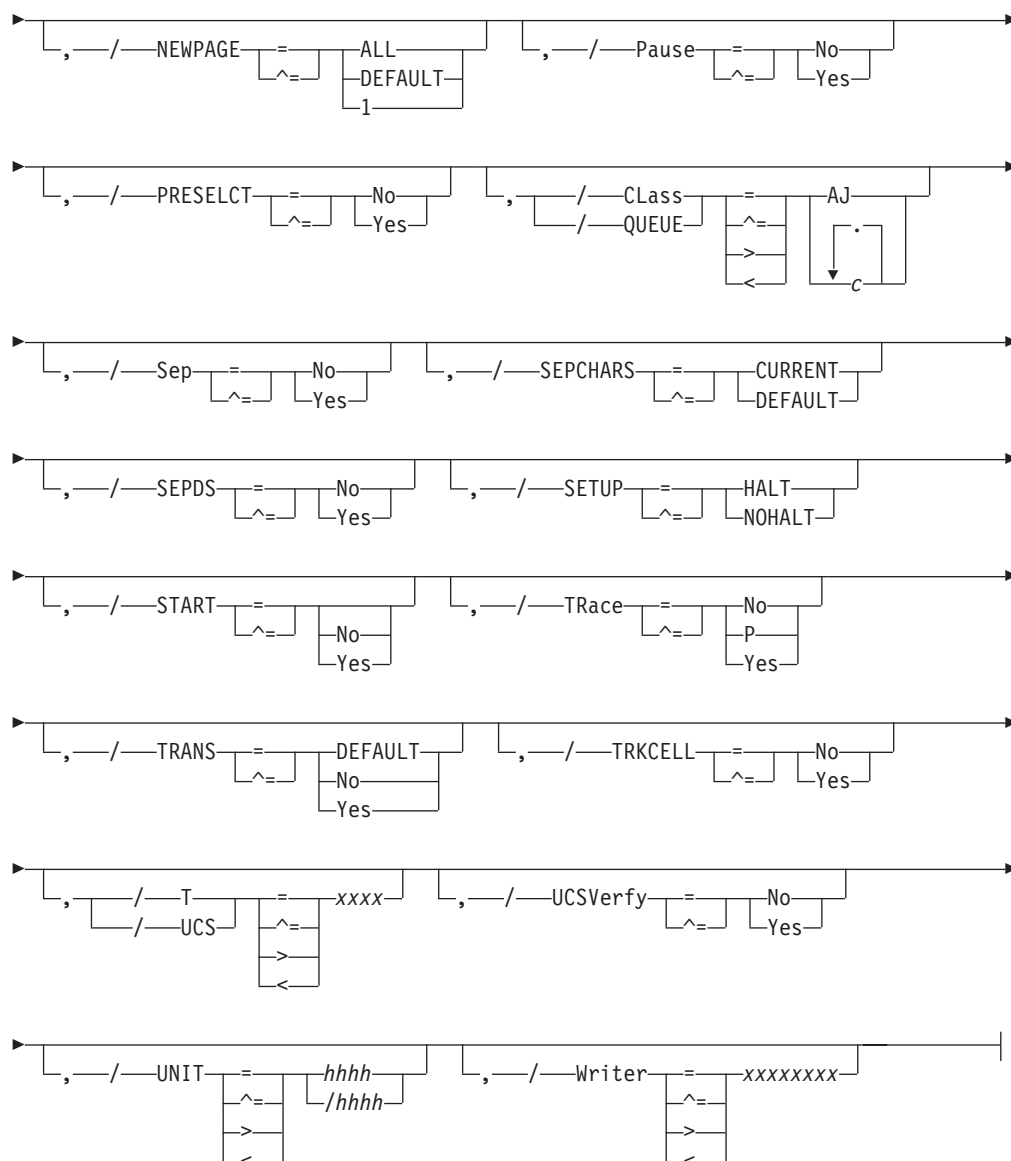


## Notes:

- 1 *PRMode* can be coded up to 8 times

## Selection limiting keywords:





**Notes:**

1 *form* can be coded up to 8 times

**Parameter Description for PRT(nnnnn) (All Printers)**

**CKPTLINE=nnnnn|0**

Specifies the maximum number of lines (0-32767) in a logical page. JES2 uses this value, the CKPTPAGE= parameter on this statement, and the LINECT= parameter on the PRINTDEF, to determine when to take output checkpoints as follows:

JES2 compares the "line count values" you specified on the PRINTDEF LINECT= and PRT(n) CKPTLINE= parameters and then always uses the lesser value.

Checkpoint Interval = *line count* \* CKPTPAGE (if non-zero)

where *line count* is either:

-

## PRT(nnnnn)

CKPTLINE if CKPTLINE < LINECT  
hence **Checkpoint Interval** =  
CKPTLINE \* CKPTPAGE (if non-zero)

•

LINECT if CKPTLINE > LINECT  
hence **Checkpoint Interval** =  
LINECT \* CKPTPAGE (if non-zero).

The size of a logical page is also defined as the number of lines printed until:

- A channel skip is encountered
- The line count specified by the LINECT= parameter on the PRINTDEF statement, the /\*JOBPARM control statement, the JCL OUTPUT statement, or the JOB statement accounting field has been exceeded.

**Note:** This operand is ignored if specified for a printer under the control of a functional subsystem. The functional subsystem does its own physical and logical pages checkpoint based on the CKPTPAGE and CKPTSEC values passed to it from JES2.

**Modification:** \$T PRTnnnnn operator command.

### **CKPTPAGE=nnnnnn|100**

Specifies the number (1-32767) of logical pages for non-page-mode printers and physical pages for page-mode printers to be printed before each checkpoint is taken. This parameter and CKPTLINE= control the amount of checkpoint activity to spool. Although the default is set to 100, a lower value is recommended for slow devices. However, too low a value will degrade performance; therefore, use Exit 15 to protect the JES2 member from users who may specify this value too low in a job. (For further information on Exit 15, see *z/OS JES2 Installation Exits*).

**Note:** If you code both CKPTPAGE= and CKPTSEC=, and code CKPTMODE=SEC, the CKPTSEC= specification overrides the CKPTPAGE= specification.

**Performance Considerations:** This parameter should be set low for slow devices and high for faster printers such as the 3800 to prevent excessive checkpoint cycles from occurring for faster devices.

**Modification:** \$T PRTnnnnn operator command.

### **Class | QUEUE=c1...cn|AJ**

Specifies the output classes to be processed initially by this printer. You can specify any number of classes up to a maximum of 36 classes.

**Modification:** \$T PRTnnnnn operator command.

### **Creator=ccccccc**

Specifies the 1- to 8-character userid whose output can be selected by this printer. Wildcard specifications are allowed on this parameter.

If this parameter is allowed to default, JES2 can select all output for processing, regardless of userid.

**Modification:** \$T PRTnnnnn operator command.

### **DEVFCB=xxxx**

Specifies a 1- to 4-character name of the forms control buffer (FCB) this printer uses as the default if the printer selects output that does not have an FCB associated with it. If you do not specify DEVFCB=, the printer uses the last FCB that you loaded to process the output if that FCB has the default bit

turned on. However, JES2 still determines the default FCB for 3800 printers as described in the FCB= parameter description if you do not specify DEVFCB=. Otherwise, the printer uses the NIFCB specified on the PRINTDEF statement.

**Modification:** \$T PRTnnnnn operator command.

#### FCB|C=xxxx

Specifies, for impact printers, the forms control buffer image or the carriage control tape that is to be initially mounted on this printer. For the 3800, xxxx specifies the name of both the FCB image that JES2 initially loads into the printer and the installation's default FCB image for data sets not specifying an FCB, unless you coded DEVFCB=.

For all printers, xxxx is the forms control buffer (FCB) identifier that resides in SYS1.IMAGELIB. If this FCB is to be a default FCB, the image in SYS1.IMAGELIB **must** have the default bit turned on. (For information about the 3800, see *Advanced Function Presentation: Printer Information* .)

If you do not specify this parameter, JES2 specifies a default based upon the type of printer.

- For impact printers, the identifier specified by the FCB= parameter on the PRINTDEF statement
- For 3800 printers, the identifier specified by the NIFCB= parameter on the PRINTDEF statement.
- FCB=RESET causes the printer to use the default FCB.

**Modification:** \$T PRTnnnnn operator command. For FSS-controlled printers only, if you modify this parameter value and then reconnect the printer on a hot start, the parameter value in effect before termination will be used.

**Note:** See *z/OS JES2 Initialization and Tuning Guide* for FCB format restrictions that apply to JES2 printers.

#### Forms=(xxxxxxx[,...])

Specifies the 1- to 8-character forms identifier that is to be initially loaded in this printer. Wildcard specifications are allowed on this parameter. You can supply up to eight different forms identifiers to be used as work selection criteria. If the device only supports one form, it is recommended that you only code one form. The forms identifier specified by the STDFORM parameter on the OUTDEF statement.

**Modification:** \$T PRTnnnnn operator command. For FSS-controlled printers only, if you modify this parameter value and then reconnect the printer on a hot start, the parameter value in effect before termination will be used.

#### FSAROLTR=(YES/NO)

Specifies whether the internal rolling trace for an FSS printer is activated or deactivated. Yes is the default.

#### HONORTRC=Yes | No

Specifies whether or not the TRC=Yes/No parameter specified on the job's OUTPUT JCL statement will be honored or not honored for a given JES mode printer. HONORTRC= only applies to JES mode printer.

JES mode printer (other than D/T3800) deletes (skips) the Table Reference Character if HONORTRC=YES and TRC=Yes is specified for sysout.

JES mode printer (other than D/T3800) treats Table Reference Character as data if HONORTRC=NO and TRC=Yes is specified for sysout.

**Modification:** \$T PRTnnnnn operator command.

## PRT(nnnnn)

### **JOBname=jcccccc**

Specifies the 1- to 8-character name for a job whose output can be selected by this printer. Wildcard specifications are allowed on this parameter.

If this parameter is allowed to default, JES2 can select all output for processing, regardless of jobname.

**Modification:** \$T PRTnnnnn operator command.

### **LIMit=m|m-n|m-\***

Specifies that output is selected for specific printers based upon the amount of the output (in records). The values *m* and *n* specify the range (in records) into which a job output element (JOE) must fall to be processed by this printer. The integer *m* specifies the lower output size limit and *n* specifies the upper output size limit.

For both variables *m* and *n*, you can specify a range of values 0-4294967295. *m* and *n* can be equal. If they are not equal, *n* must be larger than *m*.

If you code only *m*, that value becomes both the lower and upper limit. If *m-\** is specified, the upper limit is set to the default value of 4294967295.

After a warm start, the original size of the output (before any printing) will be used to determine where the remainder of the output will be printed. That is, the original size of the JOE will be used to determine output device selection.

**Default:** If you omit this parameter, JES2 uses the defaults *m*=0 and *n*=4294967295.

**Modification:** \$T PRTnnnnn operator command.

### **MODE=JES**

Specifies this printer is initially started under the operation of JES2. An operator can change the control mode by use of the \$T PRTnnnnn command whenever the printer is drained.

If you do not specify this parameter, the default is JES. Although you can also specify *FSS* here; however, that value is reserved for *FSS*-controlled printers only.

**Modification:** \$T PRTnnnnn operator command.

### **NEWPAGE={1|ALL|DEFAULT}**

Specifies how a 'skip to channel' is counted as a new page.

**1** Specifies that JES2 treats only skip-to-channel-1 as a new page.

**ALL** Specifies that JES2 treats skip-to-any-channel as a new page.

#### **DEFAULT**

Specifies that JES2 uses the NEWPAGE= value specified on the PRINTDEF initialization statement.

**Modification:** \$T PRT(nnnnn) operator command.

### **Pause=Yes|No**

Specifies whether (Yes) or not (No) this printer is to pause between data set groups.

**Modification:** \$T PRTnnnnn operator command.

**Note:** This operand has no effect on page-mode printers that operate under the control of a functional subsystem.

**PRMode=(vvvvvvv[,vvvvvvv...])**

Specifies one to eight names that identify the processing modes used by JES2 to direct output data sets to this output device. Wildcard specifications are allowed on this parameter. To specify no processing mode, specify PRMode=() to cause this printer to select no output group if PRMode is also coded on the WS= list. If only one PRMODE is specified, the parentheses are optional.

**vvvvvvv**

Specifies the process mode:

**LINE** Specifies that the data set contains formatting controls that only a line-mode printer can process.

**PAGE** Specifies that the data set contains formatting controls that only a page-mode printer can process.

**installation-defined**

Specifies that the data set contains formatting characteristics defined at the installation for specific output groups. Users can assign a PRMode= value to the data sets by using JCL OUTPUT statements. However, if the user does not specify a process mode for the data set, JES2 assigns a process mode. IBM suggests that you prefix installation-defined process mode names with the character U.

Installation-defined and IBM-defined process mode designations may be mixed on one PRMODE= parameter statement. For example, you can specify names on this parameter designating the output device as capable of accepting data sets that can be printed on either a plotter device (for example, UPLOT2) or a page-mode printer device.

PRMODE=(UPLOT2,PAGE)

If you do not specify this parameter, JES2 defaults all printers to LINE.

**Modification:** \$T PRTnnnnn operator command.

**RANGE={J|S|T} nnnnn[-nnnnn] | J1-99999**

Specifies the job ID range for output jobs that can be selected by this printer. Use J to specify batch jobs, S to specify started tasks, and T for TSO/E jobs. You can specify a single job number or range (up to 65534) of jobs.

If you code this parameter, you can specify one or two values:

- If you specify one value, that value becomes both the low and the high end of the range.
- If you specify two values, the first value is the low end of the range and the second value the high end. If they are not equal, the second value must be larger than the first value. If you specify two equal values, this printer can select only those jobs assigned that particular number.

**Modification:** \$T PRTnnnnn operator command.

**Routecode=rtcode**

Specifies up to four internal route codes to be assigned to this printer.

The maximum size of a route code is 18 characters. Wildcard specifications are allowed on this parameter for userids only. You can specify a route code in any of the forms listed below.

Ummmmm

destid

remote

## PRT(nnnnn)

user

**Note:** If you specify a `destid` on the `Routecde` parameter, you must place the `DESTID` initialization statement before the `PRTnnnnn` statement in the initialization stream. Explanations of the different forms of specifying route codes follow.

### **Ummmmm**

Indicates that output for special local routing is selected. The special routing numbers range from 1 to 32767.

### **destid**

Indicates that output routed to the specified node(s) is selected. If `destid` is specified alone, it refers to both the node and the remote.

### **LOCAL | ANYLOCAL**

Indicates that output routed to the local node is selected.

### **remote**

Indicates that output routed to a remote is selected. Remote can be specified in any of the following ways:

#### **Rmmmmm**

Indicates that output routed to the specified remote is selected. `Rmmmmm` can also be specified as `RMmmmmm` or `RMTmmmmm`. The value specified for `mmmmm` can range from 1 to 32767.

#### **destid**

Indicates that output routed to a `destid` referring to a remote is selected.

### **user**

Indicates that output routed to a specific `userid` is selected. Generic `userid`s are also valid. A generic `userid` is a `userid` that ends in an asterisk (\*), and refers to all `userid`s that begin with the characters preceding the \*. Note that the \* can only be specified in the last position of the `userid`.

A `userid` at the local node must be in the form of a valid TSO/E `userid`. It must begin with an alphabetic (A-Z) or a special character ( @ # or \$ ), and the remaining characters may be alphabetic, numeric, or special characters.

If you specify only one route code the parentheses are optional. To specify a null route code, use `Routecde=( )` to cause this printer to select no work if `Routecde` is also specified in the `WS=` list.

**Note:** Route codes for local devices should be used cautiously if you have also coded `R` on the `WS=` parameter on this statement. When a printer has been assigned a route code or route codes, it is considered available only for a job that requests printed output through the `/*ROUTE` control statement, through the `DEST` keyword on the `/*OUTPUT` control statement, the `JCL OUTPUT` statement, the output initialization parameter, or through an operator command. A printer with print routing may also be the default destination for jobs read through a local or remote reader specifying `PRDEST=` and `PRLCL=|PRRMT=`. See the `RDRnn` and `Rnnnnn.RDn` statements for the details of these options.

**Modification:** `$T PRTnnnnn` operator command.

If you do not specify this parameter, the default is `LOCAL`.



**Sep=Yes|No**

Specifies whether (Yes) or not (No) separator pages are provided initially between data set groups. (Separator pages can be specified later by the JES2 \$T PRTnnnnn command.) JESNEWS data will not be printed unless the job separator page is requested. This specification can be overridden by an Exit 1 routine.

If you do not specify this parameter, JES2 supplies a default of SEP=Yes. However, if LOCAL=NONE or REMOTE=NONE was specified on the SEPPAGE= parameter of the PRINTDEF initialization statement, separator pages are not produced even if SEP is specified.

**Modification:** \$T PRTnnnnn operator command. For FSS-controlled printers only, if you modify this parameter value and then reconnect the printer on a hot start, the parameter value in effect before termination will be used.

**SEPDS=Yes|No**

Specifies whether (Yes) or not (No) data set separator pages are desired for the data sets within the output groups selected for processing by printers. For this parameter to affect processing, you must customize JES2 or a functional subsystem as follows.

For JES-mode printers (MODE=JES), your systems programmer must have written an Exit 15 (Output Data Set/Copy Separators) that examines the SEPDS= specification and produces separator pages when SEPDS=Yes. Exit 15 controls both the production of separator pages and whether they are affected by the SEPDS= parameter. If Exit 15 is enabled, it is invoked even if SEPDS=No. To enable Exit 15, see *z/OS JES2 Installation Exits*.

For functional subsystem printers (MODE=FSS), JES2 makes an indication of the parameter's setting available to the functional subsystem. If an FSS printer is controlled by PSF, an APSUX03 exit must have been installed to produce data set header pages. APSUX03 is not invoked if SEPDS=NO. For more information about the APSUX03 exit, see *PSF for z/OS: Customization*.

**Default:** SEPDS=NO

**Modification:** \$T PRTnnnnn operator command. For FSS-controlled printers only, if you modify this parameter value and then reconnect the printer on a hot start, the parameter value in effect before termination will be used.

**Note:** Be careful not to confuse this parameter with the SEP=.

**SETUP=HALT|NOHALT**

Specifies whether JES2 issues the device setup message (\$HASP190) after a change of device characteristics (for example, forms control).

SETUP=HALT halts the printer and issues the setup message. This allows the operator to verify the changes to the printer.

SETUP=NOHALT allows the printer to process output without requiring setup verification by the operator. With SETUP=NOHALT, JES2 can load any printer characteristics that require no manual intervention. have not changed to process output.

**Modification:** \$T PRTnnnnn operator command. For FSS-controlled printers only, if you modify this parameter value and then reconnect the printer on a hot start, the parameter value in effect before termination will be used.

**START=Yes|No**

START=No specifies that this printer is to be started by operator command.

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START=Yes specifies that this printer (if it is ready) will be started automatically when JES2 starts processing.

**Default:** START=Yes: if the Yes keyword was specified on this initialization statement and unit was not specified for a non-FSS mode printer.

**Modification:** \$S PRTnnnnn operator command or \$P PRTnnnnn operator command.

### TRace=Yes|No

Specifies whether tracing is activated or deactivated for the specified print processor. To trace a printer, you must also provide the following initialization statements:

```
TRace(n) START=Yes
TRACEDDEF ACTIVE=Yes
```

Trace IDs 11, 12, 14, 15, and 16 can be specified through the TRACE(n) initialization statement and the \$S TRACE command by coding nn for each trace ID. Note that trace ids 14, 15, and 16 apply to FSS printers.

**Modification:** \$T PRTnnnnn command. For FSS-controlled printers only, if you modify this parameter value and then reconnect the printer on a hot start, the parameter value in effect before termination will be used.

For further information about coding this parameter, see *z/OS JES2 Initialization and Tuning Guide*. For further information about the tracing facility, see *z/OS JES2 Diagnosis*. For an explanation of the \$S TRACE command, see *z/OS JES2 Commands*.

### TRANS=Yes|No|DEFAULT

If this PRT(nnnnn) statement specifies or defaults to MODE=JES, the TRANS= parameter on this statement affects data translation:

- If the PRT(nnnnn) statement specifies TRANS=Yes, JES2 translates each line of output sent to the device regardless of the device type or the setting of the PRINTDEF TRANS= parameter.
- If the PRT(nnnnn) statement specifies TRANS=No, JES2 does not translate output sent to the device regardless of the device type or the setting of the PRINTDEF TRANS= parameter.
- If the PRT(nnnnn) statement specifies TRANS=DEFAULT, or TRANS= is omitted from the PRT(nnnnn) statement, and the PRINTDEF statement specifies TRANS=Yes, and the device is either a local 1403 or a remote printer, JES2 translates each line of output sent to the device. Otherwise, JES2 does not translate output sent to the device.

**Modification:** \$T PRTnnnnn,TRANS= operator command. Do not issue this command unless the printer is inactive or drained.

### TRKCELL=Yes|No

Yes specifies that an entire track cell is to be despoiled (read from the spool) in one operation, for data sets that belong to a SYSOUT class that has the track-cell characteristic. The number of records in the track cell is governed by the TRKCELL parameter on the SPOOLDEF statement. Specifying TRKCELL=Yes and double buffering (DBLBUFR=Yes on the PRINTDEF statement) indicates double track-cell buffering.

NO indicates that track-cell despooling is not to be used. Instead, spool records are despoiled 1 record per despooling operation.

**Performance Considerations:** You can use track-cell despooling for any printer supported by JES2. However, TRKCELL=No (the default) is recommended for

low-speed printers such as the 3820 because a considerable amount of storage space is saved. But for high-speed printers such as the 3800-3 running under the control of an FSS, TRKCELL=YES is required to prevent performance degradation.

**Modification:** \$T PRTnnnnn operator command. For FSS-controlled printers only, if you modify this parameter value and then reconnect the printer on a hot start, the parameter value in effect before termination will be used.

#### UCS|T=vvvv

Specifies, for impact printers, the print train (print chain or print band) that is mounted on this printer. The value of vvvv is the identifier (1-4 characters) of a universal character set (UCS) image that resides in SYS1.IMAGELIB.

For 3800 printers, vvvv specifies both the character arrangement table that JES2 initially loads into the printer and the installation's default character arrangement tables for data sets not specifying any character arrangement. See *Advanced Function Presentation: Printer Information* for information about the IBM-supplied character arrangement tables and the addition of other character arrangement tables to SYS1.IMAGELIB.)

If you specify an incorrect identifier, JES2 bypasses the UCS loading procedure and issues the \$HASP190 setup message allowing the operator to specify a valid image.

If you do not specify this parameter, JES2 selects the default based upon the type of printer:

- For impact printers, the identifier specified by the UCS= parameter on the PRINTDEF statement.
- For 3800 printers, the identifier specified by the NIUCS= parameter on the PRINTDEF statement.

**Modification:** \$T PRTnnnnn operator command. For FSS-controlled printers only, if you modify this parameter value and then reconnect the printer on a hot start, the parameter value in effect before termination will be used.

**Note:** This parameter is not supported for a 1403 printer that does not have the UCS feature. If you specify UCS=0 (or if a zero value was specified for the UCS parameter on the PRINTDEF statement), JES2 will not load the UCS buffer.

#### UCSVERIFY=Yes|No

Specifies whether (Yes) or not (No) UCS verification processing is performed when a UCS image is loaded for 4245 and 4248 printers. UCS images are loaded on 4245 and 4248 printers only when required for print processing (they are **not** loaded in response to a \$T PRT operator command that specifies a change in UCS setup). Specifying UCSVERIFY=Yes provides UCS verification and causes the band image to be displayed to the 4245 and 4248 printers. UCSVERIFY=No suppresses the image display.

**Modification:** \$T PRTnnnnn operator command.

#### UNIT={hhh|/hhh}

Specifies a 3- or 4-digit hexadecimal device number. Device numbers can be specified by any of the following formats:

```
UNIT=hhh
UNIT=hhhh
UNIT=/hhh
UNIT=/hhhh
```

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where hhh and hhhh represent the device numbers.

A slash (/) can optionally precede the device number (for compatibility with other initialization statements that require a slash to denote a 4-digit device number).

If not specified, JES2 does not assign an available printer; instead, a printer can be dynamically assigned using a \$T PRT command.

**Modification:** \$T PRTnnnnn operator command. For FSS-controlled printers only, if you modify this parameter value and then reconnect the printer on a hot start, the parameter value in effect before termination will be used.

### Note:

1. This parameter is not required if the printer defined by this statement is an SNA-attached IBM 3820 printer. If a UNIT= specification is provided when defining a non-channel attached IBM 3820 printer, JES2 will ignore it.
2. If UNIT= is not specified at this time, the defaults for COPYMARK=, FLASH=, FCB=, and UCS= will be based on the setting of the MODE= parameter. If MODE=FSS, the defaults will be the same as if the device were a non-impact printer. If MODE=JES, the defaults will be set assuming the device is an impact printer.

### Volume=(v1[,v2][,v3][,v4]) | ()

Specifies the 5- to 6-character volume serial number of a volume containing a spool data set. Only output jobs containing tracks on the specified volume can be selected for printing. As many as four volumes can be specified. Use commas to separate individual volume IDs and enclose this list in parenthesis if more than one ID is specified.

**Modification:** \$T PRTnnnnn operator command

### Writer=xxxxxxx

Specifies the 1- to 8-character writer name assigned to this printer. Wildcard specifications are allowed on this parameter.

If you do not specify this parameter, no writer name is assigned.

**Modification:** \$T PRTnnnnn operator command.

### WS=criteria | (W,Q,R,PRM,LIM/F,T,C)

Specifies the work selection criteria (listed below) for this device. Criteria that are not specified are not considered during output selection although they are used by JES2 to determine setup requirements. This parameter can be particularly useful when draining a specific spool volume. You specify a list of selection criteria as follows:

- One and only one slash (/) may precede or follow any number of criteria. The slash separates the work selection criteria that must be matched exactly from those that need not be matched exactly to the characteristics of the output. If you do not code a slash, all criteria specified must be matched exactly. (See *z/OS JES2 Initialization and Tuning Guide* for a further discussion of device to job matching.)
- The order of those criteria specified before the slash (those that must be matched exactly) may affect output selection. All criteria will be matched regardless of the sequence in which they are listed. See *z/OS JES2 Initialization and Tuning Guide* for details on output selection.
- The order of those criteria specified after the slash (those that need not match exactly) indicates the priority (highest to lowest in left to right order) in which JES2 will attempt to match them.

- Queue (class), Routecde (route) and Volume criteria are exceptions; these must be matched exactly, and will be, no matter where you specify them in the criteria list. However, specifying these criteria before the slash indicates a left to right priority order of multiple values, if multiple values are designated. Specifying either one after the slash indicates no priority order of multiple values, if multiple values are designated on the output device initialization statement.
- If a criterion is omitted from the list of selection criteria, it will not influence work selection, but if characteristics of the selected output differs from the output device's selection criteria, a setup message may be issued to the operator.

Unless otherwise noted, if the criterion is specified before the slash, an exact match is required; if after the slash, an exact match is preferred (and attempted in left to right priority) but not required, only the priority order is considered.

You can specify the following *criteria* on the WS= parameter:

#### **Burst**

Specifies that the current BURST= specification is either required or preferred.

#### **Class|Queue**

Specifies that a match must be found for the output classes specified on this device. If Q is omitted from the WS list, all output queues (beginning with queue A) will be searched for work.

**Note:** If specified before the slash, the priority of the device characteristics table class list is from left to right. If specified after the slash, there is no device characteristics table class list priority ordering. To increase performance, this criterion should be placed before the slash.

#### **CREator**

Specifies that output for the current userid is preferred. JES2 attempts to consecutively select all eligible output for a particular userid. However, output is only grouped in this manner depending upon the specification of the current work selection list and output queues. If specified to the left of the slash, an exact match is required.

#### **FCB|C**

Specifies that the current forms control buffer (FCB) image or carriage control tape is either required or preferred.

#### **Flash|0**

Specifies that the current FLASH= specification is either required or preferred.

#### **Forms**

Specifies that the current FORMS= specification is either required or preferred. If FORMS is omitted from the criteria list, work selection will not contain any forms checking.

#### **JOBname**

Specifies that JES2 gathers all output for a job and attempt to process that output consecutively. The JOBNAME= parameter for a particular device determines what job name JES2 selects when JES2 has processed all output that matches the current job name.

- If JOBname= is specified before the slash in the WS= list:  
JES2 selects only those jobs that match the value specified on JOBNAME= for a specific device. When JOBNAME= is specified as a

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generic name, JES2 only processes jobs that match that pattern and attempts to process all output for that job name consecutively.

- If JOBname= is specified after the slash in the WS= list:

JES2 uses the value specified on JOBNAME= to select new job names for the specific device. If there are no job names that match the JOBNAME= specification, JES2 selects jobs as if JOBname were not listed in the WS= list. A device gathers and processes all output for a particular job before again examining the value specified on JOBNAME= for more jobs.

If you require JES2 to group jobs based on job name but do not want JES2 to prefer a particular JOBNAME= pattern, specify JOBNAME=\* on the device statement and code JOBname after the slash in the WS= list.

### LIMit

Specifies that the limits of output, as noted on the LIMIT= keyword (on this initialization parameter) will be supported, that is, the amount of generated output must fall within the LIMIT= specification.

This subparameter has no effect as a work selection value for files received from a node that does not provide a page count for its files. For more information, see the sending node's reference documentation.

### PRMode|PMD

Specifies that the current PRMODE= specification is preferred. If more than one mode is specified, they are in left to right priority order.

**Note:** To print output, a match must be found; this criterion should be placed before the slash.

### Priority

Specifies that output priority will be considered. Priority is not matched with any other parameter; rather, it specifies that a higher output priority receives greater output preference. If specified before the slash, the importance of selecting output by priority is increased.

### Routecde

Specifies that only output destined for a destination specified by a route code listed on the ROUTECDE= parameter is eligible for selection by this device.

**Note:** If Routecde is specified before the slash, the route code(s) are in left to right priority order; if specified after the slash, there is no such priority order.

### RANGE

Specifies that the current job ID range is preferred. If specified to the left of the slash, an exact match is required.

### Volume

Specifies that only output with tracks on the currently specified volume can be selected for printing. If specified to the left of the slash, the volumes are considered to be in left to right priority order. If specified to the right of the slash, no priority order exists, but an exact match is still required.

### Writer

Specifies that the writer name (W=) specification is either required or preferred.

### UCS|T

Specifies that the currently mounted print train (on impact printers only) is



either required or preferred. If omitted from the work selection list, the UCS specified for the output is not required to match the device setup, but a setup message will be issued to the operator if the UCS= specifications differ.

**Note:** Embedded comments are not allowed within the WS= parameter specification.

**Modification:** \$T PRTnnnnn operator command.

## Parameter Description for FSS Printers Only:

### CKPTMODE=PAGE|SEC

Specifies whether the checkpointing of information is to be based on page count (CKPTMODE=PAGE) or time (CKPTMODE=SEC).

**Note:** If this parameter is specified, and both the CKPTPAGE= and CKPTSEC= keywords on this initialization statement have also been specified, this parameter specification determines if the checkpoint interval is based on the number of pages (the CKPTPAGE=pages specification) or time (the CKPTSEC=seconds specification).

**Modification:** \$T PRTnnnnn operator command.

### CKPTSEC=nnnnnn | 0

Specifies the number (0-32767) of seconds before an output checkpoint is taken by a functional subsystem.

**Note:** If you code both CKPTPAGE= and CKPTSEC=, and you either omit CKPTMODE= or code CKPTMODE=PAGE, the CKPTPAGE= specification overrides the CKPTSEC= specification.

**Modification:** \$T PRTnnnnn operator command.

### COPYMARK=DATASET|JOB|CONSTANT|NONE|DEFAULT

Specifies how a printer increments copy marks or offset stacking.

#### DATASET

The printer is to increment the copy marks or offset stacking on a data set boundary.

#### JOB

The printer is to increment the copy marks or offset stacking on a job boundary.

#### CONSTANT

Copy marks are constant, and no offset stacking is done.

#### NONE

No copy marks are used and no offset stacking is done.

**Note:** COPYMARK=NONE only works if the FSS application supports that setting. If it is not supported by the FSS application, COPYMARK=NONE acts like COPYMARK=CONSTANT.

**Modification:** \$T PRTnnnnn operator command. For FSS-controlled printers only, if you modify this parameter value and then reconnect the printer on a hot start, the parameter value in effect before termination will be used.

### FSS=accccc

Specifies a 1- to 8-character functional subsystem name that supports a

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page-mode printer. If an FSSname is not defined by an FSS(acccccc) initialization statement, the functional subsystem name assigned on this statement will cause the generation of a default FSS initialization statement. The FSS(acccccc) statement then defines (by default) the subscript(acccccc) and PROC name specified here.

**Modification:** \$T PRTnnnnn operator command.

### Note:

1. This parameter must be specified if MODE=FSS is specified for this PRT(nnnnn) statement. If this parameter is not specified, the MODE setting becomes MODE=JES.
2. You must also specify UNIT=, if this PRT(nnnnn) statement defines a 3827 or 3835 printer.

### MODE=FSS

Specifies this printer is initially started under the operation of a functional subsystem. An operator can change the control mode by use of the \$T PRTnnnnn command whenever the printer is drained.

**Attention:** If a line-mode printer (3800 model 1, for example) is defined as a page-mode printer operating under the control of a functional subsystem, page-mode data **will** be directed to it although the page-mode data will be ignored by the printer. There will be no warning message, initialization error, or message of any type to warn the operator. Incorrect, unexpected output from the printer will result.

MODE= defaults to FSS if FSS= is also specified on this initialization statement and UNIT= was not specified.

**Modification:** \$T PRTnnnnn operator command.

### NPRO=nnnnn | 300

Specifies the non-process-runout (NPRO) time interval, in seconds (0-3600). The NPRO time interval is that time interval during which output remains in the paper path but has not reached the stacker. After the NPRO time specification has elapsed, the functional subsystem directs the page-mode printer to force the output to the stacker. NPRO=0 specifies that a timer-based NPRO is not to be used.

**Note:** This keyword is only supported for 3800 model 3 printers under the control of a functional subsystem.

**Modification:** \$T PRTnnnnn operator command.

### PLIM=m | m-n | m-\*

Specifies upper and lower bounds (in pages) for the size of job output elements eligible for this printer. The values *m* and *n* specify the lower and upper limits of the range (in pages) into which a JOE must fall to be processed by this printer.

For both variables *m* and *n*, you can specify a range of values from 0-4294967295. *m* and *n* can be equal. If they are not equal, *n* must be larger than *m*.

If you code only *m*, that value becomes both the lower and upper limit. If m-\* is specified, the upper limit is set to the default value of 4294967295.

### Note:



1. If the printing of a data set is interrupted by a warm start, the original number of pages specified in the JOE is used to determine where the remainder of the output is to be printed.
2. When PLIM is specified (non zero value) for r(nnnn).pr(m) PRMODE of PAGE will be of significance for remote printers and WS criteria for remote printers.

**Default:** If you omit this parameter, JES2 uses the defaults  $m=0$  and  $n=4294967295$ .

**Modification:** \$T PRTnnnnn operator command.

#### PRESELECT=Yes|No

PRESELECT=Yes, specifies that this FSS printer initially selects two output groups for processing. From then on, the printer will keep two output groups available for processing until you stop the printer. The preselected output groups are not available for processing by other printers.

If you specify PRESELECT=No, this FSS printer will select only one output group for processing.

**Note:** This parameter is valid only for printers controlled through an FSS.

#### Performance Considerations:

- If this printer preselects a second output group and is busy printing a large output group, be aware that the operator is unable to change the destination of this second output group. As a result, this second print job is delayed on this printer until the first output group completes printing, whereas it could have printed elsewhere had it not been preselected.
- If an FSS requests forms repositioning (such as might occur during a paper jam or because of a \$B, \$F, or \$I command), the resulting sequence of the output data sets might be different than expected.

**Modification:** \$T PRTnnnnn operator command. For FSS-controlled printers only, if you modify this parameter value and then reconnect the printer on a hot start, the parameter value in effect before termination will be used.

## Parameter Description for Non-Impact Printers (JES & FSS mode)

#### Burst=Yes|No

Specifies whether the printed output from a 3800 printer is to be burst into separate sheets (Yes) or to be printed in continuous fanfold form (No). The use of this parameter sets the initial status of the printer for output work selection.

**Modification:** \$T PRTnnnnn operator command. For FSS-controlled printers only, if you modify this parameter value and then reconnect the printer on a hot start, the parameter value in effect before termination will be used.

#### DEVFLASH | FLASH|0=xxxx

A 1- to 4-character name that specifies the name of the default forms FLASH ID that JES2 uses on printers that can perform forms flashing. The use of DEVFLASH= or FLASH= are equivalent when used to set the forms FLASH ID. This forms FLASH ID is used for jobs selected by this printer that do not have the FLASH= parameter explicitly coded on the job's JCL. The user can override this default forms FLASH ID by explicitly requesting forms flashing on the job's JCL DD statement (with the SYSOUT parameters), JCL OUTPUT statement, or /\*OUTPUT JES2 control statement. If you specify

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FLASH=NONE, no forms flashing occurs regardless of the setting of the NIFLASH= parameter on the PRINTDEF statement.

If you omit this parameter, the global default value specified by the NIFLASH= parameter on the PRINTDEF statement is used for the forms FLASH ID.

**Modification:** \$T PRTnnnnn operator command. For FSS-controlled printers only, if you modify this parameter value and then reconnect the printer on a hot start, the parameter value in effect before termination will be used.

You can change a forms FLASH ID only if it was originally specified by the DEVFLASH= parameter. To do so, issue the \$T PRTnnnnn,DEVFLASH=xxxx command after draining the printer.

### MARK=Yes | No

MARK=Yes specifies for a non-impact printer that there is marking on the edge of the separator page.

If you do not specify this parameter, it becomes MARK=No, which specifies (when MODE=JES2) for a non-impact printer that there is no marking on the edge of the trailer separator page. If MODE=FSS, MARK=No specifies for a non-impact printer that although no mark is produced on the edge of the trailer separator page, a unique mark is produced on the carrier strip (that is, the punched, perforated page edge).

**Modification:** \$T PRTnnnnn operator command. For FSS-controlled printers only, if you modify this parameter value and then reconnect the printer on a hot start, the parameter value in effect before termination will be used.

### SEPCHARS=CURRENT | DEFAULT

Specifies whether separator pages printed on the 3800 printer use the character arrangement table loaded in the 3800 (CURRENT) or the installation default character arrangement table (DEFAULT).

JES2 attempts to use the installation default character arrangement table (see the NIUCS= parameter on the PRINTDEF statement) for separator pages if the UCS= parameter is not specified on the PRT statement. These options determine the action taken when the default is not already loaded.

If the installation default character arrangement table is not loaded, SEPCHARS=CURRENT tells JES2 to use the first character arrangement table. SEPCHARS=DEFAULT tells JES2 to specify that the table must be loaded before it prints the separator pages.

This parameter is valid only for 3800 JES-mode printers. If you do not specify a default on those printers, JES2 specifies that SEPCHARS=DEFAULT.

**Modification:** \$T PRTnnnnn operator command.

---

## PUN(nn) - Local Card Punch

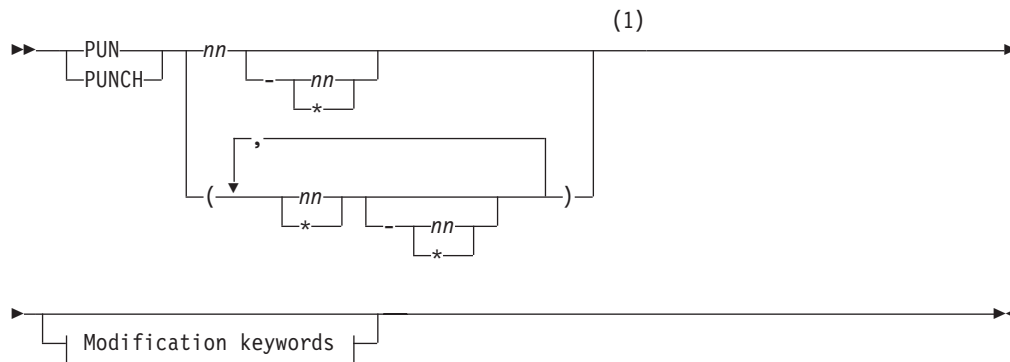
The PUN(nn) statement specifies the characteristics of one local card punch. Each punch device is defined by a PUN(nn) statement with a unique value (1-99) specified for nn. Punch characteristics are specified by the following parameters.

The dual reader/punch feature is supported by JES2 as shown in the following example. Assume that a 3525 with the read feature has a unit address of 013 and that the following two items appear in the JES2 initialization data set:

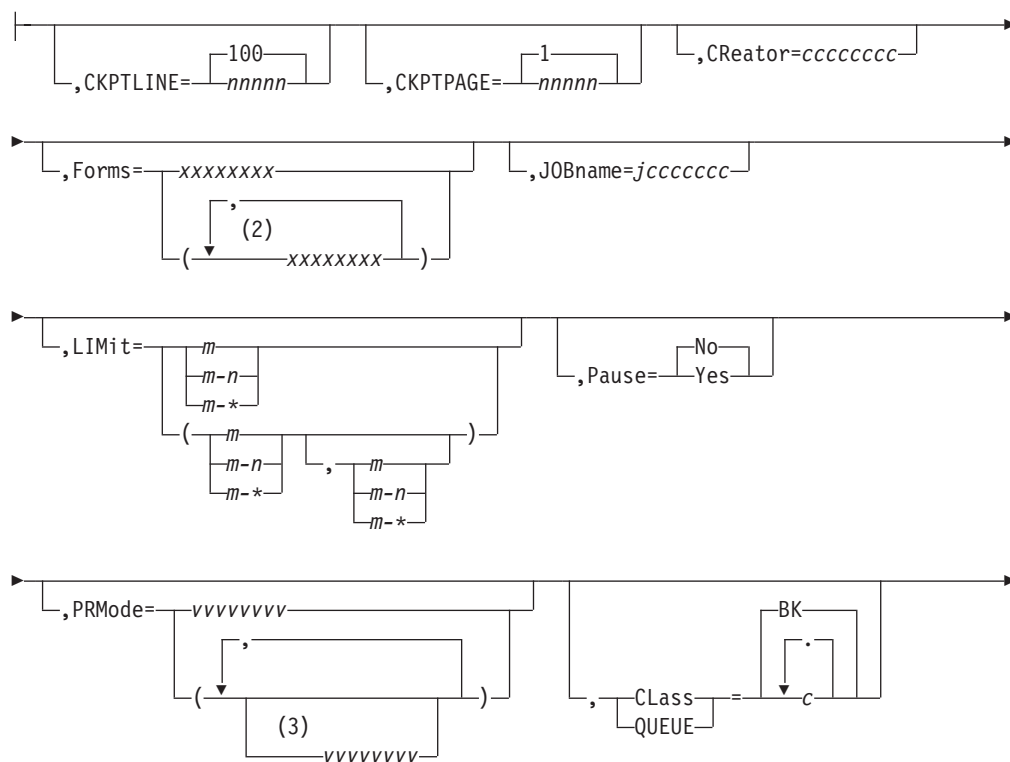
```
RDR(2) UNIT=013,START=NO
PUN(1) UNIT=013
```

When JES2 is started, the reader will be stopped and the punch feature will be activated. If the operator later wants to read data from the 3525, he can stop punch 1 and start reader 2 with JES2 commands.

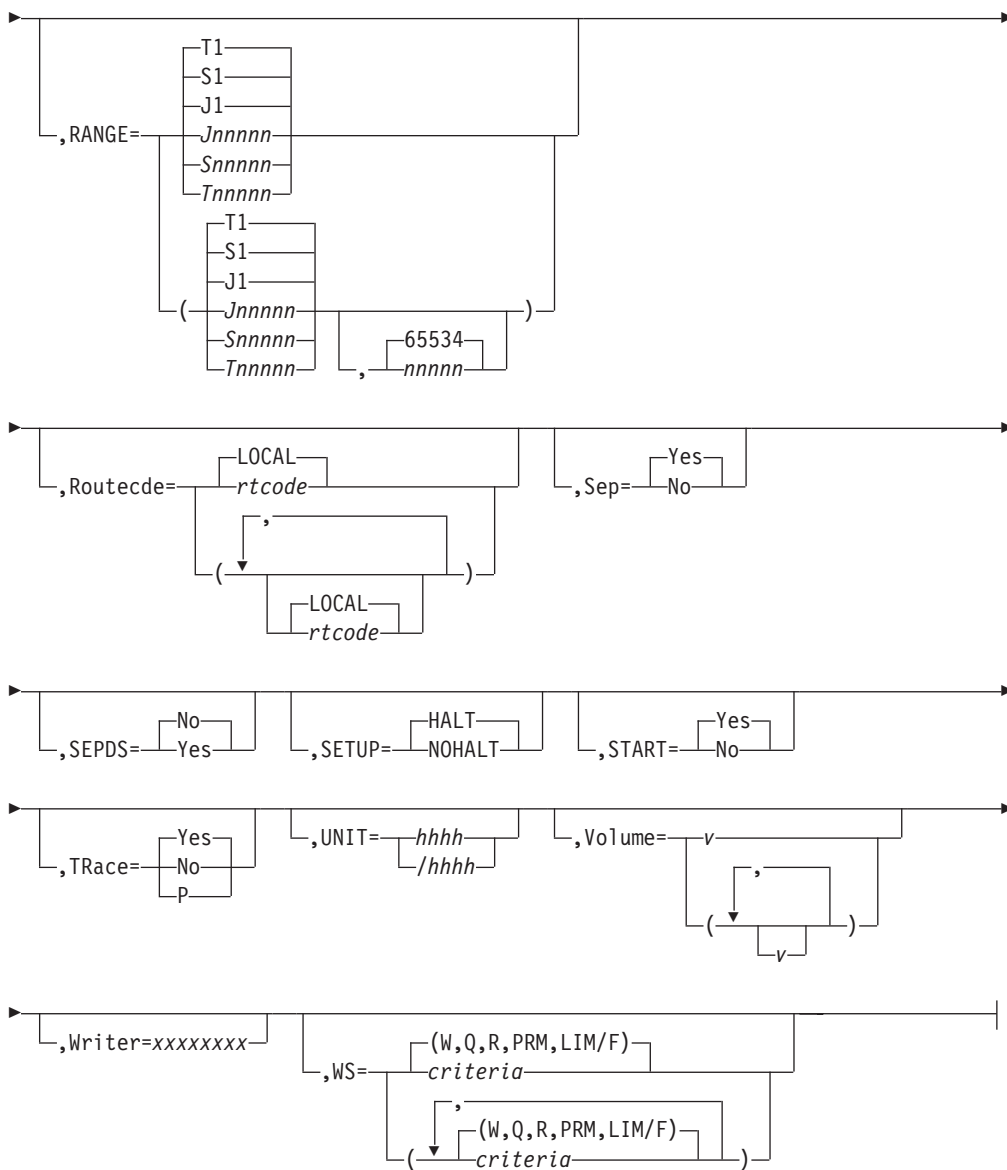
### Format Description for PUN(nn)



#### Modification keywords:



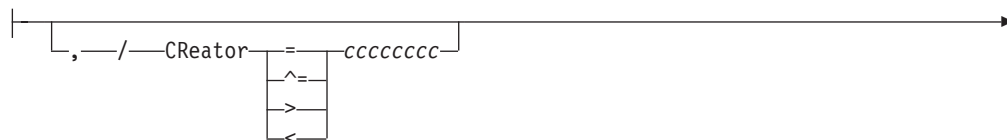
# PUN(nn)

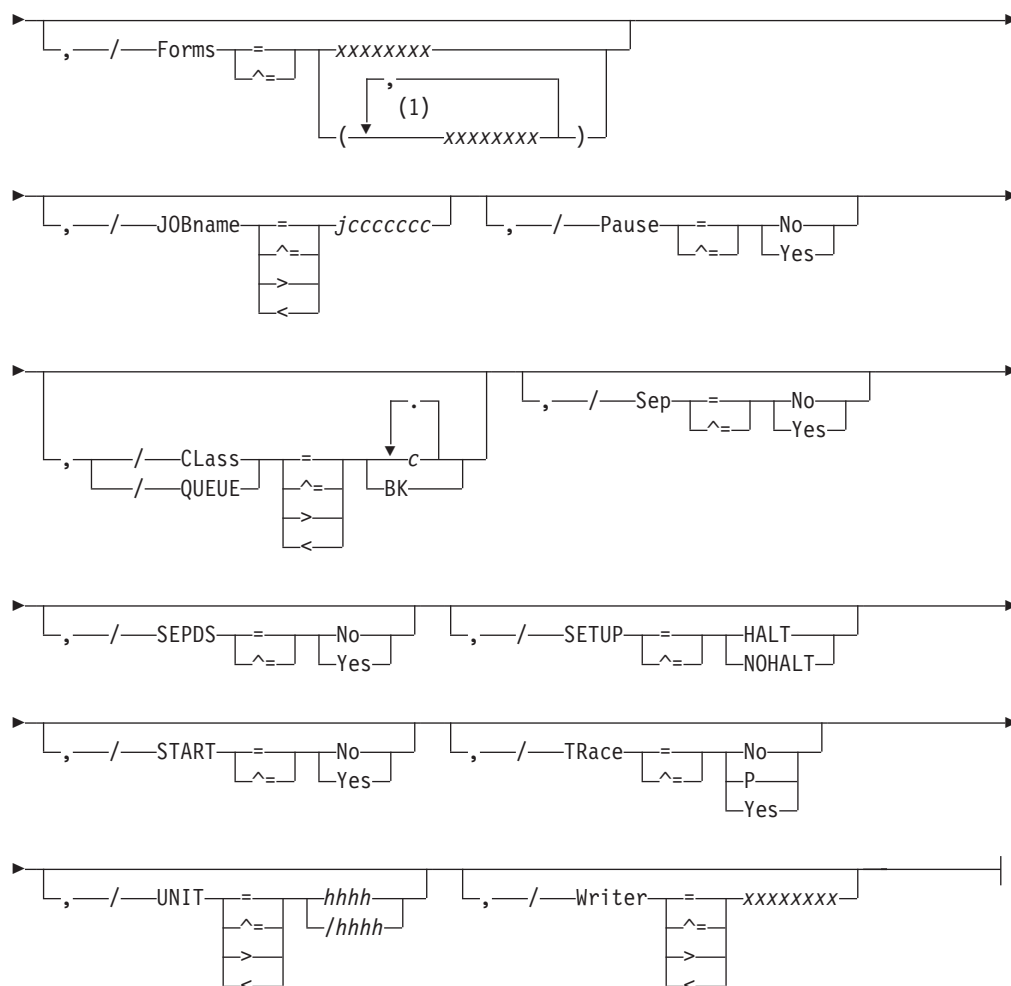


## Notes:

- 1 Omit the comma between initialization statement and first keyword
- 2 *Forms* can be coded up to 8 times
- 3 *PRMode* can be coded up to 8 times

## Selection limiting keywords:





**Notes:**

- 1 Forms can be coded up to 8 times

**Parameter Description for PUN(nn)**

**CKPTLINE=nnnn|100**

Specifies the number of cards (1-32767) to be punched per logical page. This value is the only one used to define a logical page for punches.

**Modification:** \$T PUN(nn) operator command.

**Note:** To switch off checkpointing, specify CKPTLINE=0.

**CKPTPAGE=nnnn|1**

Specifies the number (1-32767) of logical pages to be punched before each checkpoint is taken.

**Modification:** \$T PUN(nn) operator command.

**{Class|Queue}=c1...cn|BK**

Specifies the output classes to be processed initially by this card punch. You can specify any number of classes (A-Z and 0-9) up to the maximum of 15 classes.

**Modification:** \$T PUN(nn) operator command.

## PUN(nn)

### **CREATOR=ccccccc**

Specifies the 1- to 8-character userid whose output can be selected by this punch. Wildcard specifications are allowed on this parameter.

If this parameter is allowed to default, JES2 can select all output for processing, regardless of userid.

**Modification:** \$T PUN(nn) operator command.

### **FORMS=xxxxxxxx, . . . ,xxxxxxxx**

Specifies the 1- to 8-alphanumeric character forms name of the forms that are to be loaded initially in this punch. Wildcard specifications are allowed on this parameter.

If you do not specify a value, JES2 provides the forms identifier specified by the STDFORM= parameter on the OUTDEF statement.

**Modification:** \$T PUN(nn) operator command.

### **JOBNAME=jcccccc**

Specifies the 1- to 8-character job name for jobs whose output can be selected by this punch. Wildcard specifications are allowed on this parameter.

If this parameter is allowed to default, JES2 can select all output for processing, regardless of jobname.

**Modification:** \$T PUN(nn) operator command.

### **LIMIT=m|m-n|m-\***

Specifies that output is selected for specific punches based upon the amount of the output (in records). The values *m* and *n* specify within what output size range (in records) a job output element (JOE) must fall to be processed by this punch. The integer *m* specifies the lower output size limit and *n* specifies the upper output size limit.

For both variables *m* and *n*, you can specify a range of values from 0-4294967295. *m* and *n* can be equal. If they are not equal, *n* must be larger than *m*.

If you code only *m*, that value becomes both the lower and upper limit. If *m-\** is specified, the upper limit is set to the default value of 4294967295.

After a warm start, the original size of the output (before any punching) will be used to determine where the remainder of the output will be punched. That is, the original size of the JOE will be used to determine output device selection.

The default values are *m*=0 and *n*=4294967295.

**Modification:** \$T PUN(nn) operator command.

### **PAUSE=Yes|No**

Specifies whether (Yes) or not (No) this card punch is to pause between data set groups.

**Modification:** \$T PUN(nn) operator command.

### **PRMODE=(vvvvvvv[,vvvvvvv...])**

Specifies one to eight names used by JES2 to direct output data sets to this output device. Wildcard specifications are allowed on this parameter. If only one PRMODE is specified, the parentheses are optional. Users can assign a PRMODE value to the data sets by using JCL OUTPUT statements. However, if the user does not specify a process mode for the data set, JES2 will assign a process mode. If the data set contains formatting controls that can only be

processed by a page-mode printer, JES2 defaults the PRMODE= specification to PAGE. For all other data sets, the default is LINE.

Your installation may have output devices capable of printing other than line-mode data sets. If so, you can specify a name(s) on this parameter designating the output device as capable of accepting such data sets. For installation-defined process modes, use the Uvvvvvvv form of the process mode designation. The U identifies the process mode as installation defined. Installation-defined and IBM-defined process mode designations may be mixed on one PRMODE= parameter statement. For example, you can specify names on this parameter designating the output device as capable of accepting data sets that can be printed on either a plotter device (for example, UPLOT2) or a line-mode printer by specifying:

```
PRMODE=(UPLOT2,LINE)
```

**Note:**

1. You can specify only up to eight process modes on a single device; however, you can specify as many as 255 different modes throughout a particular JES2 member.
2. Within a job entry network, receiving nodes must designate the same process mode as that specified on the data set(s) sent to them. If the receiving node has not specified the same process mode, the data set(s) will not be printed.
3. To specify a null processing mode, use PRMode=().

**Default:** LINE, except for those data sets containing formatting controls that can only be processed by page-mode printers. The default for these data sets is PAGE.

**Modification:** \$T PUN(nn) operator command.

**RANGE={J|S|T}nnnnn[-nnnnn] | J1-999999**

Specifies the job ID range for output jobs that can be selected by this punch. Use "J" to specify batch jobs, "S" to specify stated tasks, and "T" for TSO/E jobs. You can specify a single job number or range (up to 65534) of jobs. If you code this parameter, you can specify one or two values:

- If you specify one value, that value becomes both the low and the high end of the range.
- If you specify two values, the first value is the low end of the range and the second value the high end. The two values can be equal. If they are not equal, the second value must be larger than the first value.

**Modification:** \$T PUN(nn) operator command.

**Route~~code~~=rtcode | LOCAL**

Specifies up to four internal route codes to be assigned to this card punch. Wildcard specifications are allowed on this parameter for userids only. A route code indicates that this card punch is to be eligible for punch routing.

The maximum size of a route code is 18 characters. You can specify a route code in any of the forms listed below.

```
Ummmm
destid
remote
user
```

## PUN(nn)

**Note:** If `destid` is used, it must be previously defined on a `DESTDEF` statement in the initialization stream. Explanations of the different forms of specifying route codes follow.

### **Ummmm**

Indicates that output for special local routing is selected. The special routing numbers range from 1 to 32767.

### **destid**

Indicates that output routed to the specified node(s) is selected. If `destid` is specified alone, it refers to both the node and the remote.

### **remote**

Indicates that output routed to a remote is selected. Remote can be specified in any of the following ways:

#### **LOCAL | ANYLOCAL**

Indicates that output routed to the local node is selected.

#### **Rmmmm**

Indicates that output routed to the specified remote is selected. `Rmmmm` can also be specified as `RMmmmm` or `RMTmmmm`. The value specified for `mmmm` can range from 1 to 32767.

#### **destid**

Indicates that output routed to a `destid` referring to a remote is selected.

### **user**

Indicates that output routed to a specific `userid` is selected. Generic `userid`s are also valid. A generic `userid` is a `userid` that ends in an asterisk (\*), and refers to all `userid`s that begin with any character preceding the \*. Note that the \* can only be specified in the last position of the `userid`.

A `userid` at the local node must be in the form of a valid TSO/E `userid`. It must begin with an alphabetic (A-Z) or a special character ( @ # or \$ ), and the remaining characters may be alphabetic, numeric, or special characters.

You can override the destinations specified by this parameter with the set operator command (`$T`). If you specify only one route code the parentheses are optional. To specify a null route code, use `Routecdc=( )` to cause this punch to select no work if `Routecdc` is also specified in the `WS` list. Use the `Unnnn` form to specify this punch as a special local punch.

**Note:** Route codes for local devices should be used cautiously. When a card punch has been assigned a route code or route codes, it is considered available only for a job that requests punched output through the `DEST` keyword on the `/*OUTPUT` control statement or `JCL OUTPUT` statement, or through the `/*ROUTE` control statement or by operator command.

**Modification:** `$T PUN(nn)` operator command.

### **Sep=Yes|No**

Specifies whether (Yes) or not (No) separator cards are not to be initially provided between data set groups. (Separator cards can be specified later by the `JES2 $T` command.) This specification can be overridden by a `JES2 Exit 1` routine. See *z/OS JES2 Installation Exits* for information about Exit 1.

**Modification:** `$T PUN(nn)` operator command.

### **SEPDS=Yes|No**

Specifies whether data set separator cards are desired for the data sets within



the job output elements (JOEs) selected for processing by the specific device. JES2 does not actually generate data set separator cards based on this parameter specification. If you enabled Exit 15 (Output Data Set/Copy Separators), SEPDS=Yes causes the exit to generate separator cards for each data set selected by this device. See *z/OS JES2 Installation Exits* for information about Exit 15.

**Modification:** \$T PUN(nn) operator command.

**Note:** Be careful not to confuse this parameter with the SEP= parameter.

#### SETUP=HALT|NOHALT

Specifies whether JES2 issues the device setup message (\$HASP190) after a change of device characteristics (for example, forms control).

SETUP=HALT halts the punch and issues the setup message. This allows the operator to verify the changes to the punch.

SETUP=NOHALT allows the punch to process output without setup verification by the operator. The punch uses any previously existing setup characteristics that you have not changed to process output.

**Modification:** \$T PUN(nn) operator command.

#### START=Yes|No

Specifies whether (Yes) or not (No) this card punch (if it is ready) starts automatically when JES2 starts processing.

**Note:** If the punch is to be started automatically and is unavailable when JES2 is started, it remains unusable until the next time JES2 is started, unless the UNIT= keyword is specified on this device statement. If UNIT= is specified, the specified unit is started although it may have been offline during JES2 initialization.

**Modification:** \$S PUNnnnn operator command or \$P PUNnnnn operator command.

#### TRace=Yes|No|P

Specifies whether tracing is activated or deactivated for all punches. To trace a punch you must also provide the following initialization statements:

```
TRACE(n) START=Yes
TRACEDEF ACTIVE=Yes
```

This parameter setting can be overridden by the \$T PUN(nnnn) operator command. Punch tracing is also controlled by trace IDs 11 and 12, the TRACE(n) and TRACEDEF initialization statements, and the \$S TRACE command. (See *z/OS JES2 Initialization and Tuning Guide*, the TRACE(n) and TRACEDEF initialization statements in this chapter, and *z/OS JES2 Commands* for a description of the \$S TRACE command for further information concerning the tracing facility.)

**Modification:** \$T PUN(nn) command

**Note:** If you modify this parameter value and then restart JES2 with a hot start, the parameter values in effect before termination will be used. (For further information, see *z/OS JES2 Initialization and Tuning Guide*.)

#### UNIT={hhh|/hhh}

Specifies a 3- or 4-digit hexadecimal device number. Device numbers can be specified by any of the following formats:

## PUN(nn)

UNIT=hhh  
UNIT=hhhh  
UNIT=/hhh  
UNIT=/hhhh

where hhh and hhhh represent the device numbers.

A slash (/) can optionally precede the device number (for compatibility with other initialization statements that require a slash to denote a 4-digit device number).

If UNIT= is specified, this card punch is allowed to start although it may have been offline during JES2 initialization.

If not specified, JES2 does not assign an available card punch; instead, a card punch can be dynamically assigned using a \$T PUNnn command.

**Modification:** \$T PUN(nn) operator command.

**Volume=(v1[,v2][,3][,4]) | ()**

Specifies the 5- to 6-character volume serial number of a volume containing a spool data set. Only output jobs containing tracks on the specified volume can be selected for punching. As many as four volumes can be specified. Use commas to separate individual volume IDs and enclose the list in parenthesis if more than one ID is specified.

**Modification:** \$T PUN(nn) operator command.

**Writer=xxxxxxxx**

Specifies the 1- to 8-character writer name assigned to this punch. If not specified, there is no writer name. Wildcard specifications are allowed on this parameter.

**Modification:** \$T PUN(nn) operator command.

**WS=criteria | (W,Q,R,PRM,LIM/F)**

Specifies the output selection criteria (listed below) for this device. Criteria not specified are not considered during output selection, although they are used by JES2 to determine setup requirements.

Unless otherwise noted, if the criterion is specified before the slash, an exact match is required; if after the slash, an exact match is preferred (and attempted in left to right priority) but not required, only the priority order is considered. The criteria that may be coded follow:

**Class|Queue**

Specifies that a match must be found for the output classes specified on this device. If Q is omitted from the WS= list, all output queues (beginning with queue A) will be searched for work.

**Note:** If specified before the slash, the priority of the device characteristics table class list is from left to right. If specified after the slash, there is no device characteristics table class list priority ordering. To increase performance, this criterion should be placed before the slash.

**Creator**

Specifies that output for the current userid is preferred. JES2 attempts to consecutively select all eligible output for a particular userid. However, output is only grouped in this manner depending upon the specification of the current work selection list and output queues. If specified to the left of the slash, an exact match is required.

**Forms**

Specifies that the current FORMS specification is either required or preferred. If FORMS is omitted from the criteria list, work selection will not contain any forms checking.

**JOBname**

Specifies that JES2 gathers all output for a job and attempt to process that output consecutively. The JOBNAME= parameter for a particular device determines what job name JES2 selects when JES2 has processed all output that matches the current job name.

- If JOBname= is specified before the slash in the WS= list:  
JES2 selects only those jobs that match the value specified on JOBNAME= for a specific device. When JOBNAME= is specified as a generic name, JES2 only processes jobs that match that pattern and attempts to process all output for that job name consecutively.
- If JOBname= is specified after the slash in the WS= list:  
JES2 uses the value specified on JOBNAME= to select new job names for the specific device. If there are no job names that match the JOBNAME= specification, JES2 selects jobs as if JOBname were not listed in the WS= list. A device gathers and processes all output for a particular job before again examining the value specified on JOBNAME= for more jobs.

If you require JES2 to group jobs based on job name but do not want JES2 to prefer a particular JOBNAME= pattern, specify JOBNAME=\* on the device statement and code JOBname after the slash in the WS= list.

**LIMit**

Specifies that the limits of output, as noted on the LIMIT= keyword (on this initialization parameter) will be supported, that is, the amount of generated output must fall within the LIMIT= specification.

This subparameter has no effect as a work selection value for files received from a node that does not provide a page count for its files. For more information, see the sending node's reference documentation.

**PRMode|PMD**

Specifies that the current PRMODE= specification is preferred. If more than one mode is specified, they are in left to right priority order.

**Note:** To print output, a match must be found; this criterion should be placed before the slash.

**Priority**

Specifies that output priority will be considered. Priority is not matched with any other parameter; rather, it specifies that a higher output priority receives greater output preference. If specified before the slash, the importance of selecting output by priority is increased.

**Note:** To prevent performance degradation, this criterion should be placed after the slash.

**RouteCde**

Specifies that only output destined for a destination specified by a route code listed on the ROUTECDE= parameter is eligible for selection by this device.

## PUN(nn)

**Note:** If Routecode is specified before the slash, the route code(s) are in left to right priority order; if specified after the slash, there is no such priority order. To prevent performance degradation, this criteria should be placed before the slash.

### RANGE

Specifies that the current job ID range is preferred. If specified to the left of the slash, an exact match is required.

### Volume

Specifies that only output with tracks on the currently specified volume can be selected for printing. If specified to the left of the slash, the volumes are considered to be in left to right priority order. If specified to the right of the slash, no priority order exists, but an exact match is still required.

### Writer

Specifies that the writer name (W=) specification is either required or preferred.

**Note:** Embedded comments are not allowed within the WS= parameter specification.

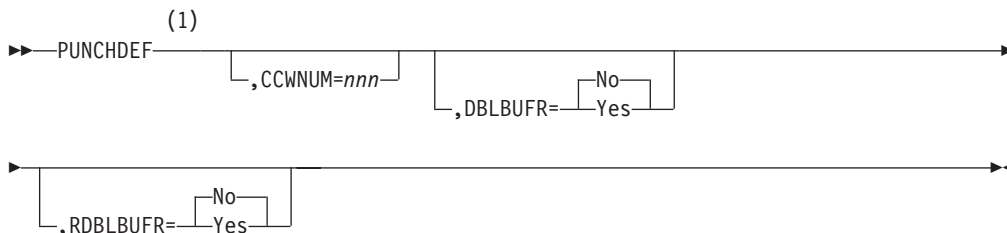
**Modification:** \$T PUN(nn) operator command.

---

## PUNCHDEF - Local Card Punch Environment Definition

The PUNCHDEF statement defines the JES2 punch environment.

### Format Description for PUNCHDEF



### Notes:

- 1 Omit the comma between initialization statement and first keyword

### Parameter Description for PUNCHDEF

#### CCWNUM=nnn

Specifies the maximum number (1-235) of double words to be used for channel program area for local punches.

Use the following formula to determine this parameter's recommended value:

$$\text{CCWNUM} = (\text{BUFSIZE= parameter on SPOOLDEF statement}) / \text{average card length}$$

Estimate the average card length to allow for JES2's truncation of trailing blanks.

**Note:** If a 3525 is interpreting (FUNC=I on the DD card), the CCWNUM must be at least 2.

**Default:** BUFSIZE parameter on the SPOOLDEF statement / 80.

**Modification:** Single-member warm start.

**DBLBUFR=Yes|No**

Specifies whether (Yes) or not (No) double buffering is used for local card punches.

**Modification:** Single-member warm start.

**RDBLBUFR=Yes|No**

Specifies whether double buffering (Yes) or single buffering (No) is to be used for remote card punches.

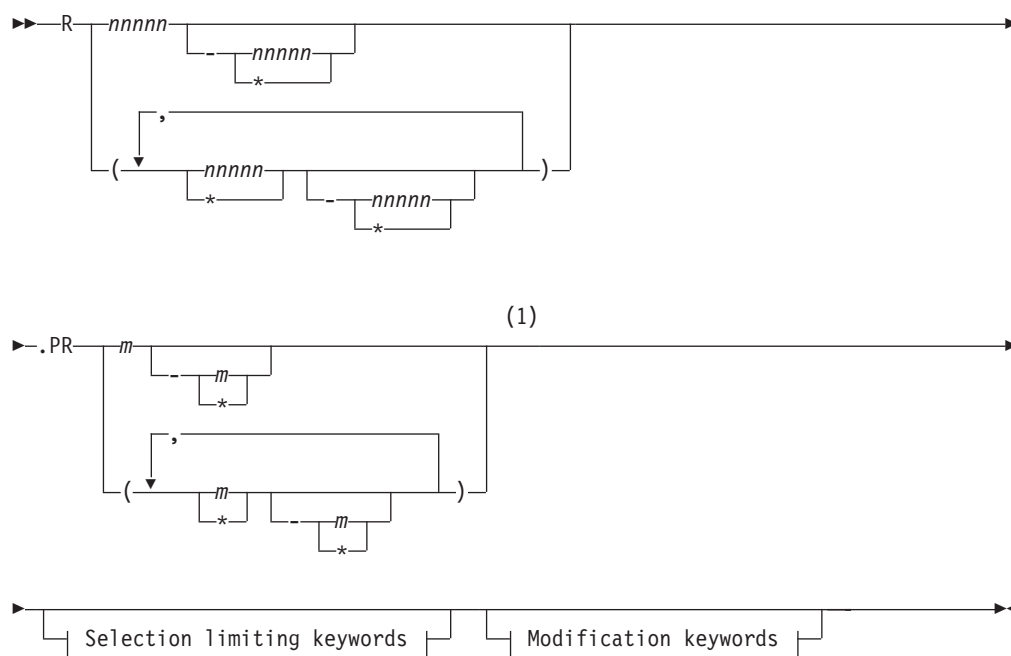
**Note:** The specification refers to JES2 regular I/O buffers, not to JES2 teleprocessing buffers.

**Modification:** Single-member warm start.

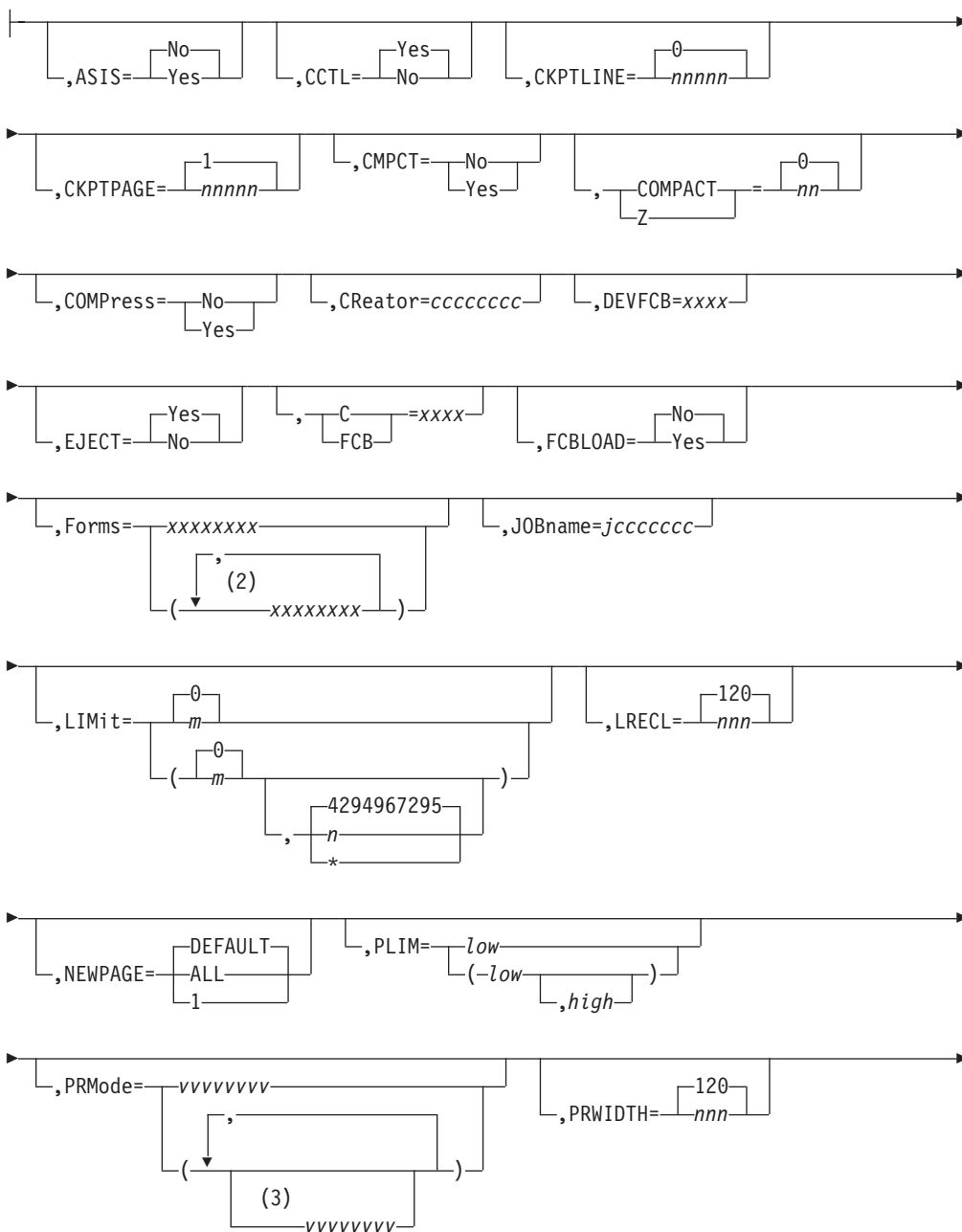
## R(nnnn).PR(m) - Remote Printer

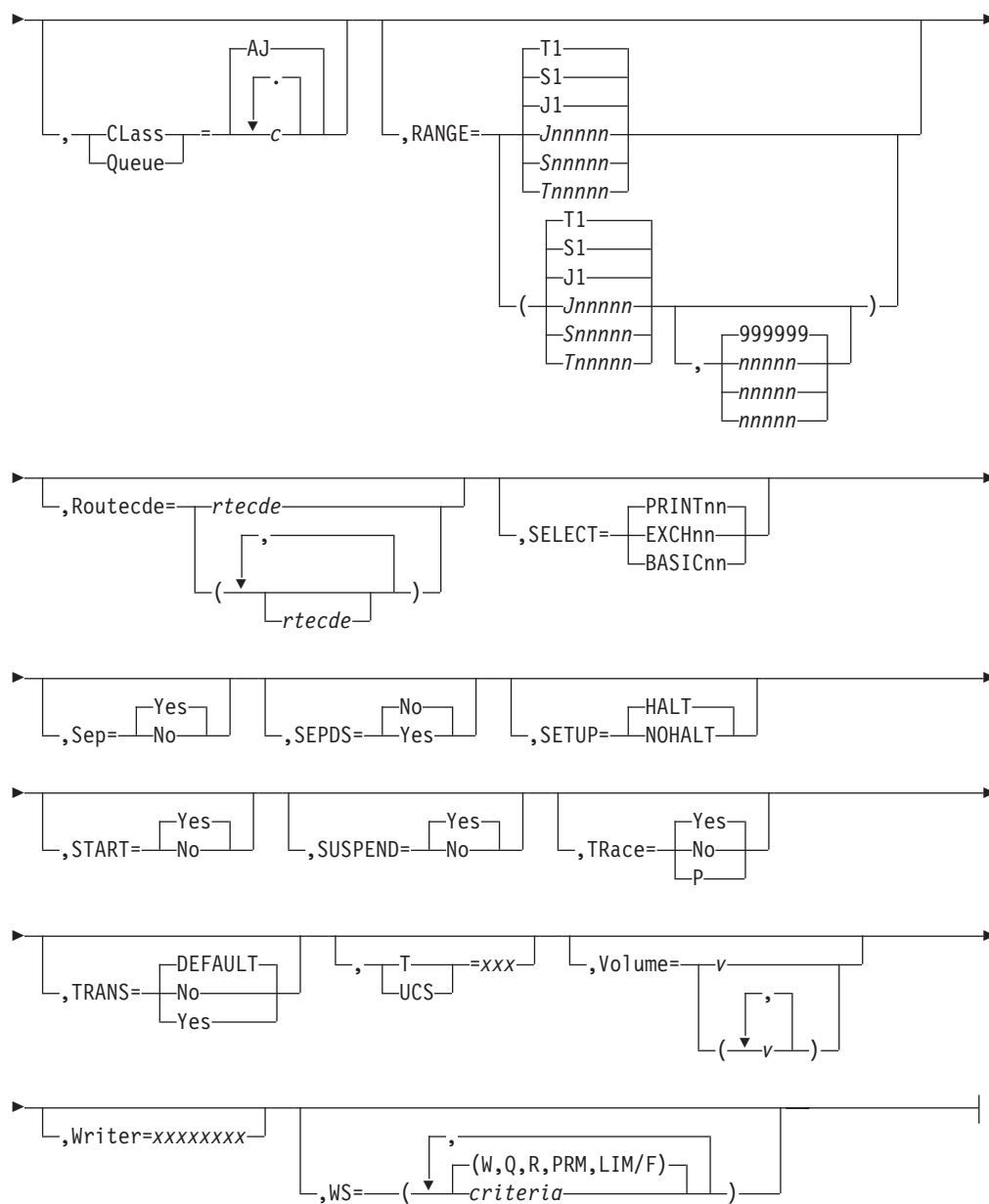
The R(nnnn).PR(m) statement specifies the characteristics of one printer at an RJE workstation. The value of nnnn is the number of an RJE workstation as specified in the RMT(nnnn) statement; m is the number of this printer. Printers are numbered consecutively (Rnnnn.PR1 to Rnnnn.PR7) for the number of printers specified (NUMPRT=n in the RMT(nnnn) statement) for this remote terminal. For example, if there are three printers attached to RJE workstation number 28, the printers are numbered R28.PR1, R28.PR2, and R28.PR3. Use the subscripts (nnnn or m) in an ascending range (n-\*) to indicate from n to 32767 or, in a descending range (\*-n) to indicate 32767 to n, or \* to indicate all remote printers. Note that parameter ranging applies to both remotes and remote printers. Characteristics for remote printers are specified by the following parameters.

### Format Description for R(nnnn).PR(m)



**Modification keywords:**

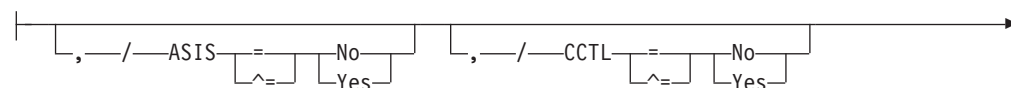




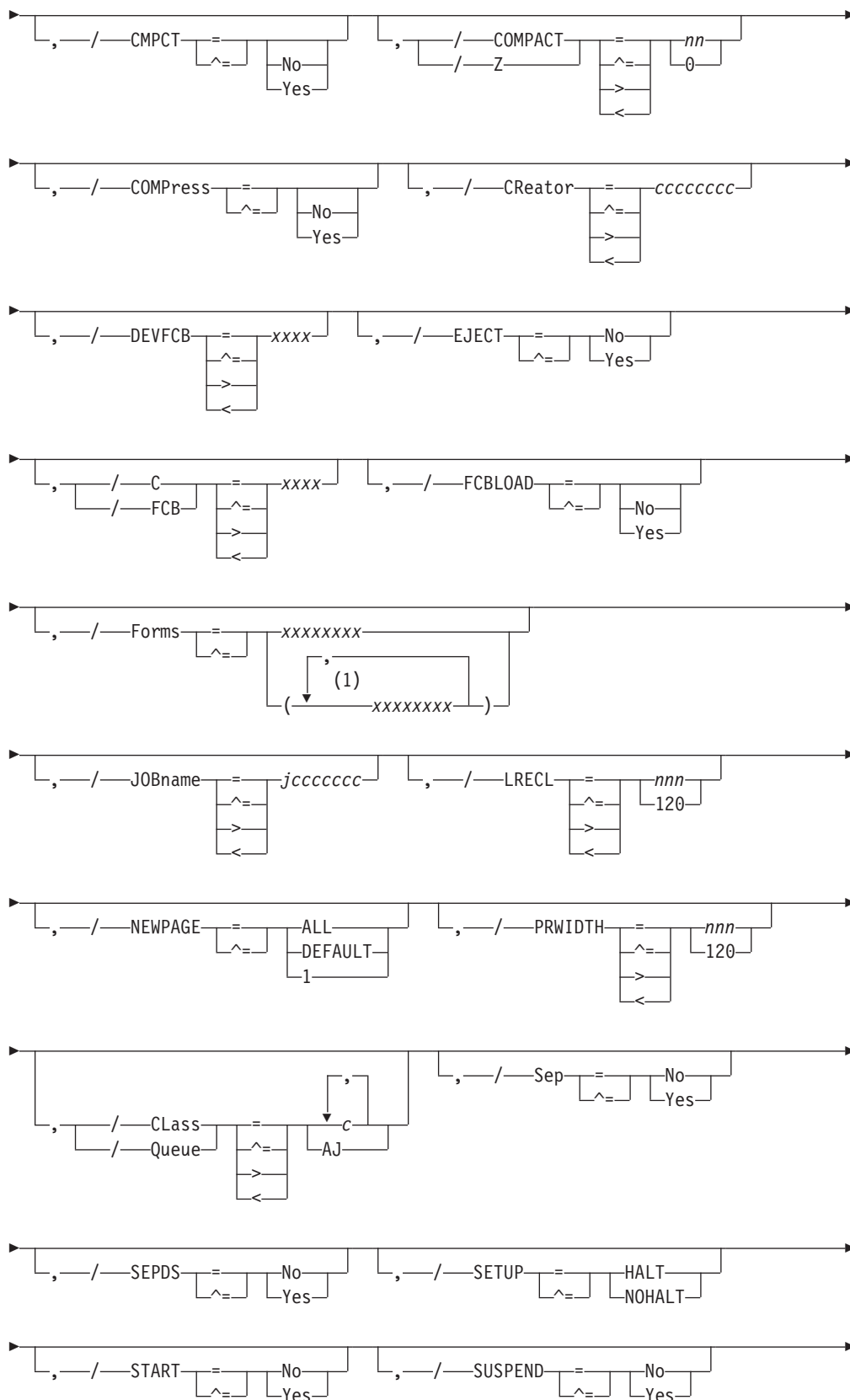
**Notes:**

- 1 Omit the comma between initialization statement and first keyword
- 2 *Forms* can be coded up to 8 times
- 3 *PRMode* can be coded up to 8 times

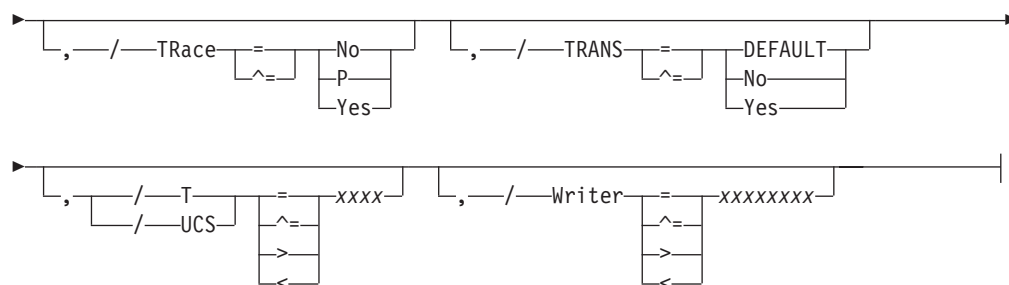
**Selection limiting keywords:**



R(nnnn).PR(m)





**Notes:**

- 1 *form* can be coded up to 8 times

**Parameter Description for R(nnnn).PR(m)****ASIS=Yes | No**

ASIS=Yes causes JES2 to send the print data to the remote printer without suppressing extraneous ejects or adding an eject at the end of a data set. The remote printer will receive the data set as it appears on the JES2 spool.

ASIS=No causes JES2 to send print data to the remote printer, suppressing extraneous ejects and inserting an eject at the end of the data set.

**Modification:** \$T Rnnnn.PRm operator command.

**CCTL=Yes | No**

CCTL=Yes specifies that carriage control characters are to be placed in the output stream transmitted to this remote printer. This operand is for use with only SNA devices. CCTL=No is required if SELECT=BASICnn is also specified. When CCTL=No is specified, data will not be compressed or compacted, and SCS control characters will not be placed in the output string.

**Modification:** \$T Rnnnn.PRm operator command.

**CKPTLINE=nnnn | 0**

Specifies the maximum number (0-32767) of lines in a logical page. The size of a logical page is also defined as the number of lines printed until:

1. A channel skip is encountered.
2. The line count specified by LINECT= parameter on the PRINTDEF statement, the /\*JOBPARM control statement, the /\*OUTPUT statement, the JCL OUTPUT statement, or the JOB statement accounting field has been exceeded.

If you specify 0 for CKPTLINE=, a logical page is defined only by items 1 and 2, above.

If the line count specified in item 2 does not equal zero, setting CKPTLINE= to a value greater than line count results in the line count being used as the definition of a logical page; it overrides CKPTLINE=.

JES2 uses CKPTLINE= in conjunction with CKPTPAGE= to determine the checkpoint interval for data sets having a line count of zero and no channel skips.

**Modification:** \$T Rnnnn.PRm operator command.

**CKPTPAGE=nnnn | 1**

Specifies the number (1-32767) of logical pages to be printed before each checkpoint is taken. (See the description of the CKPTLINE= parameter.)

## R(nnnn).PR(m)

**For SNA remote printers**, the CKPTPAGE= and CKPTLINE= parameters determine the number of logical records within an SNA chain. JES2 will not take a checkpoint until it receives acknowledgment that the chain was received successfully by the remote. The chain size is the number of logical pages specified by CKPTPAGE=.

**For BSC remote printers**, the CKPTPAGE= and CKPTLINE= parameters determine the number of logical records sent to the remote before a checkpoint is taken. JES2 will not take a checkpoint until it receives acknowledgment that the chain was received successfully by the remote.

**Modification:** \$T Rnnnn.PRm operator command.

### **{Class|Queue}=c1[...cn] |Aj**

Specifies the output classes to be processed by this printer. You can specify any number of classes (A-Z and 0-9) up to a maximum number of 15 classes.

**Modification:** \$T Rnnnn.PRm operator command.

### **CMPCT=Yes|No**

**For SNA remote printers only**, specifies that this printer has compaction capabilities and forces this printer to use compaction if the corresponding RJE workstation initialization statement (RMT(nnnn) ) specifies COMPACT=Yes. Specifying CMPCT=Yes also causes the data to be compressed. Specifying CMPCT=NO turns off compaction even if compaction is specified on the RMT(nnnn) initialization statement.

#### **Note:**

1. If the RMT(nnnn) initialization statement specifies compaction and the R(nnnn).PR(m) initialization statement does not specify CMPCT=NO, compression will be forced regardless of the CMPCT= specification.
2. CMPCT=Yes is valid only if CCTL=Yes.
3. COMPACT= must be nonzero. If COMPACT=0, no compaction table is used and overrides a CMPCT=Yes specification.

**Modification:** \$T Rnnnn.PRm operator command.

### **COMPACT=nn|0**

Specifies the compaction table (0-99) to be used for all outbound remote printer data. The COMPACT= parameter of RMT(nnnn) must indicate that compaction is supported by this printer. A compaction table value of 0 indicates no compaction table will be used, and will also override CMPCT=Yes, if it was specified.

Note that if a compaction table number is specified that does not match any compaction table defined by a COMPACT initialization statement, JES2 uses the default of 0.

**Modification:** \$T Rnnnn.PRm operator command.

### **COMPRESS=Yes|No**

Specifies this printer has compression and expansion capabilities. Specifying COMPRESS=Yes forces this printer to use compression only if the corresponding RJE workstation (RMT(nnnn) ) and line (LINE(nnnn) ) initialization statements have COMPRESS=Yes specified. Specifying COMPRESS=No turns off compression for this remote SNA printer even if the corresponding RMT(nnnn) initialization statement specifies COMPRESS=Yes.

**For SNA remote printers only**,

- If CCTL=No, then COMPRESS=Yes is not valid.

- If COMPRESS=Yes, JES2 sets the corresponding bit in the RJE BIND to on.

**Modification:** \$T Rnnnn.PRm operator command.

**CREATOR=ccccccc**

Specifies the 1- to 8-character userid whose output can be selected by this printer. Wildcard specifications are allowed on this parameter.

If you allow this parameter to default, JES2 selects all output for processing, regardless of the userid.

**Modification:** \$T Rnnnn.PRm operator command.

**DEVFCB=xxxx**

Specifies the forms control buffer (FCB) this printer uses if the printer selects output that does not have an FCB associated with it.

If you do not specify DEVFCB=, the printer uses the last FCB that you loaded to process the output if that FCB has the default bit turned on. Otherwise, the printer uses the FCB specified on the PRINTDEF statement.

**Modification:** \$T Rnnnn.PRm operator command.

**EJECT=Yes|No**

Specifies whether JES2 sends a page eject to a remote printer on the printer's first use following the start of an RJE session depending upon the assumed position of the printer. JES2 assumes that the remote printer is not positioned at the top of a page on the first use after JES2 is started, restarted, or after an RJE session fails and the remote printer is not at the top of a page.

EJECT=Yes causes JES2 to send a page eject when the remote printer is not assumed to currently be at the top of a page. Use this parameter value when the output is destined for a physical printer.

EJECT=No ensures that a print stream never begins with a page eject. Workstations that write SYSOUT to media other than paper can use this parameter to create files that do not contain page ejects in the first line.

You can change this parameter after initialization using a \$T command; however, the change takes effect at the beginning of the next RJE session, regardless of whether printing has begun.

**Modification:** \$T Rnnnn.PRm operator command.

**FCB|C=xxxx**

Specifies the forms control buffer image or the carriage control tape that is to be initially mounted on this printer.

For all printers, xxxx is the forms control buffer (FCB) identifier that resides in SYS1.IMAGELIB.

If you do not specify a value, JES2 provides impact printers with the value of the FCB parameter on the PRINTDEF statement as a default.

**Modification:** \$T Rnnnn.PRm operator command.

**FCBLOAD=Yes|No**

FCBLOAD=Yes specifies that FCB support is to be provided for this printer. If SETUP=PDIR is specified in the RMT(nnnn) statement, FCBLOAD=No is forced.

**Note:** FCBLOAD= is effective only if this is a 3211 printer attached to a multileaving RJE workstation that has the text-transparency feature (TRANSPAR=Yes specified for both the LINE(nnnn) and the RMT(nnnn))

## R(nnnn).PR(m)

statements), or if this printer is a SNA RJE workstation. (FCBLOAD for an SNA terminal uses only one stop per channel, for a maximum of 12 stops. Also, the length of FCB images that can be used for this printer cannot exceed the line length specified for this printer (PRWDITH) minus 2.)

**Modification:** \$T Rnnnn.PRm operator command.

### **Forms=xxxxxxx**

Specifies the 1- to 8-character forms identifier of the forms that are to be loaded initially in this printer. Wildcard specifications are allowed on this parameter.

If you specify no value for this parameter, JES2 will use the forms identifier specified by the STDFORM parameter on the OUTDEF statement.

**Modification:** \$T Rnnnn.PRm operator command.

### **JOBname=jccccc**

Specifies the 1- to 8-character job name for jobs whose output can be selected by this printer. Wildcard specifications are allowed on this parameter.

If you allow this parameter to default, JES2 selects all output for processing, regardless of the jobname.

**Modification:** \$T Rnnnn.PRm operator command.

### **LIMit=m|m-n|m-\***

Specifies that output is selected for specific printers based upon the amount of the output (in records). The values *m* and *n* specify within what output size range (in records) a job output element (JOE) must fall to be processed by this printer. The integer *m* specifies the lower output size limit and *n* specifies the upper output size limit.

For both variables *m* and *n*, you can specify a range of values 0-4294967295. *m* and *n* can be equal. If they are not equal, *n* must be larger than *m*.

If you code only *m*, that value becomes both the lower and upper limit. If *m-\** is specified, the upper limit is set to the default value of 4294967295.

After a warm start, the original size of the output (before any printing) will be used to determine where the remainder of the output will be printed. That is, the original size of the JOE will be used to determine output device selection.

**Default:** If you omit this parameter, JES2 uses the defaults *m*=0 and *n*=4294967295.

**Modification:** \$T Rnnnn.PRm operator command.

### **LRECL=nnn|120**

**For SNA remote printers only**, specify the logical record length (1-255) of data transmitted to this SNA remote printer. This value must not exceed the printer width specified during RMT generation (through the &PRTSIZE RMT generation statement) for this terminal. (See *z/OS JES2 Initialization and Tuning Guide* for further information.) You can use LRECL in place of the PRWIDTH= parameter when specifying record sizes for records destined for remote devices. When calculating the value of this parameter, carriage control characters (CCTL) should not be included.

**Modification:** \$T Rnnnn.PRm operator command.

### **NEWPAGE={1|ALL|DEFAULT}**

Specifies when JES2 treats a 'skip to channel' as a new page.

**1** Specifies that JES2 treats only skip to channel 1 as a new page.

**ALL** Specifies that JES2 treats skip to any channel as a new page.

**DEFAULT**

Specifies that JES2 uses the NEWPAGE= value specified on the PRINTDEF initialization statement.

**Modification:** \$T R(nnnn).PR(m) operator command.

**PLIM={m|m-n|m-\*}**

Specifies the lower and upper limits (in pages) for the size of output that is to be selected by this printer.

For both variables *m* and *n*, you can specify a range of values from 0 through 2147483647. *m* and *n* can be equal. If they are not equal, *n* must be larger than *m*.

If you code only *m*, that value becomes both the lower and upper limit. If you specify *m-\**, the upper limit is set to the default value (4294967295).

- Normally, you should only use PLIM= with functional subsystem (FSS) printers capable of printing page-mode data.
- If the printing of an output group is interrupted, JES2 compares the original size of the output (the number of pages before any printing rather than the pages remaining) with the PLIM= specifications.
- When you specify R(nnnn).PR(m) PLIM= as a non-zero value, JES2 honors PRMODE=PAGE for remote printers and WS= criteria for remote printers.

**PRMode=(vvvvvvvv[, vvvvvvvv . . .])**

Specifies one to eight names used by JES2 to direct output data sets to this output device. Wildcard specifications are allowed on this parameter. If only one PRMODE= is specified, the parentheses are optional. Users can assign a PRMODE= value to the data sets by using JCL OUTPUT statements. However, if the user does not specify a process mode for the data set, JES2 will assign a process mode.

Your installation may have output devices capable of printing other than line-mode data sets. If so, you can specify a name(s) on this parameter designating the output device as capable of accepting such data sets. For installation-defined process modes, use the Uvvvvvvv form of the process mode designation. The U identifies the process mode as installation defined. Installation-defined and IBM-defined process mode designations may be mixed on one PRMODE parameter statement. For example, you can specify names on this parameter designating the output device as capable of accepting data sets that can be printed on either a plotter device (for example, UPLOT2) or a line-mode printer by specifying:

```
PRMODE=(UPLOT2,LINE)
```

**Note:**

1. You can specify only up to eight process modes on a single device; however, you can specify as many as 255 different modes throughout a particular JES2 member.
2. Within a job entry network, receiving nodes must designate the same process mode as that specified on the data set(s) sent to them. If the receiving node has not specified the same process mode, the data set(s) will not be printed.

**Default:** LINE, except for those data sets containing formatting controls that can only be processed by page-mode printers. The default for these data sets is PAGE causing an error condition because the page-mode specifications are incompatible with remote print processing.

## R(nnnn).PR(m)

**Modification:** \$T Rnnnn.PRm operator command.

### **PRWIDTH=nnn | 120**

Specifies the number (1-255) of characters to be printed on one line. This value must not exceed the printer width specified during RMT generation of this multileaving terminal (through the &PRTSIZE statement for multileaving workstations). PRWIDTH= should not be set greater than 120 for printers attached to BSC terminals defined as 2770s without the buffer-expansion feature.

**Modification:** \$T Rnnnn.PRm operator command.

### **RANGE={J|S|T}nnnn[-nnnn] | J1-999999**

Specifies the job ID range for output jobs that can be selected by this printer. Use "J" to specify batch jobs, "S" to specify started tasks, and "T" for TSO/E jobs. You can specify a single job number or range (up to 999999) of jobs. If you code this parameter, you can specify one or two values:

- If you specify one value, that value becomes both the low and the high end of the range.
- If you specify two values, the first value is the low end of the range and the second value the high end. The two values can be equal. If they are not equal, the second value must be larger than the first value.

**Modification:** \$T Rnnnn.PRm operator command.

### **Routecde=rtcode**

Specifies up to four internal route codes to be assigned to this printer.

The maximum size of a route code is 18 characters. Wildcard specifications are allowed on this parameter for userids only. You can specify a route code in any of the forms listed below.

Ummmm  
destid  
remote  
user

Explanations of the different forms of specifying route codes follow:

#### **Ummmm**

Indicates that output for special local routing is selected. The special routing numbers range from 1 to 32767.

#### **destid**

Indicates that output routed to the specified node(s) is selected. If destid is specified alone, it refers to both the node and the RJE workstation.

**Note:** If you specify a destid on the Routecde parameter, you must place the DESTID initialization statement before the R(nnnn).PR(m) statement in the initialization stream.

#### **LOCAL | ANYLOCAL**

Indicates that output routed to the local node is selected.

#### **remote**

Indicates that output routed to a RJE workstation is selected. Remote can be specified in any of the following ways:

#### **Rmmmm**

Indicates that output routed to the specified RJE workstation is

selected. Rmmmm can also be specified as RMmmmm or RMTmmmm. The value specified for mmmm can range from 1 to 32767.

**destid**

Indicates that output routed to a destid referring to an RJE workstation is selected.

**user**

Indicates that output routed to a specific userid is selected. Generic userids are also valid. A generic userid is a userid that ends in an asterisk (\*), and refers to all userids that begin with the characters preceding the \*. Note that the \* can only be specified in the last position of the userid.

A userid at the local node must be in the form of a valid TSO/E userid. It must begin with an alphabetic (A-Z) or a special character ( @ # or \$ ), and the remaining characters may be alphabetic, numeric, or special characters.

You can override the destination specified with the ROUTECDE= keyword with the set operator command (\$T). If you specify only one route code, the parentheses are optional. To specify a null route code, use Routecde=() to cause this printer to select no work if Routecde is also specified in the WS list.

If you do not specify this parameter, JES2 assigns the route code of the RJE workstation to which the printer is attached. (See the description of the RMT(nnnn) statement in this chapter for more information about the route code.)

**Modification:** \$T Rnnnn.PRm operator command.

**SELECT=PRINTnn|EXCHnn|BASICnn**

**For SNA remote printers only**, specifies the device type (PRINT, EXCH, or BASIC) and device subaddress (n-1) to which output queued for this remote device will be sent. The SELECT options and their meanings are:

**Option Meaning****PRINTnn**

Output sent to printer

**EXCHnn**

Output sent to exchange diskette device

**BASICnn**

Output sent to basic exchange diskette device

The value nn specifies the desired device number. The value of nn ranges from 1-15 (subaddress 0-14). If nn is omitted, then any available device (subaddress=15) of the specified type (PRINT, EXCH, or BASIC) will be used. When BASIC is specified, CCTL=NO must be specified and LRECL= must not exceed 128. See the RJE workstation publication for your device for valid device type subaddresses and their requirements.

**Example:** To cause all output queued to this RJE workstation route code to be sent to an exchange diskette device with subaddress 0, specify:

```
SELECT=EXCH1
```

If you do not specify this parameter, JES2 provides for standard device selection of print and subaddress selection based upon printer number.

**Modification:** \$T Rnnnn.PRm operator command.

**Sep=Yes|No**

Specifies whether (Yes) or not (No) JES2 initially provides separator pages



between data set groups. (Separator pages can be specified later by the JES2 \$T command.) With the exception of the setup message \$HASP190, SEP=NO also suppresses printing of operator messages at the RJE workstation. JES2 will not print JESNEWS data unless the job separator page is printed. This specification can be overridden by JES2 Exit 1. See *z/OS JES2 Installation Exits* for information about Exit 1.

**Modification:** \$T Rnnnn.PRm operator command.

#### SEPDS=Yes|No

Specifies whether (Yes) or not (No) data set separator pages are desired for the data sets within the output groups selected for processing by printers. For this parameter to affect processing, you must customize JES2 or a functional subsystem as follows.

For JES-mode printers (MODE=JES), your systems programmer must have written an Exit 15 (Output Data Set/Copy Separators) that examines the SEPDS= specification and produces separator pages when SEPDS=Yes. Exit 15 controls both the production of separator pages and whether they are affected by the SEPDS= parameter. If Exit 15 is enabled, it is invoked even if SEPDS=No. To enable Exit 15, see *z/OS JES2 Installation Exits*.

For functional subsystem printers (MODE=FSS), JES2 makes an indication of the parameter's setting available to the functional subsystem. If an FSS printer is controlled by PSF, an APSUX03 exit must have been installed to produce data set header pages. APSUX03 is not invoked if SEPDS=NO. For more information about the APSUX03 exit, see *PSF for z/OS: Customization*.

**Modification:** \$T Rnnnn.PRm operator command.

**Note:** Be careful not to confuse this parameter with the SEP= parameter.

#### SETUP=HALT|NOHALT

Specifies whether JES2 issues the device setup message (\$HASP190) after a change of device characteristics (for example, forms control).

SETUP=HALT halts the printer and issues the setup message. This allows the operator to verify the changes to the printer.

SETUP=NOHALT allows the printer to process output without requiring setup verification by the operator. With SETUP=NOHALT, you can load any printer characteristics that require no manual intervention. The printer uses any previously existing setup characteristics that you have not changed to process output.

**Modification:** \$T Rnnnn.PRm operator command.

#### START=Yes|No

Specifies whether (Yes) or not (No) this printer is to be started automatically when JES2 starts processing.

**Modification:** \$S Rnnnn.PRm operator command or \$P Rnnnn.PRm operator command.

#### SUSPEND=Yes|No

For BSC remote printers only, specifies whether (Yes) or not (No) JES2 interrupts the printing of a data set every time this remote printer sends an end-of-transmission (EOT) message. An RJE workstation operator might interrupt printing in order to transmit jobs or JES2 commands to the JES2 member.

**Modification:** \$T Rnnnn.PRm operator command.



**Note:** This parameter applies only to printers that are connected to BSC hardware terminals.

**TRACE=Yes|No|P**

**Note:** TRACE=Yes is identical to specifying TRACE=P. Specifies whether tracing is activated (Yes) or deactivated (No) for all remote printers. To trace a remote printer, you must also provide the following initialization statements:

```
TRACE(n) START=Yes
TRACEDEF ACTIVE=Yes
```

This parameter setting can be overridden by the \$T R(nnnn).PR(m) command. Remote printer tracing is also controlled by trace IDs 11, 12, 14, 15, the TRACE(n) and TRACEDEF initialization statements, and the \$S TRACE command.

**Note:** TRACE=Yes is identical to specifying TRACE=P. (See *z/OS JES2 Initialization and Tuning Guide*, the TRACE(n) and TRACEDEF initialization statements in this chapter, and *z/OS JES2 Commands* for a description of the \$S TRACE command for further information concerning the tracing facility.)

**Modification:** \$T Rnnnn.PRm command

**Note:** If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used. (For further information, see *z/OS JES2 Initialization and Tuning Guide*.)

**TRANS=Yes|No|DEFAULT**

If TRANS=Yes specifies that JES2 translates each line of output sent to the device regardless of the device type or the setting of the PRINTDEF TRANS= parameter.

TRANS=No specifies that JES2 does not translate output sent to the device regardless of the device type or the setting of the PRINTDEF TRANS= parameter.

TRANS=DEFAULT (or TRANS= is omitted) specifies that if TRANS=Yes is specified on the PRINTDEF statement, JES2 translates each line of output sent to the device. Otherwise, JES2 does not translate output sent to the device.

**Modification:** \$T Rnnnn.PRm,TRANS= operator command. Do not issue this command unless the printer is inactive or drained.

**UCS|T=xxxx**

Specifies the print train, print chain, or print band default universal character set (UCS) image that is mounted on this printer for use by output without a specific UCS attribute. A UCS image for a printer can be modified through the JES2 \$T Rnnnn.PRm command, but the default UCS image that is mounted on this printer for use by output without a specific UCS attribute cannot be changed.

If you do not specify this parameter, JES2 defaults to the identifier specified by the UCS parameter on the PRINTDEF statement.

**Modification:** \$T Rnnnn.PRm operator command.

**Volume=(v1[,v2][,v3][,v4])|()**

Specifies the 5- to 6-character volume serial number of a volume containing a spool data set. Only output jobs containing tracks on the specified volume can

## R(nnnn).PR(m)

be selected for printing. As many as four volumes can be specified. Use commas to separate individual volume IDs and enclose the list in parenthesis if more than one ID is specified.

**Modification:** \$T Rnnnn.PRm operator command.

### **Writer=xxxxxxx**

Specifies the 1- to 8-character writer name assigned to this printer. Wildcard specifications are allowed on this parameter.

**Default:** no writer name

**Modification:** \$T Rnnnn.PRm operator command.

### **WS=criteria | (W,Q,R,PRM,LIM/F)**

Specifies the output selection criteria (listed below) for this device. Criteria not specified are not considered during output selection, although they are used by JES2 to determine setup requirements.

Unless otherwise noted, if the criterion is specified before the slash, an exact match is required; if after the slash, an exact match is preferred (and attempted in left to right priority) but not required, only the priority order is considered.

You can specify the following criteria:

#### **Burst**

Specifies that the current BURST= specification is either required or preferred.

#### **Class|Queue**

Specifies that a match must be found for the output classes specified on this device. If Class/Queue is omitted from the WS= list, all output queues (beginning with queue A) will be searched for work.

**Note:** If specified before the slash, the priority of the device characteristics table class list is from left to right. If specified after the slash, there is no device characteristics table class list priority ordering. To increase performance, this criterion should be placed before the slash.

#### **Creator**

Specifies that output for the current userid is preferred. JES2 attempts to consecutively select all eligible output for a particular userid. However, output is only grouped in this manner depending upon the specification of the current work selection list and output queues. If specified to the left of the slash, an exact match is required.

#### **FCB|C**

Specifies that the current forms control buffer (FCB) image or carriage control tape is either required or preferred.

#### **Flash|0**

Specifies that the current FLASH specification is either required or preferred.

#### **Forms**

Specifies that the current FORMS specification is either required or preferred. If FORMS is omitted from the criteria list, work selection will not contain any forms checking.

#### **JOBname**

Specifies that JES2 gathers all output for a job and attempt to process that

output consecutively. The JOBNAME= parameter for a particular device determines what job name JES2 selects when JES2 has processed all output that matches the current job name.

- If JOBname= is specified before the slash in the WS= list:  
JES2 selects only those jobs that match the value specified on JOBNAME= for a specific device. When JOBNAME= is specified as a generic name, JES2 only processes jobs that match that pattern and attempts to process all output for that job name consecutively.
- If JOBname= is specified after the slash in the WS= list:  
JES2 uses the value specified on JOBNAME= to select new job names for the specific device. If there are no job names that match the JOBNAME= specification, JES2 selects jobs as if JOBname were not listed in the WS= list. A device gathers and processes all output for a particular job before again examining the value specified on JOBNAME= for more jobs.

If you require JES2 to group jobs based on job name but do not want JES2 to prefer a particular JOBNAME= pattern, specify JOBNAME=\* on the device statement and code JOBname after the slash in the WS= list.

### LIMit

Specifies that the limits of output, as noted on the LIMIT= keyword (on this initialization parameter) will be supported, that is, the amount of generated output must fall within the LIMIT= specification.

This subparameter has no effect as a work selection value for files received from a node that does not provide a page count for its files. For more information, see the sending node's reference documentation.

### PRMode|PMD

Specifies that the current PRMODE specification is preferred. If more than one mode is specified, they are in left to right priority order.

**Note:** To print output, a match must be found; this criterion should be placed before the slash.

### Priority

Specifies that output priority will be considered. Priority is not matched with any other parameter; rather, it specifies that a higher output priority receives greater output preference. If specified before the slash, the importance of selecting output by priority is increased.

**Note:** To prevent performance degradation, this criterion should be placed after the slash.

### RouteCde

Specifies that only output destined for a destination specified by a route code listed on the ROUTECDE= parameter is eligible for selection by this device.

### Note:

1. If RouteCde is specified before the slash, the route code(s) are in left to right priority order; if specified after the slash, there is no such priority order. To prevent performance degradation, this criteria should be placed before the slash.
2. **If WS= is added to this remote printer statement, you must specify RouteCde in the WS= list.**

## R(nnnn).PR(m)

### RANGE

Specifies that the current job ID range is preferred. If specified to the left of the slash, an exact match is required.

### Volume

Specifies that only output with tracks on the currently specified volume can be selected for printing. If specified to the left of the slash, the volumes are considered to be in left to right priority order. If specified to the right of the slash, no priority order exists, but an exact match is still required.

### Writer

Specifies that the writer name (W=) specification is either required or preferred.

### UCS|T

Specifies that the currently mounted print train (on impact printers only) is either required or preferred. If omitted from the work selection list, the UCS specified for the output is not required to match the device setup, but a setup message will be issued to the operator if the UCS specifications differ.

### Note:

1. Embedded comments are not allowed within the WS= parameter specification.
2. The LIM= subparameter has no effect as a work selection value for files received from a node that does not provide a page count for its files. For more information, see the sending node's reference documentation.

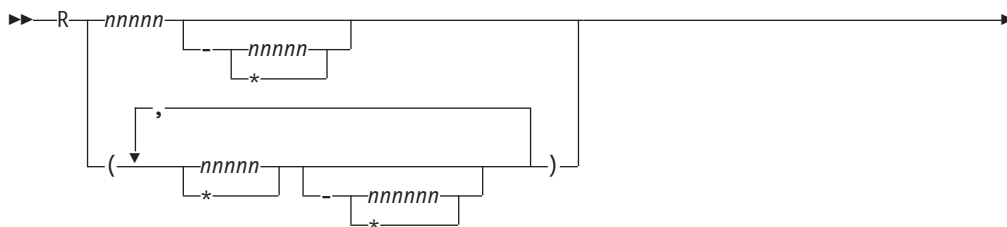
**Modification:** \$T Rnnnn.PRm operator command.

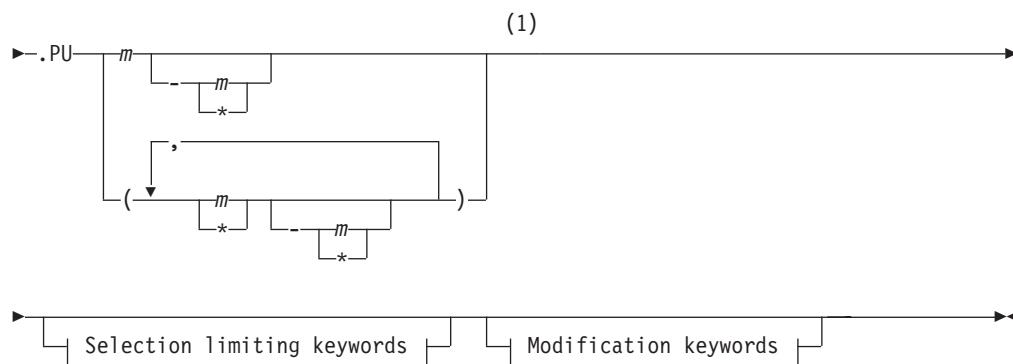
---

## R(nnnnn).PU(m) - Remote Card Punch

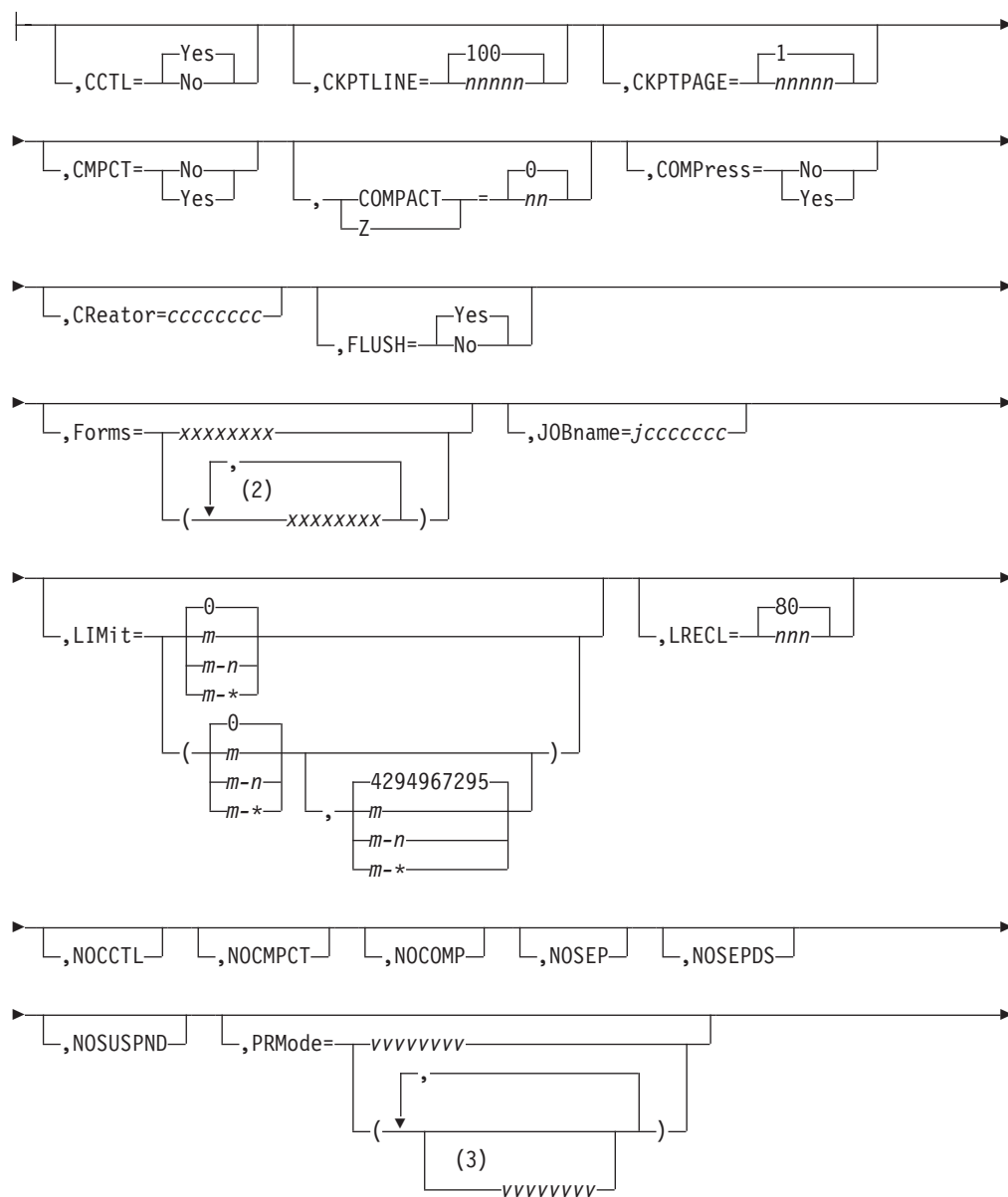
The R(nnnnn).PU(m) statement specifies the characteristics of one card punch at an RJE workstation. The value of nnnnn is the number of an RJE workstation, as specified in the RMT(nnnnn) statement; m is the number of this card punch. Card punches are numbered consecutively (Rnnnnn.PU1 to Rnnnnn.PU7) for the number of card punches specified (NUMPUN=n in the RMT(nnnnn) statement) for this RJE workstation. For example, if there are two punches attached to RJE workstation number 14, the punches are numbered R14.PU1 and R14.PU2. Use the subscripts (nnnnn or m) in an ascending range (n-\*) to indicate from n to 32767 or, in a descending range (\*-n) to indicate 32767 to n, or \* to indicate all remote punches. Note that, on this statement, parameter ranging applies to both RJE workstations and remote punches. Characteristics for remote punches are specified by the following parameters.

### Format Description for R(nnnnn).PU(m)

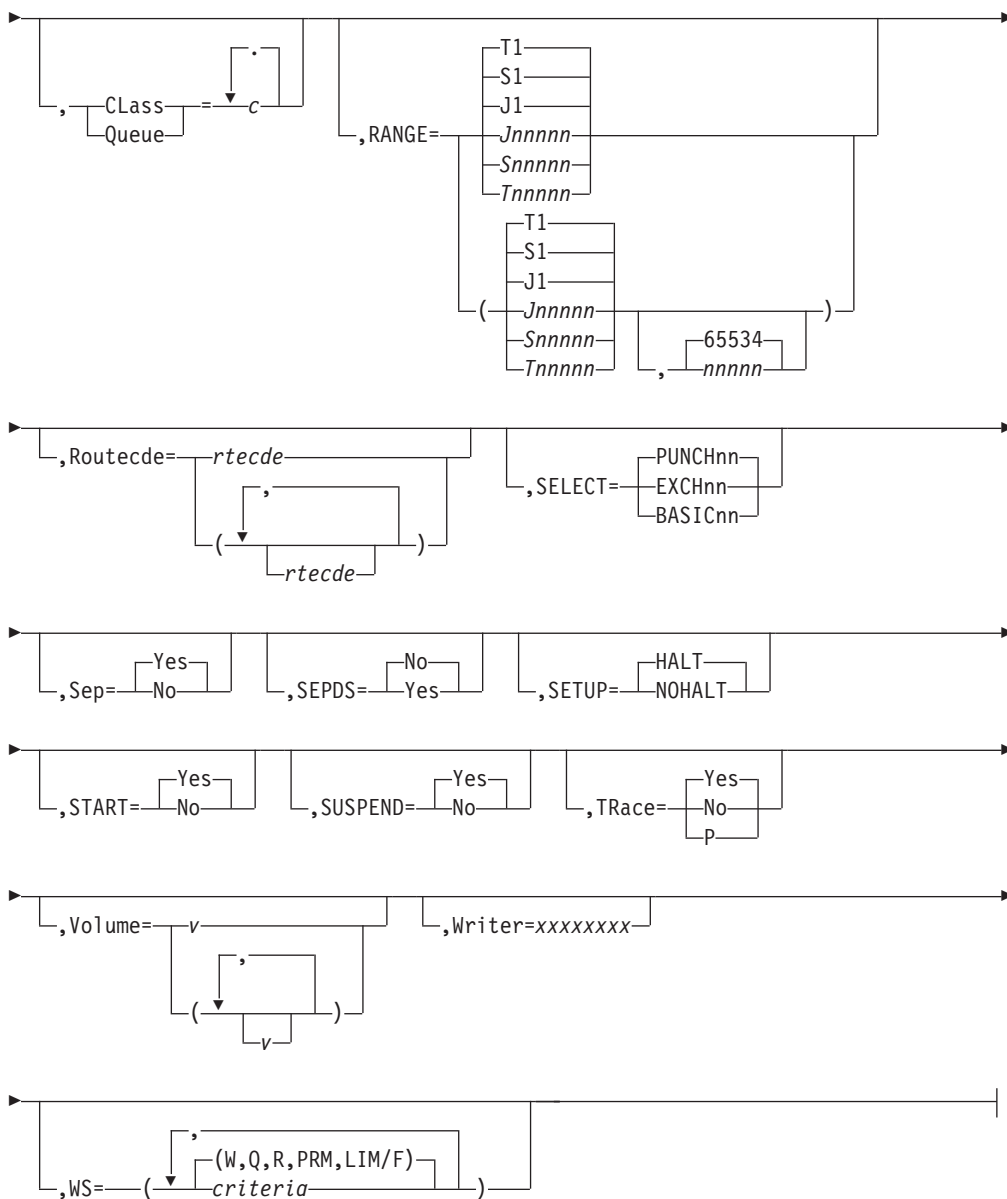




**Modification keywords:**



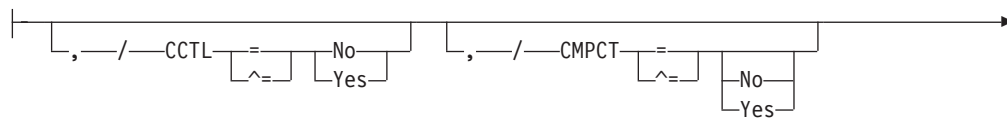
# R(nnnnn).PU(m)

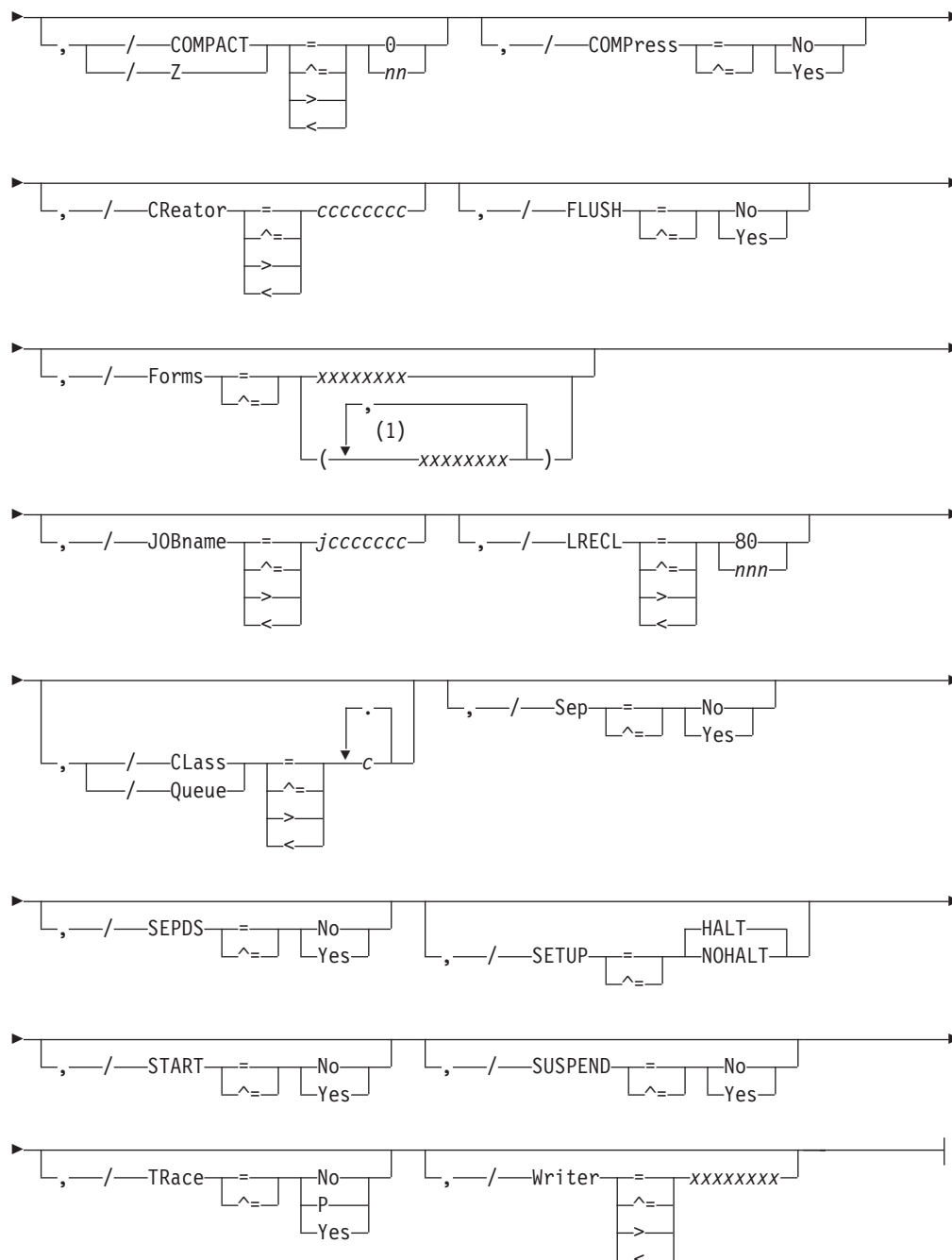


## Notes:

- 1 Omit the comma between initialization statement and first keyword
- 2 *Forms* can be coded up to 8 times
- 3 *PRMode* can be coded up to 8 times

## Selection limiting keywords:



**Notes:**

- 1 *Forms* can be coded up to 8 times

**Parameter Description for R(nnnnn).PU(m)****CCTL=Yes|No**

For SNA remote punches only, specify that carriage control characters are to be placed in the output stream transmitted to this remote punch. CCTL=No is required when the SELECT=BASICnn parameter of the R(nnnnn).PU(m) initialization statement is specified. When CCTL=No is specified, data will not be compressed or compacted, and SCS control characters will not be placed in the output string.

## R(nnnnn).PU(m)

**Modification:** \$T Rnnnnn.PUm operator command.

### CKPTLINE=nnnnn|100

Specifies the number (1-32767) of cards to be punched per logical page. CKPTLINE is the only value used to define a logical page for punches.

**Modification:** \$T Rnnnnn.PUm operator command.

**Note:** To switch off checkpointing, specify CKPTLINE=0.

### CKPTPAGE=nnnnn|1

Specifies the number (1-32767) of logical pages to be punched before each checkpoint is taken. (See the description of the CKPTLINE= parameter.)

**For SNA remote punches,** the CKPTPAGE= and CKPTLINE= parameters determine the number of logical records within an SNA chain. JES2 will not take a checkpoint until it receives acknowledgment that the chain was received successfully by the RJE workstation. The chain size is the number of logical pages specified by CKPTPAGE=.

**For BSC remote punches,** the CKPTPAGE= and CKPTLINE= parameters determine the number of logical records sent to the RJE workstation before a checkpoint is taken. The checkpoint is not taken until JES2 receives acknowledgment that the RJE workstation successfully received the data.

**Modification:** \$T Rnnnnn.PUm operator command.

### CLass | Queue=c1[...cn]

Specifies the output classes, in priority sequence, to be processed initially by this card punch. You can specify any number of classes (A-Z and 0-9) up to a maximum number of 15 classes.

**Modification:** \$T Rnnnnn.PUm operator command.

### CMPCT=Yes|No

**For SNA remote punches only** - Specifies that this punch has compaction capabilities. CMPCT=Yes forces this punch to use compaction if the corresponding RJE workstation initialization statement (RMT(nnnnn) ) specifies COMPACT=Yes. Specifying CMPCT=Yes also causes the data to be compressed. CMPCT=NO turns off compaction even if compaction is specified on the RMT(nnnnn) initialization statement.

**Note:**

1. If the RMT(nnnnn) initialization statement specifies compaction and the R(nnnnn).PU(m) initialization statement does not specify CMPCT=No, compression will be forced regardless of the COMPRESS= specification.
2. CMPCT=Yes is valid only if CCTL=Yes.
3. COMPACT= must be nonzero. If COMPACT=0, no compaction table is used and overrides a CMPCT=Yes specification.

**Modification:** \$T Rnnnnn.PUm operator command.

### COMPACT=nn|0

Specifies the compaction table (0-99) to be used for all outbound remote punch data. The COMPACT= parameter of the RMT(nnnnn) statement must indicate that compaction is supported by this punch. A compaction table value of 0 indicates no compaction table will be used, and will also override CMPCT=Yes, if it was specified.



Note that if a compaction table number is specified that does not match any compaction table defined by a COMPACT initialization statement, JES2 uses the default of 0.

**Modification:** \$T Rnnnnn.PUm operator command.

**COMPRESS=Yes|No**

Specifies that this punch has compression/expansion capabilities. COMP=Yes forces this punch to use compression only if the corresponding RJE workstation (RMT(nnnnn) ) initialization statement has COMPRESS=Yes specified. COMP=No turns off compression for this punch even if the corresponding RMT(nnnnn) initialization statement specifies COMPRESS=Yes.

**For SNA remote punches only:**

- COMPRESS=Yes is valid only if CCTL=Yes.
- If COMPRESS=Yes, the corresponding bit in the RJE BIND is set on.

**Modification:** \$T Rnnnnn.PUm operator command.

**CREATOR=ccccccc**

Specifies the userid whose output can be selected by this punch. Wildcard specifications are allowed on this parameter.

If you allow this parameter to default, JES2 selects all output for processing, regardless of the userid.

**Modification:** \$T Rnnnnn.PUm operator command.

**FLUSH=Yes|No**

Specifies whether (Yes) or not (No) JES2 causes a blank card to be punched at the end of each data set or following each copy of a data set.

Intelligent workstations can use this parameter to create files that do not contain blank cards between data sets.

**Modification:** \$T Rnnnnn.PUm operator command.

**FORMS=xxxxxxxx**

Specifies the 1- to 8-character forms identifier of the forms that are to be loaded initially in this card punch. Wildcard specifications are allowed on this parameter.

If you do not specify a value, JES2 uses the identifier specified by the STDFORM parameter on the OUTDEF statement.

**Modification:** \$T Rnnnnn.PUm operator command.

**JOBNAME=jcccccc**

Specifies the name of jobs whose output can be selected by this punch.

If you allow this parameter to default, JES2 selects all output for processing, regardless of the jobname. Wildcard specifications are allowed on this parameter.

**Modification:** \$T Rnnnnn.PUm operator command.

**LIMIT=m|m-n|m-\***

Specifies that output is to be selected for specific punches based upon the amount of the output (in records). The designated values m and n specify within what output size range (in records) a job output element (JOE) must fall to be processed by this punch. The integer m specifies the lower output size limit and n specifies the upper output size limit.

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For both variables  $m$  and  $n$ , you can specify a range of values 0-4294967295.  $m$  and  $n$  can be equal. If they are not equal,  $n$  must be larger than  $m$ .

If you code only  $m$ , that value becomes both the lower and upper limit. If  $m^*$  is specified, the upper limit is set to the default value of 4294967295.

After a warm start, the original size of the output (before any punching) will be used to determine where the remainder of the output will be punched. That is, the original size of the JOE will be used to determine output device selection.

**Default:** If you omit this parameter, JES2 uses the defaults  $m=0$  and  $n=4294967295$ .

**Modification:** \$T Rnnnnn.PUm operator command.

### **LRECL=nnn|80**

**For SNA remote punches only**, specifies the maximum logical record length (1-255) of data transmitted to this punch.

**Modification:** \$T Rnnnnn.PUm operator command.

### **PRMode=(vvvvvvv[,vvvvvvv...])**

Specifies one to eight names used by JES2 to direct output data sets to this output device. Wildcard specifications are allowed on this parameter. If only one PRMODE is specified, the parentheses are optional. Users can assign a PRMODE value to the data sets by using JCL OUTPUT statements. However, if the user does not specify a process mode for the data set, JES2 will assign a process mode.

Your installation may have output devices capable of punching other than line-mode data sets. If so, you can specify one or more names on this parameter designating the output device as capable of accepting such data sets. For installation-defined process modes, use the Uvvvvvvv form of the process mode designation. The U identifies the process mode as installation defined. Installation-defined and IBM-defined process mode designations may be mixed on one PRMODE= parameter. For example, you can specify names on this parameter designating the output device as capable of accepting data sets that can be printed on either a plotter device (for example, UPLOT2) or a line-mode printer by specifying:

```
PRMODE=(UPLOT2,LINE)
```

#### **Note:**

1. You can specify only up to eight process modes on a single device; however, you can specify as many as 255 different modes throughout a particular JES2 member.
2. Within a job entry network, receiving nodes must designate the same process mode as that specified on the data set(s) sent to them. If the receiving node has not specified the same process mode, the data set(s) will not be printed.
3. To specify a null processing mode use PRMode=().

**Default:** LINE, except for those data sets containing formatting controls that can only be processed by page-mode printers. The default for these data sets is PAGE causing an error condition because the page-mode specifications are incompatible with remote punch processing.

**Modification:** \$T Rnnnnn.PUm operator command.

### **RANGE={J|S|T}nnnnnn[-nnnnnn]|J1-65534**

Specifies the job ID range for output jobs that can be selected by this punch.

Use "J" to specify batch jobs, "S" to specify started tasks, and "T" for TSO/E jobs. You can specify a single job number or range (up to 65534) of jobs.

If you code this parameter, you can specify one or two values:

- If you specify one value, that value becomes both the low and the high end of the range.
- If you specify two values, the first value is the low end of the range and the second value the high end. The two values can be equal. If they are not equal, the second value must be larger than the first value.

**Modification:** \$T Rnnnnn.PUm operator command.

#### **Routecde=**

Specifies up to four internal route codes to be assigned to this punch. A route code indicates that this punch is eligible for special routing.

The maximum size of a route code is 18 characters. Wildcard specifications are allowed on this parameter for userids only. You can specify a route code in any of the forms listed below.

Ummmmm  
 destid  
 remote  
 user

Explanations of the different forms of specifying route codes follow:

#### **Ummmmm**

Indicates that output for special local routing is selected. The special routing numbers range from 1 to 32767.

#### **destid**

Indicates that output routed to the specified node(s) is selected. If destid is specified alone, it refers to both the node and the RJE workstation remote.

**Note:** If you specify a destid on the Routecde parameter, you must place the DESTID initialization statement before the R(nnnnn).PU(m) statement in the initialization stream.

#### **LOCAL | ANYLOCAL**

Indicates that output routed to the local node is selected.

#### **remote**

Indicates that output routed to an RJE workstation is selected. *remote* can be specified in any of the following ways:

#### **Rmmmmm**

Indicates that output routed to the specified RJE workstation is selected. Rmmmmm can also be specified as RMmmmmm or RMTmmmmm. The value specified for mmmmm can range from 1 to 32767.

#### **destid**

Indicates that output routed to a destid referring to an RJE workstation is selected.

#### **user**

Indicates that output routed to a specific userid is selected. Generic userids are also valid. A generic userid is a userid that ends in an asterisk (\*), and refers to all userids that begin with the characters preceding the \*. Note that the \* can only be specified in the last position of the userid.

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A userid at the local node must be in the form of a valid TSO/E userid. (It must begin with an alphabetic (A-Z) or a special character ( @ # or \$ ), and the remaining characters may be alphabetic, numeric, or special characters.)

You can override the destination specification with the set operator command (\$T). If you specify only one route code, the parentheses are optional. To specify a null route code use Routecde=() to cause this punch to select no work if Routecde is also specified in the WS list. Use the Unnnnn form to specify this punch as a special local punch.

If you do not specify a route code value, JES2 assigns the route code of the RJE workstation to which the punch is attached. (See the description of the RMT(nnnnn) statement in this chapter for more information about the route code.)

**Modification:** \$T Rnnnnn.PUm operator command.

### **SELECT=PUNCHnn | EXCHnn | BASICnn**

**For SNA remote punches only**, specifies the device type (PUNCH, EXCH, or BASIC) and device subaddress (n-1) to which output queued for this remote device will be sent. The SELECT options and their meanings are:

#### **Option Meaning**

##### **PUNCH(nn)**

Output sent to punch (card format)

##### **EXCHnn**

Output sent to exchange diskette device

##### **BASICnn**

Output sent to basic exchange diskette device

The value nn specifies the desired device number. The value of nn may range from 1-15 (subaddress 0-14). If nn is omitted, then any available device (subaddress 15) of the specified type (PUNCH, EXCH, or BASIC) will be used. When BASIC is specified, NOCCTL must be specified and LRECL must not exceed 128. See the RJE workstation publication for your device for valid device type subaddresses and their requirements.

**Example:** To cause all output to this RJE workstation route code to be sent to a basic exchange diskette with subaddress 0, specify:

```
SELECT=BASIC1
```

**Note:** If this is the only punch defined, Specification of BASICnn or EXCHnn for a SNA device will cause the media-byte presentation service portion of the bind to be changed to reflect non-card format.

If you do not specify a value, JES2 defaults to the standard device selection of punch and subaddress selection based upon punch number.

**Modification:** \$T Rnnnnn.PUm operator command.

### **Sep=Yes | No**

Specifies whether (Yes) or not (No) separator cards are provided initially between data set groups. (Separator cards can be specified later by operator command.) This specification can be overridden if an installation exit routine is provided by JES2 Exit 1. See *z/OS JES2 Installation Exits* for information about Exit 1.

**Modification:** \$T Rnnnnn.PUm operator command.

**SEPDS=Yes|No**

Specifies whether you desire data set separator cards for the data sets within the job output elements (JOEs) selected for processing by the specific device. If you enabled Exit 15 (Output Data Set/Copy Separators), the exit can test for SEPDS=Yes to cause the exit to generate separator cards for each data set selected by this device. See *z/OS JES2 Installation Exits* for information about Exit 15.

**Modification:** \$T Rnnnnn.PUm operator command.

**Note:** Be careful not to confuse this parameter with the SEP= parameter.

**SETUP=HALT|NOHALT**

Specifies whether JES2 issues the device setup message (\$HASP190) after a change of device characteristics (for example, forms control).

SETUP=HALT halts the punch and issues the setup message. This allows the operator to verify the changes to the punch.

SETUP=NOHALT allows the punch to process output without requiring setup verification by the operator. The punch uses any previously existing setup characteristics that you have not changed to process output.

**Modification:** \$T Rnnnnn.PUm operator command.

**START=Yes|No**

Specifies whether (Yes) or not (No) this punch is started automatically when JES2 starts processing.

**Modification:** \$S Rnnnnn.PUm operator command or \$P Rnnnnn.PUm operator command.

**SUSPEND=Yes|No**

**For BSC remote punches only,** Specifies whether (Yes) or not (No) JES2 interrupts the punching of a data set every time this remote punch sends an end-of-transmission (EOT) message. An RJE workstation operator might interrupt punching in order to transmit jobs or JES2 commands to the JES2 member.

**Modification:** \$T Rnnnnn.PUm operator command.

Specifies whether tracing is activated or deactivated for all remote punches. To trace a remote punch, you must also provide the following initialization statements:

TRACE(n) START=Yes

TRACEDF ACTIVE=Yes

**TRace=Yes|No|P**

**Note:** TRACE=Yes is identical to specifying TRACE=P. This parameter setting can be overridden by the \$T R(nnnnn).PU(M) operator command. Remote punch tracing is also controlled by trace IDs 11 and 12, the TRACE(n) and TRACEDF initialization statements, and the \$S TRACE command. (See *z/OS JES2 Initialization and Tuning Guide*, the TRACE(n) and TRACEDF initialization statements in this chapter, and *z/OS JES2 Commands* for a description of the \$S TRACE command for further information concerning the tracing facility.)

**Modification:** \$T Rnnnnn.PUm command

## R(nnnnn).PU(m)

**Note:** If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used. (For further information, see *z/OS JES2 Initialization and Tuning Guide*.)

### **Volume=(v1[,v2][,v3][,v4]) | ()**

Specifies the 5- to 6-character volume serial number of a volume containing a spool data set. Only output jobs containing tracks on the specified volume can be selected for punching. As many as four volumes can be specified. Use commas to separate individual volume IDs and enclose the list in parenthesis if more than one ID is specified.

**Modification:** \$ T Rnnnnn.PUm command.

### **Writer=xxxxxxx**

Specifies the 1- to 8-character writer name assigned to this punch. Wildcard specifications are allowed on this parameter.

**Default:** no writer name

**Modification:** \$T Rnnnnn.PUm operator command.

### **WS=criteria | (W,Q,R,PRM,LIM/F)**

Specifies the output selection criteria (listed below) for this device. Criteria not specified are not considered during output selection, although they are used by JES2 to determine setup requirements.

Unless otherwise noted, if the criterion is specified before the slash, an exact match is required; if after the slash, an exact match is preferred (and attempted in left to right priority) but not required, only the priority order is considered. The criteria that may be coded follow:

#### **Class/Queue**

Specifies that a match must be found for the output classes specified on this device. If Class/Queue is omitted from the WS list, all output queues (beginning with queue A) will be searched for work.

**Note:** If specified before the slash, the priority of the device characteristics table class list is from left to right. If specified after the slash, there is no device characteristics table class list priority ordering. To increase performance, this criterion should be placed before the slash.

#### **Creator**

Specifies that output for the current userid is preferred. JES2 attempts to consecutively select all eligible output for a particular userid. However, output is only grouped in this manner depending upon the specification of the current work selection list and output queues. If specified to the left of the slash, an exact match is required.

#### **Forms**

Specifies that the current FORMS specification is either required or preferred. If FORMS is omitted from the criteria list, work selection will not contain any forms checking.

#### **JOBname**

Specifies that JES2 gathers all output for a job and attempt to process that output consecutively. The JOBNAME= parameter for a particular device determines what job name JES2 selects when JES2 has processed all output that matches the current job name.

- If JOBname= is specified before the slash in the WS= list:

JES2 selects only those jobs that match the value specified on JOBNAME= for a specific device. When JOBNAME= is specified as a generic name, JES2 only processes jobs that match that pattern and attempts to process all output for that job name consecutively.

- If JOBname= is specified after the slash in the WS= list:

JES2 uses the value specified on JOBNAME= to select new job names for the specific device. If there are no job names that match the JOBNAME= specification, JES2 selects jobs as if JOBname were not listed in the WS= list. A device gathers and processes all output for a particular job before again examining the value specified on JOBNAME= for more jobs.

If you require JES2 to group jobs based on job name but do not want JES2 to prefer a particular JOBNAME= pattern, specify JOBNAME=\* on the device statement and code JOBname after the slash in the WS= list.

### LIMit

Specifies that the limits of output, as noted on the LIMIT= keyword (on this initialization parameter) will be supported, that is, the amount of generated output must fall within the LIMIT= specification.

This subparameter has no effect as a work selection value for files received from a node that does not provide a page count for its files. For more information, see the sending node's reference documentation.

### PRMode | PMD

Specifies that the current PRMODE specification is preferred. If more than one mode is specified, they are in left to right priority order.

**Note:** To punch output, a match must be found; this criterion should be placed before the slash.

### Priority

Specifies that output priority will be considered. Priority is not matched with any other parameter; rather, it specifies that a higher output priority receives greater output preference. If specified before the slash, the importance of selecting output by priority is increased.

**Note:** To prevent performance degradation, this criterion should be placed after the slash.

### Routecde

Specifies that only output destined for a destination specified by a route code listed on the ROUTECDE= parameter is eligible for selection by this device.

#### Note:

1. If Routecde is specified before the slash, the route code(s) are in left to right priority order; if specified after the slash, there is no such priority order. To prevent performance degradation, this criteria should be placed before the slash.
2. **If WS= is added to this remote punch statement, you must specify Routecde in the WS= list.**

### RANGE

Specifies that the current job ID range is preferred. If specified to the left of the slash, an exact match is required.

### Volume

Specifies that only output with tracks on the currently specified volume can be selected for punching. If specified to the left of the slash, the volumes are



## R(nnnnn).PU(m)

considered to be in left to right priority order. If specified to the right of the slash, no priority order exists, but an exact match is still required.

### Writer

Specifies that the writer name (W=) specification is either required or preferred.

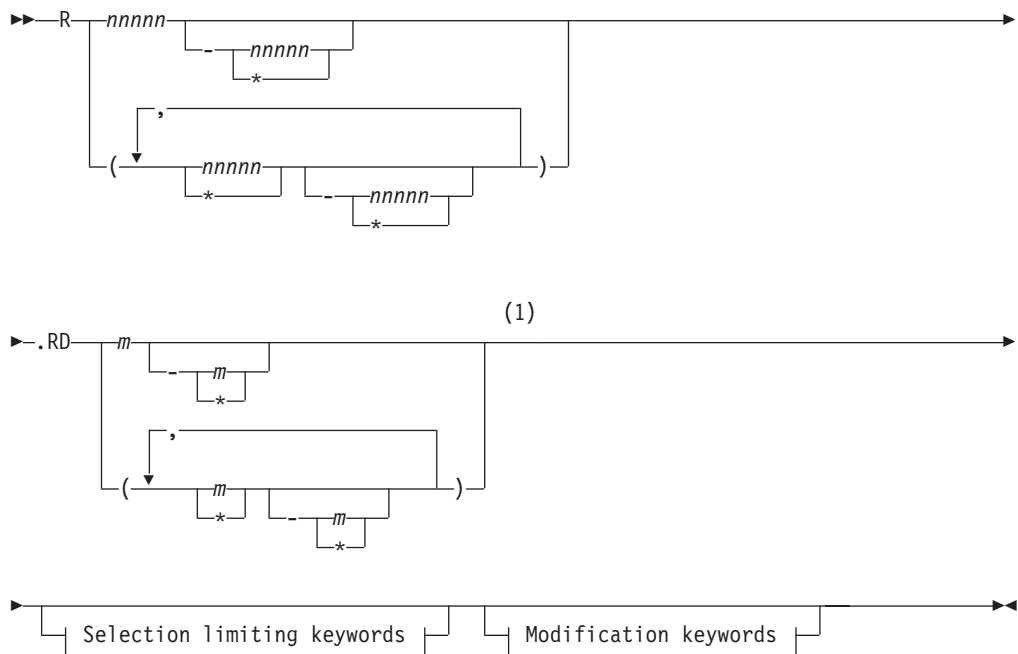
**Note:** Embedded comments are not allowed within the WS= parameter specification.

**Modification:** \$T Rnnnnn.PUm operator command.

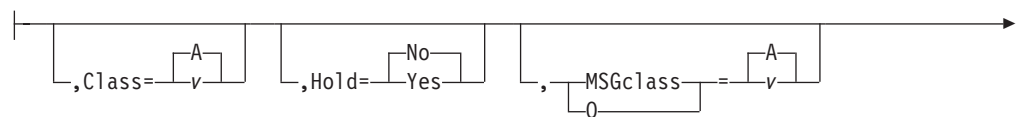
## R(nnnnnn).RD(m) - Remote Card Reader

The R(nnnnnn).RD(m) statement specifies the characteristics of one card reader at a remote terminal. The value of nnnnnn is the number of the remote terminal, as specified in the RMT(nnnnnn) statement; m is the number of this reader. Readers are numbered consecutively (Rnnnnnn.RD1 to Rnnnnnn.RD7) for the number of readers (NUMRD=n in the RMT(nnnnnn) statement) specified for this remote terminal. For example, if there are three card readers attached to remote terminal 2, the readers are numbered R2.RD1, R2.RD2, and R2.RD3. Use the subscripts (nnnnnn or m) in an ascending range (n-\*) to indicate from n to 32767 or, in a descending range (\*-n) to indicate 32767 to n, or \* to indicate all remote readers. Note that parameter ranging applies to both remotes and remote readers. Characteristics of remote readers are specified by the following parameters.

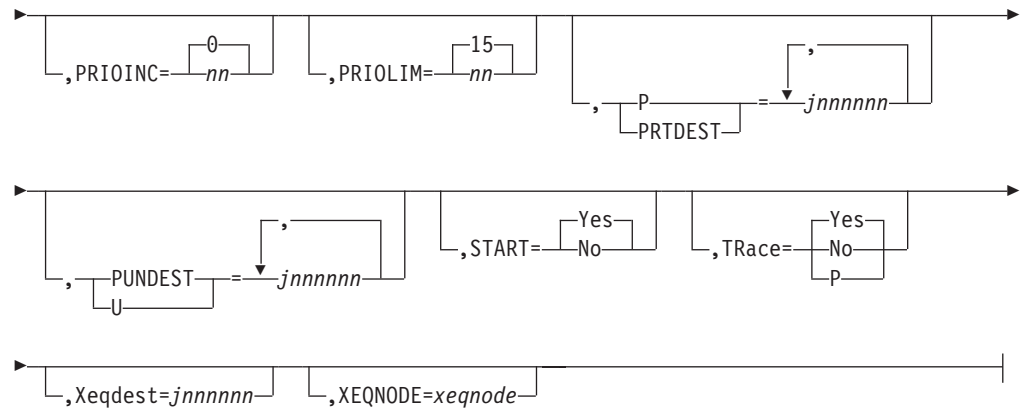
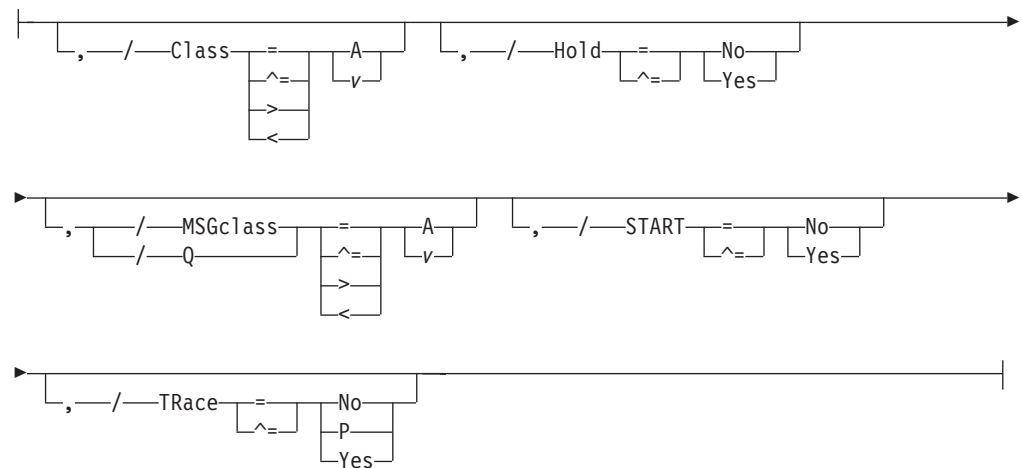
### Format Description for R(nnnnnn).RD(m)



### Modification keywords:





**Selection limiting keywords:****Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter Description for R(nnnnnn).RD(m)****Class=v|A**

Specifies the job class to be assigned to all jobs that are entered at this card reader and that do not specify a job class in the CLASS operand of their JOB statements.

**Modification:** \$T Rnnnnnn.RDm operator command.

**Hold=Yes|No**

Specifies whether (Yes) or not (No) all jobs entered at this card reader are held after JCL conversion until they are released for execution by the operator.

**Modification:** \$T Rnnnnnn.RDm operator command.

**MSGclass=v|A**

Specifies the default message class to be assigned to jobs that are entered at this card reader and that do not specify a MSGclass operand in their JOB statements.

**Modification:** \$T Rnnnnnn.RDm operator command.

## R(nnnnnn).RD(m)

### **PRIOINC=nn|0**

Specifies a number (0-15) to be added to the selection priority of each job entered at this card reader. If the total of this number and a job's priority exceeds the priority level specified by PRIOLIM=, JES2 will use the priority level specified by PRIOLIM=.

**Modification:** \$T Rnnnnnn.RDm operator command.

### **PRIOLIM=nn|15**

Specifies the maximum priority level (0-15) that can be assigned to jobs entered at this card reader. If a job's priority (with or without the increment specified by PRIOINC=) exceeds this level, it will be reduced to this level.

**Modification:** \$T Rnnnnnn.RDm operator command.

### **PRTDEST=jnnnnnnnn [.jnnnnnnnn]**

Specifies the default print destination for the print output from all jobs that are entered at this card reader and that do not have a /\*ROUTE statement or DEST parameter.

If you do not specify a route code value, JES2 defaults to the route code (ROUTECD= specified on the RMT(nn) statement) for this remote terminal.

**Modification:** \$T Rnnnnnn.RDm operator command.

**Note:** If you specify PRTDEST=, you must place the DESTID initialization statement before the R(nnnnnn).RD(m) statement in the initialization stream.

### **PUNDEST=jnnnnnnnn [.jnnnnnnnn]**

Specifies the default punch destination for the punch output from all jobs that are entered at this card reader and that do not have a /\*ROUTE statement or DEST parameter.

If you do not specify a route code value, JES2 defaults to the route code (ROUTECD= specified on the RMT(nn) statement) for this remote terminal.

**Modification:** \$T Rnnnnnn.RDm operator command.

**Note:** If you specify PUNDEST=, you must place the DESTID initialization statement before the R(nnnnnn).RD(m) statement in the initialization stream.

### **START=Yes|No**

Specifies whether (Yes) or not (No) this card reader is to start automatically when JES2 starts processing.

**Modification:** \$S Rnnnnnn.RDm operator command or \$P Rnnnnnn.RDm operator command.

Specifies whether tracing is activated (Yes) or deactivated (No) for all remote readers. To trace a remote reader, you must also provide the following initialization statements:

```
TRACE(n) START=Yes
TRACEDEF ACTIVE=Yes
```

### **TRACE=Yes|No|P**

This parameter setting can be overridden by the \$T R(nnnnnn).RD(m) operator command. Internal reader tracing is also controlled by trace IDs 11 and 12, the TRACE(n) and TRACEDEF initialization statements, and the \$S TRACE command. (See *z/OS JES2 Initialization and Tuning Guide*, the TRACE(n) and

TRACEDEF initialization statements in this chapter , and *z/OS JES2 Commands* for a description of the \$S TRACE command for further information concerning the tracing facility.)

**Modification:** \$T Rnnnnnn.RDm command.

**Note:** TRACE=Yes is identical to specifying TRACE=P. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used. (For further information, see *z/OS JES2 Initialization and Tuning Guide*.)

**Xeqdest=jnnnnnnnn**

Specifies the name of the node where jobs entered on the device are to be executed.

**Modification:** \$T Rnnnnnn.RDm operator command

## RDR(nn) - Local Card Reader

The RDR(nn) statement specifies the characteristics of one local card reader. Each reader is defined by a RDR(nn) statement with a unique value (1-99) specified for nn. Use the subscript (nn) in an ascending range (n-\*) to indicate from n to 99 or, in a descending range (\*-n) to indicate 99 to n, or \* to indicate all readers.

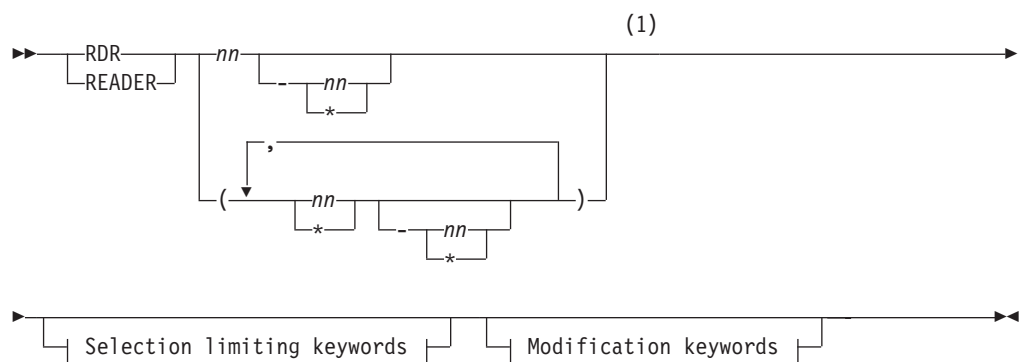
The dual reader/punch feature is supported by JES2 as shown in the following example. Assume that a 3525 with the read feature has a unit address of 013 and that the following two items appear in the JES2 initialization data set:

```
RDR(2) UNIT=013,START=NO
PUN(1) UNIT=013
```

When JES2 is started, the reader is stopped and the punch feature is activated. If the operator later wishes to read data from the 3525, punch 1 can be stopped and reader 2 started with JES2 operator commands.

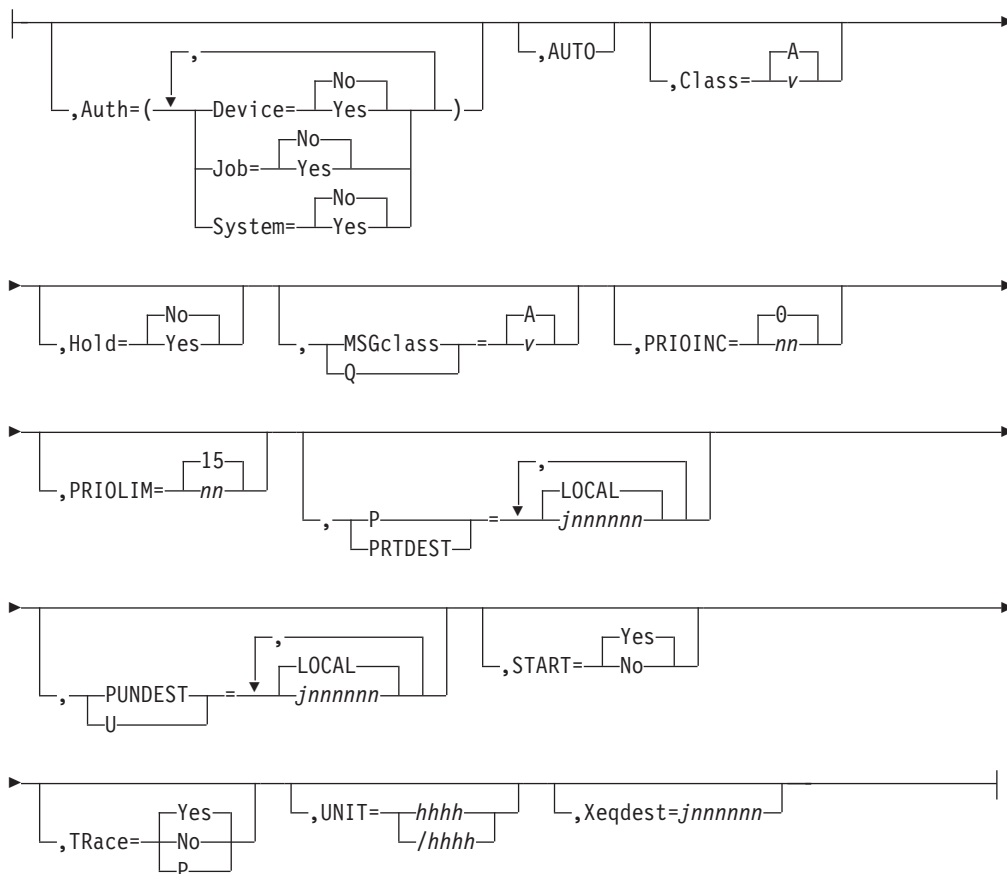
Reader characteristics are specified by the following parameters.

### Format Description for RDR(nn)

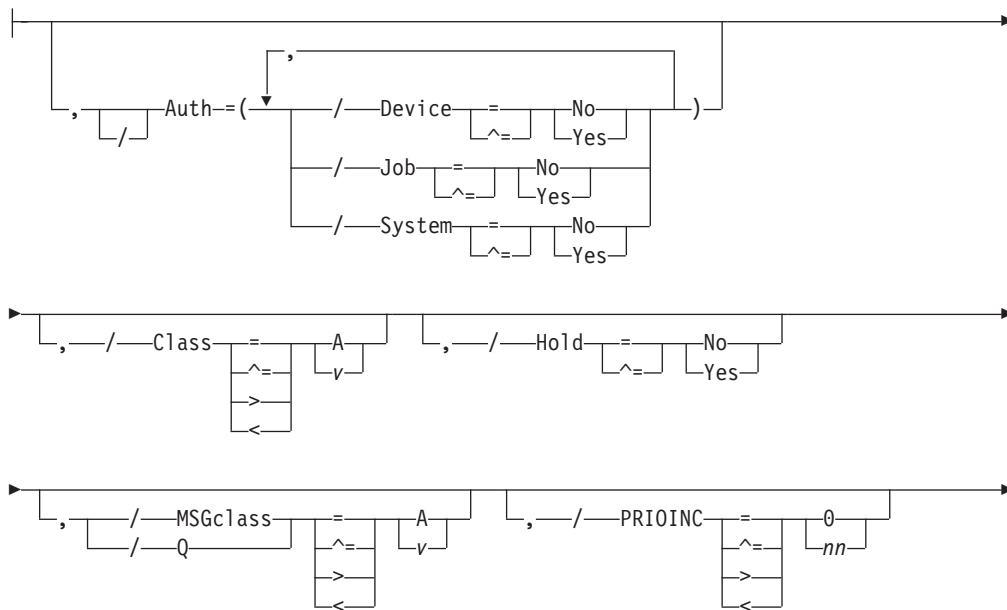


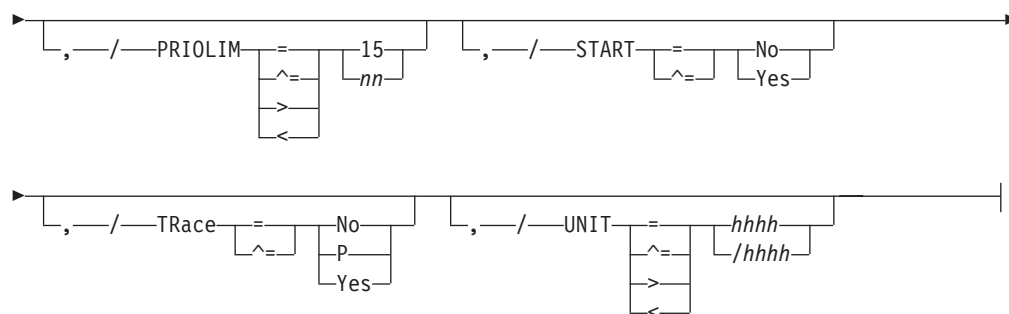
**Modification keywords:**

# RDR(nn)



## Selection limiting keywords:



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter Description for RDR(nn)****Auth=(Job=Yes|No, Device=Yes|No, System=Yes|No)**

Specifies the command authority for this card reader. These values authorize certain JES2 commands to be entered at this card reader.

**Job=Yes|No**

Specifies that the device can (Yes) or cannot (No) issue commands which require job authority.

**Device=Yes|No**

Specifies that the device can (Yes) or cannot (No) issue commands which require device authority.

**System=Yes|No**

Specifies that the device can (Yes) or cannot (No) issue commands which require system authority.

**Note:** This parameter has no effect when the associated resource class and profile in RACF 1.9 or higher are active. For more information on JES2 security, see *z/OS JES2 Initialization and Tuning Guide*.

This parameter affects JES2 command statements only. Use the AUTH= parameter of the JOBCLASS initialization statement to specify the authorization for JCL command statements. (JES2 command statements begin with /\* in columns 1 and 2. JCL command statements begin with // in columns 1 and 2.)

**Modification:** \$T RDRnn operator command.

**Class=v|A**

Specifies the default job class (A-Z,0-9) to be assigned to all jobs entered at this card reader that do not specify a job class in the CLASS operand of their JOB statements.

**Modification:** \$T RDRnn operator command.

**Hold=Yes|No**

Specifies whether (Yes) or not (No) all jobs entered at this card reader are held after JCL conversion until they are released for execution by the operator.

**Modification:** \$T RDRnn operator command.

**MSGclass=v|A**

Specifies the default message class (A-Z, 0-9) to be assigned to jobs entered at this card reader that do not specify a MSGCLASS operand in their JOB statements.

**Modification:** Operator command.

**PRTDEST=jnnnnnn[.jnnnnnn] | LOCAL**

Specifies the default print destination for the print output from all jobs that are entered at this card reader and that do not have a /\*ROUTE statement or DEST parameter.

**Modification:** \$T RDRnn operator command.

**Note:** If destid is used, it must be previously defined on a DESTDEF statement in the initialization stream.

**PRIOINC=nn | 0**

Specifies a number (0-15) to be added to the selection priority of each job entered at this card reader. If the total of this number and a job's priority exceeds the priority level specified by the PRIOLIM= parameter, JES2 will use the priority level specified by PRIOLIM=.

**Modification:** \$T RDRnn operator command.

**PRIOLIM=nn | 15**

Specifies the maximum priority level (0-15) that can be assigned to jobs entered at this card reader. If a job's priority (with or without the increment specified by PRIOINC=) exceeds this level, it will be reduced to this level.

**Modification:** \$T RDRnn operator command.

**PUNDEST=jnnnnnn[.jnnnnnn] | LOCAL**

Specifies the default punch destination for the punch output from all jobs that are entered at this card reader and that do not have a /\*ROUTE statement or DEST parameter.

**Modification:** \$T RDRnn operator command.

**Note:** If destid is used, it must be previously defined on a DESTDEF statement in the initialization stream.

**START=Yes | No**

START=Yes specifies that this reader (if ready) will be started automatically by JES2 after initialization and that no additional commands will be required to reactivate it when it becomes inactive. START=No specifies that this reader is initialized in the drained state. This requires that an operator command, \$S RDRnn, must be issued before the first usage of the reader. In addition, after every EOF, this reader will become inactive and will require a \$S RDRnn command to be reactivated.

**Modification:** \$S RDRnn command or \$P RDRnn command.

**Note:**

1. This automatic reader start feature is not available to secondary JES2 subsystems.
2. If the reader is to be started automatically and is unavailable when JES2 is started, it remains unusable until the next time JES2 is started unless the UNIT= keyword is specified on this device statement. If UNIT= is specified, the reader is allowed to start although it may have been offline during JES2 initialization.

**TRace=Yes | No | P**

Specifies tracing is activated (Yes) or deactivated (No) for all readers. To trace a reader, you must also provide the following initialization statements:

TRACE(n) START=Yes

TRACEDEF ACTIVE=Yes

**Note:** TRACE=Yes is identical to specifying TRACE=P.

Tracing readers is also controlled by trace IDs 11 and 12, the TRACE(n) and TRACEDEF initialization statements, and the \$T RDRnn command. (See *z/OS JES2 Initialization and Tuning Guide*, the TRACE(n) and TRACEDEF initialization statements in this chapter, and *z/OS JES2 Commands* for a description of the \$T RDRnn command for further information concerning the tracing facility.)

**Modification:** \$T RDRnn command.

**Note:** If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used. (For further information, see *z/OS JES2 Initialization and Tuning Guide*.)

**UNIT={hhh|/hhhh}**

Specifies a 3- or 4-digit hexadecimal device number. Device numbers can be specified by any of the following formats:

```
UNIT=hhh
UNIT=hhhh
UNIT=/hhh
UNIT=/hhhh
```

where hhh and hhhh represent the device numbers.

A slash (/) can optionally precede the device number (for compatibility with other initialization statements that require a slash to denote a 4-digit device number).

If UNIT= is specified, this device is allowed to start although it may have been offline during JES2 initialization.

If you do not specify this parameter, JES2 does not assign an available reader; instead, a reader can be dynamically assigned using a \$T RDRnn command.

**Modification:** \$T RDRnn operator command.

**XEQDEST=jnnnnnn**

Specifies the name of the node where jobs entered on the device are to be executed.

**Modification:** \$T RDRnn operator command.

## RECVOPTS - Recovery Intervention Rate

For JES2 main task errors, the RECVOPTS statement specifies a threshold for an error rate below which the operator is not involved in the recovery process. If the error rate threshold (that is, the COUNT= specification) is reached within the INTERVAL= time limit, the operator must authorize further recovery attempts. For main task errors, the operator may suppress the automatic dump which is normally generated by the operator's response to the \$HASP070 SPECIFY RECOVERY OPTIONS message.

Use the subscript (type) to specify the type of attempted error recovery for which the operator is notified. (See **type** below.) If RECVOPTS(\*) is coded, it specifies the interval and count thresholds that are used for **all** error types before the operator receives the \$HASP070 message. For example,

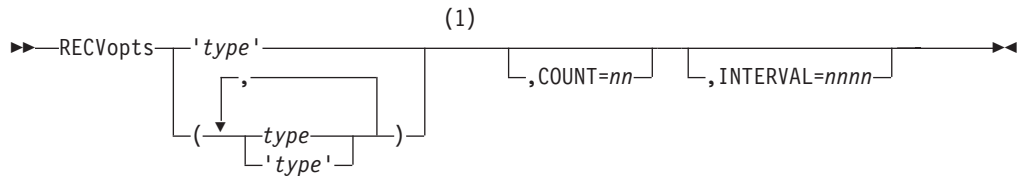
## RECVOPTS

RECVOPTS(\*) COUNT=5,INTERVAL=10 causes the \$HASP070 message to be issued if any one type of error occurs over four times in a 10-hour period (from the time the first error of that type occurred).

For subtask errors and disastrous errors, the RECVOPTS statement specifies an error rate threshold below which an automatic dump is always taken. No dumps are taken when the threshold is reached.

You can have multiple RECVOPTS statements for separate error types.

### Format Description for RECVOPTS



#### Notes:

- 1 Omit the comma between initialization statement and first keyword

### Parameter Description for RECVOPTS

#### type

Specifies the type of errors for which interval and count thresholds are set. Specify (\*) to set the thresholds for all error types. The following options can be specified:

#### ALLOCATE

Indicates HOSALLOC subtask errors

#### CKPT

Indicates checkpoint data set read/write errors

#### CKPTONCF

Indicates checkpoint on CF subtask errors

#### CKPTVRNS

Indicates CKPTVRNS subtask errors

#### CONVERT

Indicates HOSCNVT subtask errors

#### DISTERR

Indicates disastrous errors

#### GENERAL

Indicates general purpose subtask errors

#### IMAGE

Indicates HASPIMAG subtask errors

#### MAIN

Indicates JES2 main task errors

#### OFFLOAD

Indicates HASPOFF subtask errors

#### PQE

Indicate print/punch queue errors



**SMF**  
Indicates HASPACCT subtask errors

**SPOOL**  
Indicates HOSPOOL subtask errors

**VTAM**  
Indicates HASPVTAM subtask errors

**WTO**  
Indicates HASPWTO subtask errors

**COUNT=nn**

For the MAIN type, COUNT= specifies the number (1-99) of errors (within the INTERVAL= time period) below which the operator will not become involved in the recovery process. The operator becomes involved with the recovery process at the point *nn* errors are experienced within the INTERVAL= period. For subtasks and disastrous error TYPE= specifications, this parameter specifies the number of errors at which automatic SVC dumps will no longer be taken, if the errors occur within the INTERVAL= period. Therefore, this means that if a single automatic dump is desired for a subtask or disastrous error, COUNT=2 must be specified.

**Default:** See the following table of default values ( by error type):

Type    COUNT=

ALLOCATE  
          2

CKPT    2

CKPTONCF  
          2

CKPTVRNS  
          2

CONVERT  
          2

DISTERR  
          2

GENERAL  
          2

IMAGE  
          1

MAIN    2

OFFLOAD  
          1

PQE     1

SMF     2

SPOOL  
          2

VTAM  
          2

WTO     2

## RECVOPTS

\* depends on the type of error received

**Modification:** \$T RECVOpts operator command.

### **INTERVAL=nnnn**

Specifies the number of hours (0-9999) in the current interval in which JES2 is counting errors. Zero (0) indicates no operator involvement.

**Default:** See the following table of default values (by error type):

**Type INTERVAL=**

**ALLOCATE**

24

**CKPT 24**

**CKPTONCF**

24

**CKPTVRNS**

24

**CONVERT**

24

**DISTERR**

24

**GENERAL**

24

**IMAGE**

24

**MAIN 1**

**OFFLOAD**

24

**PQE 0** (indicating no operator involvement)

**SMF 24**

**SPOOL**

24

**VTAM**

24

**WTO 24**

\* depends on the type of error received

**Modification:** \$T RECVOpts operator command.

---

## **REDIRECT(vvvvvvvv) - Direct Output of Display Commands**

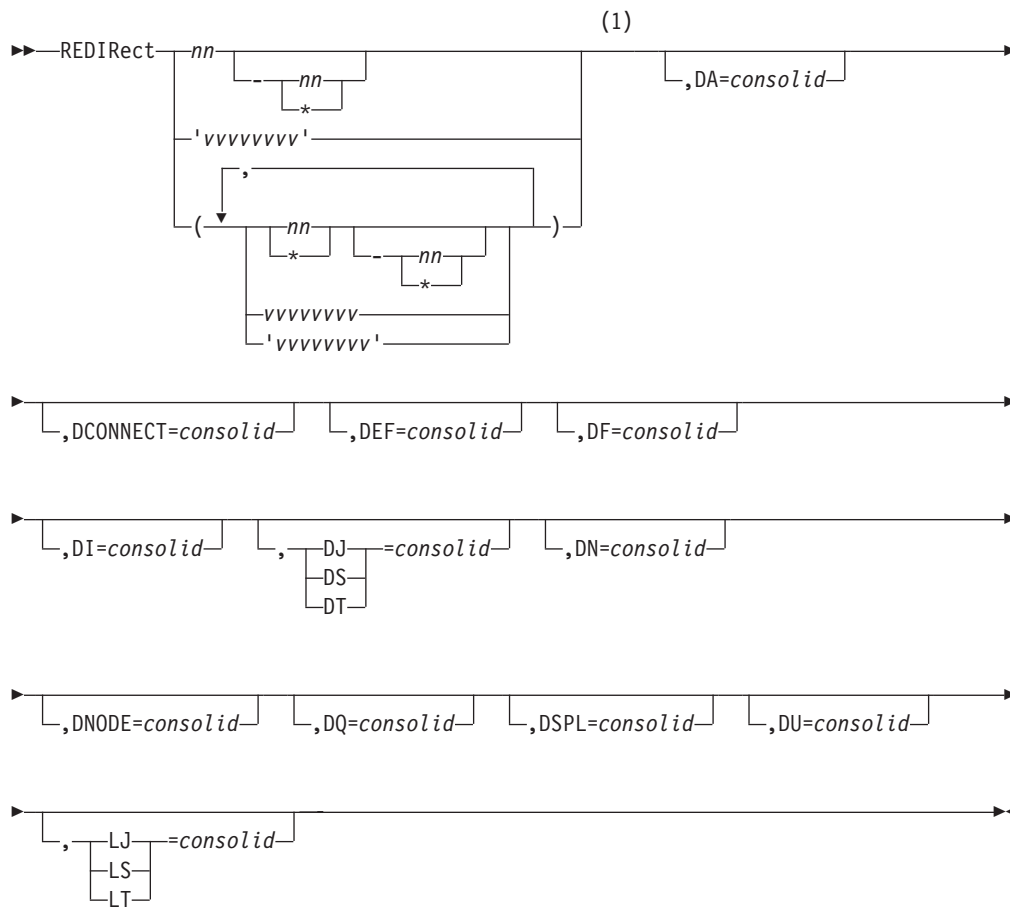
Use the REDIRECT(vvvvvvvv) initialization statement to control where JES2 directs the response to certain display commands, when they are entered at a console identified by vvvvvvvv. For vvvvvvvv, specify a 2- to 8-character console identifier from which an operator enters the command, or a 2-decimal digit console identifier.

In a sysplex, if a JES2 subsystem has SCOPE=SYSTEM on its CONDEF initialization statement, redirection will not be in effect for that subsystem. To have that subsystem take part in the redirection, issue the \$T REDIRect command on that JES2.

## Adding Applications

This statement and all its parameters can be added after initialization with the \$ADD REDIRect(vvvvvvvv) operator command.

## Format Description for REDIRect(vvvvvvvv)



### Notes:

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for REDIRect(vvvvvvvv)

### command

Specifies the display command for which JES2 is to direct responses to either a display area on the command entry console or another console, as indicated by consolid. The display commands that may be specified are the following:

### DA=

Display active jobs command

## REDIRect(vvvvvvvv)

**DCONNECT=**  
Display network connections

**DEF=**  
Display JES2 parameter definitions

**DF=**  
Display forms queue

**DI=**  
Display initiators

**DJ=**  
Display job, started task (STC), or TSO/E logon (TSU) information

**DN=**  
Display queued jobs

**DNODE=**  
Display NJE nodes

**DQ=**  
Display number of queued jobs

**DSPL=**  
Display spool volumes

**DU=**  
Display units

**LJ=**  
List job output, started task (TSU), or TSO/E logon (TSU) information.

For more information about these commands, see *z/OS JES2 Commands*.

### **consolid**

Specifies the console (or console and area) to which JES2 sends the response to the redirected command. The consolid can be specified in one of the following formats:

**a** Specifies a display area on the entry console.

**hh** Specifies the 1- or 2-digit decimal console identifier.

**hha** Specifies the 1- or 2-digit decimal console identifier (hh) and a display area of that console (a).

**xxxxxxx**  
Specifies the 2- to 8-character symbolic name of a console.

**xxxxxxx-a**  
Specifies the 2- to 8-character symbolic name of a console (xxxxxxx) and a 1-character identifier for a display area of that console (a).

Figure 1 shows examples of valid console ids.

```
1      -- MVS console with ID 1
D      -- Area "D" of the entry console
23B    -- Area "B" of MVS console 23
PRTPOOL1 -- MVS console with symbolic name PRTPOOL1
PRTPOOL1-C -- Area "C" of console with symbolic name PRTPOOL1
```

*Figure 1. Examples of Valid Console IDs*

*z/OS MVS Planning: Operations* explains how to plan your installation's console configuration.

If you do not specify this statement at initialization, JES2 directs all command responses to an area of the command entry console as specified in the RDIRAREA= parameter of the CONDEF initialization statement.

**Modification:** \$T REDirect operator command, to modify redirection for a command already named on a REDirect(vvvvvvvv) initialization statement. However, if a REDirect(vvvvvvvv) does not exist for a particular console and you want to direct responses to display commands elsewhere, you must issue the \$ADD REDirect command with the appropriate parameters.

---

## REP - Replacing Code Through the JES2 Patching Facility

The REP initialization statement is one of several statements used by the JES2 patching facility. For the other statements, see “VERify - Verifying Code Through the JES2 Patching Facility” on page 389 and “NAME - Naming the Module to Change Through the JES2 Patching Facility” on page 195. The JES2 patching facility allows you to specify temporary replacement data (patches) for the following:

- Any module in JES2 (HASJES20 or an installation exit load module)
- Any absolute storage address from the address space where JES2 is loaded.
- On a hot start, any address in a data space created by JES2 (that is, owned by JES2AUX)
- On any warm start, any address in the JES2 checkpoint data set.

Patching facility statements are placed in the JES2 initialization data set and applied when JES2 is initialized. The JES2 patching facility applies temporary patches to the in-storage copy of JES2 modules. Because some of the initialization code has already been executed before the patch facility initialization statements are processed, patches made to those portions of the code are ineffective; those portions of code **do not** execute again until you restart JES2. Most patches are applied immediately as the statements are processed. However, checkpoint updates are deferred until the checkpoint record is read. Non-checkpoint patches are not saved across a warm start. JES2 reloads the load modules at different stages in processing:

- Subsystem support modules are reloaded during all starts except a hot start.
- HASPJES20 is reloaded in response to a JES2 START command any time the JES2 member is started.

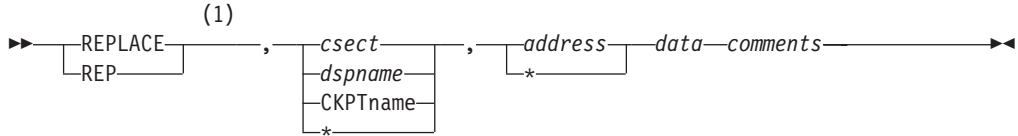
In addition, you should be aware that the JES2 patching facility does **not** support:

- Patching a module or data area residing in read-only storage. For example, you cannot use the facility to modify modules in PLPA or PSA.
- Patching a HASPFSSM load module that has been loaded into a functional subsystem address space. Use AMASPZAP (the service aid program that modifies both instructions and data) to patch the HASPFSSM load module.
- Altering the JES2 dump formatting exit modules (HASMxxxx).
- Using a patch across a restart of JES2. Because these patches are valid only until a load module is reloaded, they must be reapplied every time JES2 is started.

The JES2 patching facility statements in the JES2 initialization data set can be specified in either the JES2 patching format or in the AMASPZAP format. All patches in the JES2 patching form should precede any AMASPZAP patches. If you

supply the NAME statement or first format type of the AMASPZAP patch, JES2 resets prior verification errors. For more information on AMASPZAP patches, see "SPZAP" in *z/OS MVS Diagnosis: Tools and Service Aids*.

## Format Description for REP



### Notes:

- 1 Omit the comma between initialization statement and first keyword or variable

## Parameter Description for REP

### {REPLACE|REP}

The data on the statement replaces the data at the location specified by the csect and address fields.

### csect|dspname|CKPTname|\*

Specifies the control section (or control block), data space name, or checkpoint CTENT in which the data to be modified resides. If an asterisk (\*) is coded, JES2 uses the CSECT, dataspace or CTENT in effect on a previous JES2 patch statement. Table 89 and Table 90 on page 351 contain lists of the possible patch names that can be coded and area to which these names refer. If the CSECT is listed in Table 89, you can specify the last four characters of the CSECT name.

If an installation exit CSECT is referenced, the JES2 Patching Facility requires the entire module name, except for the reserved names HASPXJ00-HASPXJ31. If you do not linkedit the installation exit routines HASPXJ00 - HASPXJ31 with the HASJES20 load module, you must specify the full 8-character CSECT name. Furthermore, do not name an exit with the same three or four characters (xxxx) as used for a JES2 module. For example, an installation-defined exit named CKPT or TABS (that is, HASPCKPT or HASPTABS, with the HASP characters removed) would modify the IBM-supplied HASPCKPT or HASPTABS module.

Table 89. Patch Name to CSECT Reference

CSECT Referenced	AMASPZAP Patch Name	JES2 Patch Name
HASCARMS	HASCARMS	ARMS
HASCARSO	HASCARSO	ARSO
HASCBLDM	HASCBLDM	BLDM
HASCCNVS	HASCCNVS	CNVS
HASCDAU	HASCDAU	DAU
HASCENF	HASCENF	ENF
HASCGGKY	HASCGGKY	GGKY
HASCGGST	HASCGGST	GGST
HASCHAM	HASCHAM	HAM
HASCINJR	HASCINJR	INJR
HASCJBST	HASCJBST	JBST
HASCJBTR	HASCJBTR	JBTR
HASCLINK	HASCLINK	LINK
HASCNJAS	HASCNJAS	NJAS

Table 89. Patch Name to CSECT Reference (continued)

CSECT Referenced	AMASPZAP Patch Name	JES2 Patch Name
HASCNJEX	HASCNJEX	NJEX
HASCNJGP	HASCNJGP	NJGP
HASCNJE	HASCNJE	NJE
HASCNJJR	HASCNJJR	NJJR
HASCNJJT	HASCNJJT	NJJT
HASCNJSR	HASCNJSR	NJSR
HASCNJST	HASCNJST	NJST
HASCNJRC	HASCNJRC	NJRC
HASCNJRQ	HASCNJRQ	NJRQ
HASCOFST	HASCOFST	OFST
HASCPHAM	HASCPHAM	PHAM
HASCPPOOL	HASCPPOOL	POOL
HASCRQUE	HASCRQUE	RQUE
HASCSAPI	HASCSAPI	SAPI
HASCSCAN	HASCSCAN	SCAN
HASCSIJI	HASCSIJI	SIJI
HASCSIRQ	HASCSIRQ	SIRQ
HASCSISC	HASCSISC	SISC
HASCSJFA	HASCSJFA	SJFA
HASCSJFS	HASCSJFS	SJFS
HASCSRAX	HASCSRAX	SRAX
HASCSRIP	HASCSRIP	SRIP
HASCTP	HASCTP	TP
HASCUBES	HASCUBES	UBES
HASCUBFR	HASCUBFR	UBFR
HASCUBRM	HASCUBRM	UBRM
HASCUBSR	HASCUBSR	UBSR
HASCXJCT	HASCXJCT	XJCT
Absolute Storage Location	-	ABS
HASPARM	HASPARM	ARM
HASPARMO	HASPARMO	ARMO
HASPBSC	HASPBSC	BSC
HASPCFAL	HASPCFAL	CFAL
HASPCFBF	HASPCFBF	CFBF
HASPCFDE	HASPCFDE	CFDE
HASPCFE	HASPCFE	CFE
HASPCFFC	HASPCFFC	CFFC
HASPCFLE	HASPCFLE	CFLE
HASPCFMT	HASPCFMT	CFMT
HASPCFQL	HASPCFQL	CFQL
HASPCFQU	HASPCFQU	CFQU
HASPCFRD	HASPCFRD	CFRD
HASPCFRE	HASPCFRE	CFRE
HASPCFRL	HASPCFRL	CFRL
HASPCFRS	HASPCFRS	CFRS
HASPCFR2	HASPCFR2	CFR2
HASPCFSI	HASPCFSI	CFSI
HASPCFT1	HASPCFT1	CFT1
HASPCFUN	HASPCFUN	CFUN
HASPCFWP	HASPCFWP	CFWP
HASPCFWR	HASPCFWR	CFWR
HASPCKDS	HASPCKDS	CKDS
HASPCKPT	HASPCKPT	CKPT

Table 89. Patch Name to CSECT Reference (continued)

CSECT Referenced	AMASPZAP Patch Name	JES2 Patch Name
HASPCCKRR	HASPCCKRR	CKRR
HASPCCKVR	HASPCCKVR	CKVR
HASPCNVT	HASPCNVT	CNVT
HASPCOMM	HASPCOMM	COMM
HASPCON	HASPCON	CON
HASPCSV	HASPCSV	CSV
HASCDSAL	HASCDSAL	DSAL
HASPDOC	HASPDOC	DOC
HASCDSOC	HASCDSOC	DSOC
HASCDSS	HASCDSS	DSS
HASPDYN	HASPDYN	DYN
HASPEVTL	HASPEVTL	EVTL
HASPFSSM	HASPFSSM*	--
HASPFSSP	HASPFSSP	FSSP
HASP Common Communication Table	-	HCCT
HASPHOPE	HASPHOPE	HOPE
HASPIRA	HASPIRA	IRA
HASPIRDA	HASPIRDA	IRDA
HASPIRMA	HASPIRMA	IRMA
HASPIRPL	HASPIRPL	IRPL
HASPIRRE	HASPIRRE	IRRE
HASPIRSI	HASPIRSI	IRSI
HASPJOS	HASPJOS	JOS
HASPJQS	HASPJQS	JQS
HASPMISC	HASPMISC	MISC
HASPMMSG	HASPMMSG	MSG
HASPNATS	HASPNATS	NATS
HASPNET	HASPNET	NET
HASPNJT	HASPNJT	NJT
HASPNPM	HASPNPM	NPM
HASPNRM	HASPNRM	NRM
HASPNSR	HASPNSR	NSR
HASPNST	HASPNST	NST
HASPNUC	HASPNUC	NUC
HASPODSM	HASPODSM	ODSM
HASPPRPU	HASPPRPU	PRPU
HASPPSO	HASPPSO	PSO
HASPRAS	HASPRAS	RAS
HASPRDR	HASPRDR	RDR
HASPRTAM	HASPRTAM	RTAM
HASPSASR	HASPSASR	SASR
HASPSERV	HASPSERV	SERV
HASPSIR	HASPSIR	SIR
HASPSJFR	HASPSJFR	SJFR
HASPSNA	HASPSNA	SNA
HASPSPIN	HASPSPIN	SPIN
HASPSPOL	HASPSPOL	SPOL
HASPTCP	HASPTCP	TCP
HASCSRDS	HASCSRDS	SRDS
HASCSRIC	HASCSRIC	SRIC
HASCSRJB	HASCSRJB	SRJB
HASPSRV	HASPSRV	SSRV



Table 89. Patch Name to CSECT Reference (continued)

CSECT Referenced	AMASPZAP Patch Name	JES2 Patch Name
HASPSTAB	HASPSTAB	STAB
HASPSTAC	HASPSTAC	STAC
HASPSTAM	HASPSTAM	STAM
HASPSUBS	HASPSUBS	SUBS
HASPSXDV	HASPSXDV	SXDV
HASPSXIT	HASPSXIT	SXIT
HASPSXJB	HASPSXJB	SXJB
HASPSXNJ	HASPSXNJ	SXNJ
HASPSXOT	HASPSXOT	SXOT
HASPTABS	HASPTABS	TABS
HASPTERM	HASPTERM	TERM
HASPTRAK	HASPTRAK	TRAK
HASPWARM	HASPWARM	WARM
HASPCXCF	HASPCXCF	PCXCF
HASPCXEQ	HASPCXEQ	PCXEQ
HASPCXJ00-HASPCXJ31	HASPCXJ00-HASPCXJ31	XJ00-XJ31**
xxxxxxx***	xxxxxxx	xxxxxxx
* This module cannot be modified by using JES REP (replace) facilities.		
** Reserved names for installation exit modules.		
*** Any load module previously specified in a LOADMOD control statement.		

Table 90. Other Area that can be Patched

Area Name	Default Base	Description
jes2JQRB		JQE request block data space
jes2NAT		NAT data space
jes2PCL		PCL data space
jes2SAPI*	0	SYSOUT API data space
jes2TBUF		TCP/IP buffer data space
jes2TJEV*	0	TJEV data space
jes2STAC*	0	Status and Cancel request data base
jes2PSO*	0	Process SYSOUT data space
jes2IRDS*	0	Internal reader data space
jes2CKVR*	0	Checkpoint versions data space
CKPTTGM**	X'18'	Checkpointed track group map
CKPTJQT**	X'18'	Checkpointed JQE track group extension
CKPTNITC**		
CKPTSCQ**	X'18'	Checkpointed shared communications queue
CKPTJIX**	X'18'	Checkpointed JQE index
CKPTJQE**	X'18'	Checkpointed job queue element
CKPTJQX**	X'18'	Checkpointed JQE extension
CKPTPST**	X'18'	Checkpointed JOE post element

Table 90. Other Area that can be Patched (continued)

Area Name	Default Base	Description
CKPTJOE**	X'18'	Checkpointed job output element
CKPTRECY**		
CKPTTGR**	X'18'	Checkpointed track group record
CKPTBERT**	X'18'	Checkpointed block extension reuse table
CKPTRSO**	X'18'	Checkpointed remote signon table
CKPTLCK**	X'18'	Checkpointed offload lock
CKPTDAS**	X'18'	Checkpointed direct access SPOOL table
CKPTMSTR**	0	Checkpointed master record (Not for CKPTed HCT)***
CKPTHCT**	\$SAVEBEG	Checkpointed HCT

\*        *jes2* is the name of the owning subsystem

\*\*        Checkpoint REPs are not processed until the checkpoint data set is read in.

\*\*\*      The checkpointed HCT can only be patched using the name CKPTHCT. Attempts to patch the checkpointed HCT in the master record will have no effect.

**address|\***

Specifies the 1-to 8-digit hexadecimal address of the data to be modified. This address does not have to be aligned in any way. The address should be taken directly from a JES2 assembler listing that contains the referenced CSECT.

If an asterisk (\*) is coded, the address will be interpreted as one greater than the last address reference on the previous JES2 patch statement.

**data**

Specifies the bytes of data to be modified at the specified location. Specify this number as a multiple of 2 hexadecimal digits. The data within the parameter may be separated by commas, never blanks. If all the data will not fit into one patch statement (71 bytes), you must use another patch statement.

If the data specifies a location within a JES2 CSECT, as specified at assembly time, the JES2 patch processing routine will relocate this data by the base location of the CSECT if indicated. Specify this relocation by following the data to be relocated with the name of the CSECT (abbreviated as in "csect" above) enclosed in parentheses. The address specified in the data field should be taken directly from a JES2 assembly listing containing the referenced CSECT. You can specify a minimum of 6 hexadecimal digits (3 bytes), and a maximum of 8 digits (4 bytes) for relocation.

**comments**

Following the last required parameter and its blank delimiter, the rest of the control statement space can be used for comments.

Examples of JES2 patching facility statements are shown in Figure 2 on page 353 and Figure 3 on page 354.

```

/*****
/*
/*          CORRECT PROGRAMMING ERROR IN HASPRDR          */
/*
/*****
VER RDR    1E2    41E00001          /* VERIFY INSTRUCTION */
REP *      1E2    4590B258          /* BAL TO PATCH SPACE */
VER NUC    258    B258,B25A,B25C,B25E,B260 /* VERIFY PATCH SPACE */
REP *      258    41202000          /* ADD INSTRUCTION   */
REP *      *      41E00001          /* REPLACE INSTRUCTION*/
REP *      *      07F9              /* RETURN             */
/*****
/*
/*          CORRECT BAD ADDRESS CONSTANT IN HASPPRPU      */
/*
/*****
VER PRPU   32E    58F0C65C          /* VERIFY INSTRUCTION */
REP *      330    B264              /* MODIFY DISPLACEMENT*/
VER NUC    264    B264,B266          /* VERIFY PATCH SPACE */
REP *      264    00000520(PRPU)    /* ADDRESS CONSTANT   */
/*****
/*
/*          MODIFY BLOCK CHARACTER TABLE TO SLASH        */
/*          THE LETTER Z (POSITION 26) AND THE NUMBER ZERO */
/*          (POSITION 27) ON OUTPUT SEPARATORS.           */
/*          --A TABLE ENTRY IS 24 BYTES LONG--           */
/*
/*****

```

Figure 2. Examples of JES2 Patching Format

## REQJOBID

```

/*****
/*
/*          CORRECT PROGRAMMING ERROR IN HASPRDR          */
/*
/*****
NAME HASPRDR HASPRDR           /* IDENTIFY SECTION */
VER 1E2 41E00001             /* VERIFY INSTRUCTION */
REP 1E2 4590B258             /* BAL TO PATCH SPACE */
NAME HASPNUC HASPNUC         /* IDENTIFY SECTION */
VER 258 B258,B25A,B25C,B25E,B260 /* VERIFY PATCH SPACE */
REP 258 41202000             /* ADD INSTRUCTION */
REP * 41E00001               /* REPLACE INSTRUCTION*/
REP * 07F9                    /* RETURN */
/*****
/*
/*          CORRECT BAD ADDRESS CONSTANT IN HASPPRPU          */
/*
/*****
NAME HASPPRPU HASPPRPU       /* IDENTIFY SECTION */
VER 32E 58F0C65C             /* VERIFY INSTRUCTION */
REP 330 B264                 /* MODIFY DISPLACEMENT*/
NAME HASPNUC HASPNUC         /* IDENTIFY SECTION */
VER 264 B264,B266             /* VERIFY PATCH SPACE */
REP 264 00000520(PRPU)       /* ADDRESS CONSTANT */
/*****
/*
/*          MODIFY BLOCK CHARACTER TABLE TO SLASH          */
/*          THE LETTER Z (POSITION 26) AND THE NUMBER ZERO  */
/*          (POSITION 27) ON OUTPUT SEPARATORS.              */
/*          --A TABLE ENTRY IS 24 BYTES LONG--              */
/*
/*****

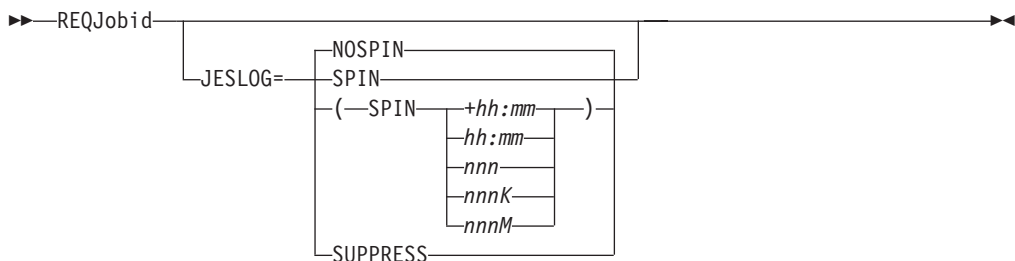
```

Figure 3. Examples of JES2 AMASPZAP Format

## REQJOBID - Specify JESLOG Characteristics

The REQJOBID initialization statement describes attributes to be assigned to request jobID address spaces. JES2 creates a "request jobID job" when an address space not running under JES2 requests a JES2 job structure. RACF is a user of this interface.

### Format Description for REQJOBID



### Parameter Description for REQJOBID

#### JESLOG=

Specifies for request jobID address spaces JESLOG data attributes to be used for JESMSG LG and JESYSMSG data sets.

**SPIN** JESLOG data is to be immediately spun off for request jobID address spaces

**(SPIN,+hh:mm)**

Indicates to spin JESLOG every hh:mm time interval.

where:

- hh is hours and has a range of 0 through 23
- mm is minutes and has a range of 00 through 59

**Note:** You must specify a minimum of 10 minutes or JES2 issues an error message. Also, for time intervals of less than one hour, you must specify the following format:  
JESLOG=(SPIN,+00:mm).

**(SPIN,hh:mm)**

Indicates to spin JESLOG at hh:mm every 24 hours.

**(SPIN,nnn)**

Indicates to spin JESLOG whenever either JESMSGGLG or JESYSMSG has nnn lines. nnn is the number (1–999) of lines in the data set.

**Note:** You must specify a minimum of 500 lines or JES2 issues an error message.

**(SPIN,nnnK)**

Indicates to spin JESLOG whenever either JESMSGGLG or JESYSMSG has "nnnK" lines. Use "K" to indicate thousands of lines.

**(SPIN,nnnM)**

Indicates to spin JESLOG whenever either JESMSGGLG or JESYSMSG has "nnnM" lines. Use "M" to indicate millions of lines.

**SUPPRESS**

Indicates that JES2 will suppress writing to the JESLOG data sets during the execution of jobs defined for this job class. JES2 only writes data to the JESLOG data sets during each job's input service and post-execution processing phases.

**NOSPIN**

Indicates that JESLOG data will not be spun, but will not be suppressed. NOSPIN is the default.

**Modification:**\$T REQJOBID operator command

**RMT(nnnnn) - BSC RJE Workstation**

The RMT(nnnnn) statement specifies the characteristics of one RJE workstation. The following descriptions apply to the characteristics of a BSC (binary synchronous communication) RJE workstation. For a description of the SNA RJE workstation, see "RMT(nnnnn) - SNA RJE Workstation" on page 363.

Specify a RMT(nnnnn) statement for each RJE workstation to be defined. RJE workstations can be numbered from RMT(1) to RMT(32767). You can use the subscript to specify a specific remote terminal (nnnnn), a range of terminals (n-\*) indicating n to the highest numbered terminal (32767), or all terminals (\*). This remote remains defined unless the RMT(nnnnn) device parameters NUMPRT=, NUMPUN=, and NUMRDR= are all set to zero, thereby setting the device count to zero. All remote definitions are ignored if no LINES are defined.

## RMT(nnnnn) (BSC)

An RJE workstation can be defined with all defaults if you specify a RMT statement that contains no operands. These default operands include specifying this terminal as a 2770 terminal with no features.

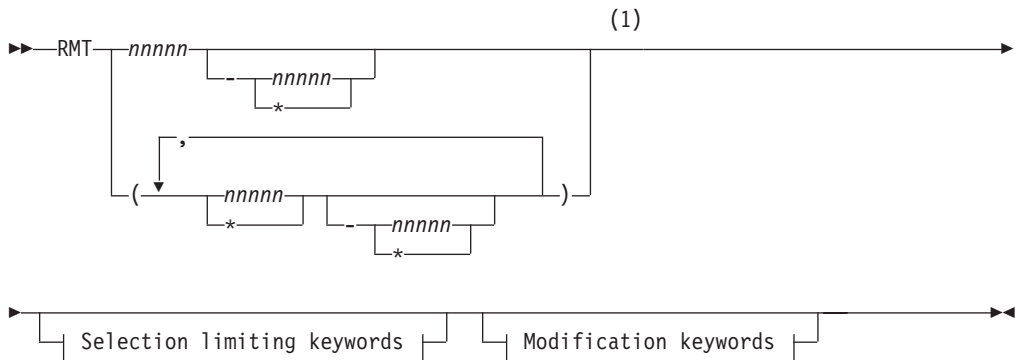
You don't have to define each RJE workstation to each member of your MAS. You only need to define each RJE workstation to one member of your MAS; however, be sure that each workstation has a unique subscript number (*nnnnn* in RMT(*nnnnn*)). For example, if you define RMT(13) on one member as a 3780 BSC terminal, RMT(13) should not be defined on **any other member**.

If an RJE workstation has attached devices, use the following initialization statements to describe their characteristics.

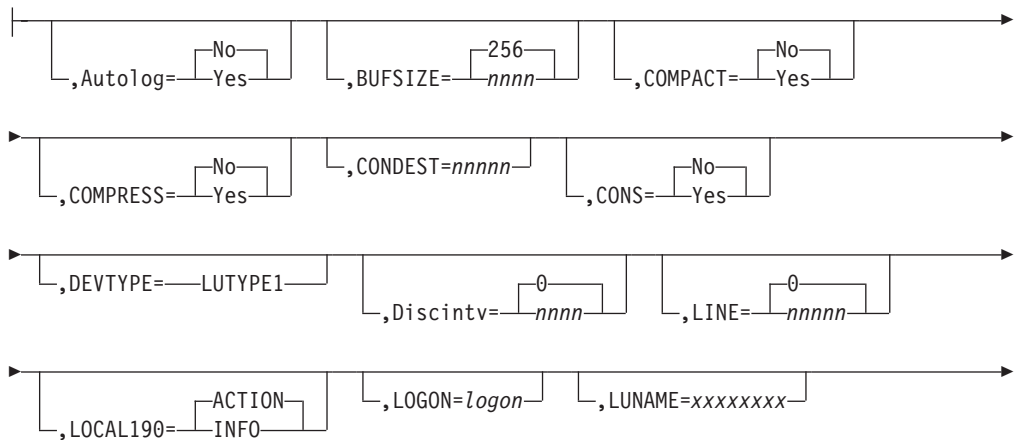
- R(nnnnn).PR(m) - specifies remote printer characteristics
- R(nnnnn).PU(m) - specifies remote card punch characteristics
- R(nnnnn).RD(m) - specifies remote card reader characteristics

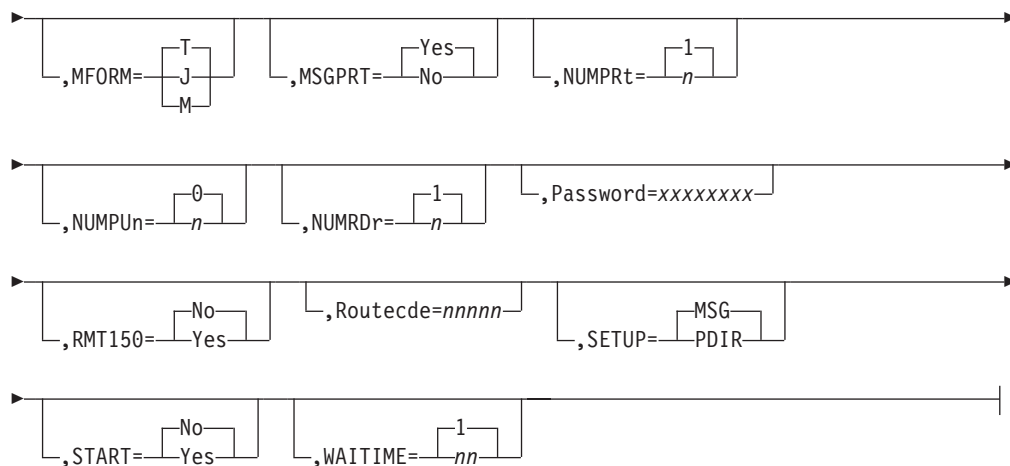
JES2 associates devices with RJE workstations by correlating the *nnnnn* in the above three statements to the *nnnnn* in an RMT(*nnnnn*) statement. JES2 does not support multiple printers, punches, or readers for remote BSC **hardware** (MULTILV=NO) terminals.

## Format Description for RMT(nnnnn) (BSC)

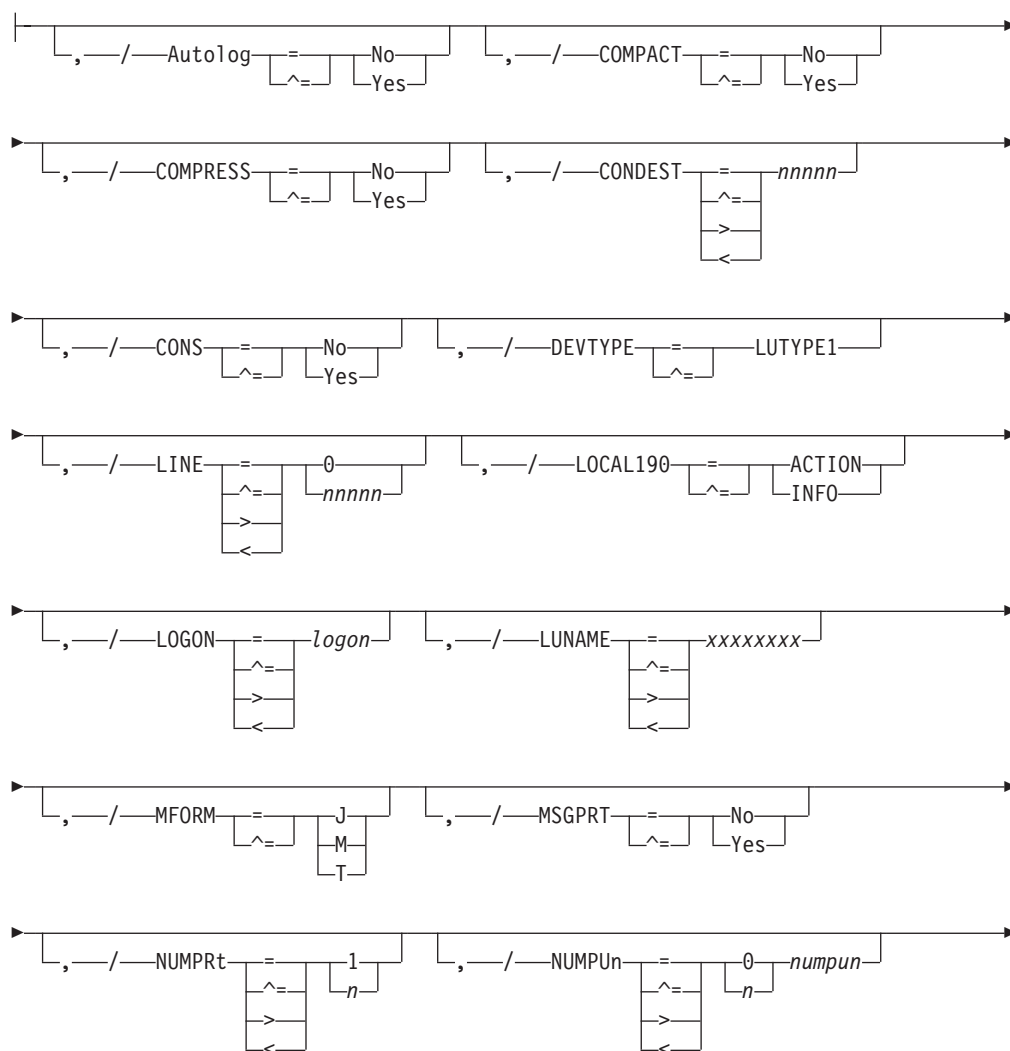


### Modification keywords:

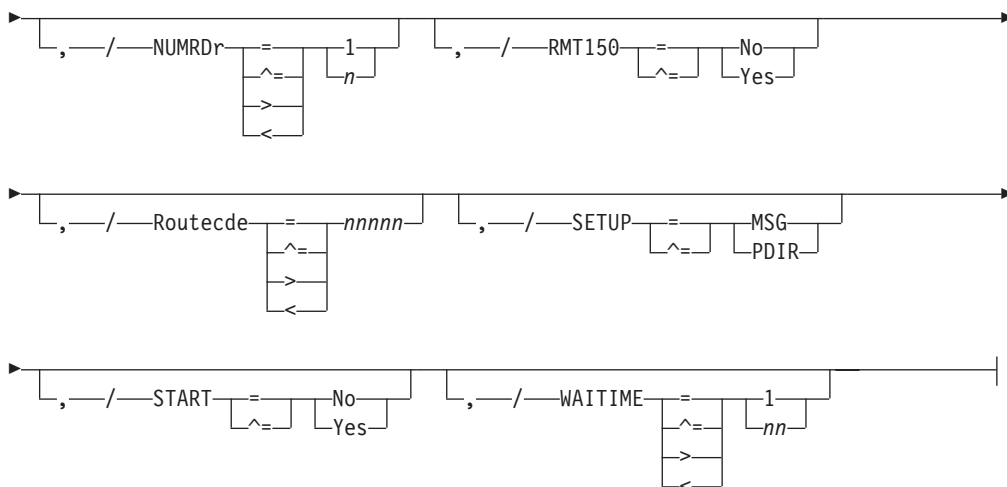




**Selection limiting keywords:**



## RMT(nnnnn) (BSC)



### Notes:

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for RMT(nnnnn) (BSC)

### DEVTYPE=type|2770

To specify the type of terminal or system at this remote location, specify one of the following:

Hardware Terminals	Multileaving Terminals	Systems
2770	2922	S/36
2780	M20-2	S/360
3781 (See note 1 below.)	M20-4	S/370
3781	M20-5	1130
	M20-6	S/3

If you are initializing a terminal that is not explicitly supported by JES2 (that is, one that is not listed above) but emulates one of the above listed terminals, consult the documentation for that terminal to be certain you set characteristics (such as buffer sizes) appropriately for that terminal.

### Note:

1. To ensure that punch output is directed to the proper device, specify '3781' to define remote 3780 terminals that contain punches.
2. Specify a 3740 hardware terminal as a 2780.

**Modification:** \$T RMT(nnnnn) operator command.

### BLOCK=Yes|No

Specifies whether or not this terminal has a blocked (Yes) or unblocked (No) data record format.

**Modification:** \$T RMT(nnnnn) operator command.

### BUFEXPAN=0|1|2

Specifies whether or not this 2770 terminal has a buffer-expansion feature.

- 0 Indicates that this terminal does not have a buffer expansion feature.



- 1 Indicates that this terminal has the buffer expansion feature and implies a remote terminal buffer size of 264 bytes.
- 2 Indicates that this terminal has the additional buffer expansion feature and implies a remote terminal buffer size of 520 bytes.

**Modification:** \$T RMT(nnnnn) operator command.

**Note:** If a printer attached to this remote has PRWIDTH= specified greater than 120, specify BUFEXPAN= 1 or 2.

#### BUFSIZE=nnnnn

Specifies the largest buffer (127-3960) that can be sent to or received from this BSC terminal. This parameter enforces minimum buffer size specification based on device type for BSC.

Following are the minimum values required to support various non-programmable terminals.

#### Minimum SIZE

	Terminal Type
127	2770, without any type of buffer expansion
264	2770, with buffer expansion (BUFEXPAN=1 on RMT(nnnnn) statement)
520	2770, with additional buffer expansion (BUFEXPAN=2 on RMT(nnnnn) statement)
400	2780
520	3780

**Performance Considerations:** This parameter can be used to reduce JES2 processor overhead when driving multileaving RJE workstations on high-speed lines. Proper specification can also increase throughput.

You can change this parameter value at the RJE workstation by: (1) regenerating the initial program load (IPL) data set or (2) specifying the multileaving buffer size before signon by placing an &MLBFSIZ initialization statement before the /\*SIGNON statement. (See MVS Remote Workstation Generation, GC28=1433 for RJE statement descriptions.)

If you do not specify a value, JES2 provides the following defaults for the following device types:

Table 91. JES2 BUFSIZE Defaults for RJE Workstations

Workstation	Type	BUFSIZE Value
Multileaving Terminals and Systems	N/A	MBUFSIZE= value on TPDEF statement
Hardware Terminal	2770 without buffer expansion (BUFEXPAN=0)	127
Hardware Terminal	2770 with buffer expansion (BUFEXPAN=1)	264
Hardware Terminal	2770 with additional buffer expansion (BUFEXPAN=2)	520
Hardware Terminal	2780	400
Hardware Terminal	3780	520
Hardware Terminal	3781	520

## RMT(nnnnn) (BSC)

**Modification:** \$T RMT(nnnnn) operator command.

### **COMPRESS=Yes|No**

Specifies whether (Yes) or not (No) this (2770 or 3780) terminal has the compression/expansion feature.

If you specified COMPRESS=No on the LINE(nnnnn) statement, for the line this terminal is to use, it overrides the value specified here. If you specified COMPRESS=Yes on the LINE(nnnnn) statement, whatever you specify here will take effect if COMP= is specified on the remote device (Rnnnnn.XXn initialization statement).

**Note:** COMPRESS=Yes and HTABS=Yes are mutually exclusive. If both are specified, HTABS=Yes will be changed to HTABS=No.

**Modification:** \$T RMT(nnnnn) operator command.

### **CONDEST=nnnnn**

Specifies the route code (1-32767) to be used for responses to commands entered from this RJE workstation. The value specified here should be equivalent to the nnnnn specification on a RMT(nnnnn) statement.

**Note:** This routing only affects nonspooled responses.

If you do not specify a value for this parameter, JES2 assigns the number of this terminal (RMT(nnnnn) ) as its route code.

**Modification:** \$T RMT(nnnnn) operator command.

### **CONS=Yes|No**

Specifies whether (Yes) or not (No) this multileaving terminal has an operator console or that it is simulating a console, as specified by the &PRTCONS RMT generation statement. See the MVS Remote Workstation Generation, GC28=1433 for an explanation of all RMT generation statements.

If JES2 determines that this remote can not have a console, JES2 forces the value of this parameter to NO.

**Note:** CONS=NO will not interrupt any streams for console messages. Console data will be sent when a session becomes available to the virtual console device. If CONS=NO is specified, data destined to a console can still be sent.

**Modification:** \$T RMT(nnnnn) operator command.

### **Discintv=nnnnn|0**

Specifies the interval (in seconds) after which, if there is no successful text transmission in either direction, this terminal will be disconnected from the processing unit. Error recovery tries and idle time are not counted as successful text transmission. The value of nnnnn may be from 0 to 8160 seconds; JES2 rounds this value to the next highest multiple of 32.

If you do not specify a value, this parameter defaults to 0, which indicates that this terminal is not to be disconnected.

**Modification:** \$T RMT(nnnnn) operator command.

### **HTABS=Yes|No**

Specifies whether (Yes) or not (No) this (2770 or 2780) terminal has the horizontal format-control feature.

**Note:** COMPRESS=Yes and HTABS=Yes are mutually exclusive. If both are specified, HTABS will be changed to HTABS=No.

**Modification:** \$T RMT(nnnnn) operator command.

**LINE=nnnnn|0**

Specifies the number (0-65535) of the teleprocessing line that is connected to this terminal. Use a number (1-65535) to specify a dedicated line or 0 to specify a non-dedicated line.

If you specify no line number, JES2 assigns a default of LINE=0, which provides a nondedicated line. This line can then be used by multiple BSC RJE workstation with similar features when started with a /\*SIGNON JCL statement.

**Modification:** \$T RMT(nnnnn) operator command.

**LOCAL190=INFO|ACTION**

INFO specifies that operator setup messages (\$HASP190) issued at the local (processor) console for this remote device are to be "information" messages, while ACTION specifies that the setup messages require operator action before they can be deleted from a display console.

**Modification:** \$T RMT(nnnnn) operator command.

**MFORM=J|M|T**

Specifies the amount of information to be displayed in JES2 operator console messages for this RJE workstation.

**J** Indicates that the message is displayed with the jobname and job ID of the issuer.

**M** Indicates that only the message text is displayed.

**T** Indicates that the message is displayed with a time stamp, jobname, and job ID of the issuer.

**Modification:** \$T RMT(nnnnn) operator command.

**MRF2780=Yes|No**

Specifies whether (Yes) or not (No) this 2780 terminal has the multiple-record feature.

**Modification:** \$T RMT(nnnnn) operator command.

**MSGPRT=Yes|No**

Specifies whether JES2 prints messages routed to a printer attached to the console of an RJE workstation.

MSGPRT=YES causes JES2 to print messages if the remote console is unavailable. MSGPRT=NO causes JES2 to discard messages if the RJE workstation console is unavailable.

**Modification:** \$T RMT(nnnnn) operator command.

**MULTILV=Yes|No**

Specifies whether (Yes) or not (No) this terminal will use the BSC (binary synchronous communication) multileaving interfaces. If Yes is specified, the terminal type must specify a multileaving workstation. No defines this RJE workstation as an RJE BSC hardware terminal.

**Modification:** \$T RMT(nnnnn) operator command.

**NUMPRT=n|1**

Specifies the number (0-7) of printers at this RJE workstation. Use the R(nnnnn).PR(m) initialization statement to specify the characteristics of each

## RMT(nnnnn) (BSC)

printer. JES2 can use values greater than 1 only if you coded MULTILV=Yes on this statement. A maximum total of 8 printers and punches may be specified.

**Modification:** \$T RMT(nnnnn) operator command.

### **NUMPUN=n|0**

Specifies the number (0-7) of card punches at this terminal. Use the R(nnnnn).PU(m) initialization statement to specify the characteristics of each card punch. JES2 can use values greater than 1 only when you coded MULTILV=Yes on this statement. A maximum total of 8 printers and punches may be specified.

**Modification:** \$T RMT(nnnnn) operator command.

### **NUMRDR=n|1**

Specifies the number (0-7) of card readers at this RJE workstation. Use the R(nnnnn).RD(m) initialization statement to specify the characteristics of each reader.

**Modification:** \$T RMT(nnnnn) operator command.

### **Password=xxxxxxx**

Specifies a 1- to 8-character security password to prevent unauthorized users from using this RJE workstation's resources.

**Modification:** \$T RMT(nnnnn) operator command.

### **RECFM=FIXED|VARIABLE**

Specifies whether the data record for this terminal is fixed-length (FIXED) or variable-length (VARIABLE).

**Modification:** \$T RMT(nnnnn) operator command.

### **RMT150=Yes|No**

Yes specifies that if this RJE workstation has a console, the \$HASP150 message is first sent to this console and then also sent to the local operator. No specifies that the \$HASP150 message is sent only to the local operator.

#### **Note:**

1. If Yes is specified for this RJE workstation, and SYSTEM36 (S/36), CONS=Yes, and MULTILV=Yes are also specified, the remote printer will pause momentarily to ensure that the \$HASP150 message arrives at the console before the data sets begin to print on the printer. There is no pause for systems other than SYSTEM36.
2. This parameter is not valid for hardware terminals.

**Modification:** \$T RMT(nnnnn) operator command.

### **Routecde=nnnnn**

Specifies the route code (1-32767) to be assigned to this terminal and its associated printers, punches, and readers. The value specified here should be equivalent to the nnnnn specification on a RMT(nnnnn) statement.

If you do not specify a route code, JES2 assigns the number of this terminal (RMT(nnnnn)) as its route code.

**Modification:** \$T RMT(nnnnn) operator command.

### **SHARABLE=Yes|No|Default**

Specifies whether (Yes) or not (No) JES2 allows the line specified on the LINE= parameter to be used by other RJE workstations.

**Yes**

Indicates that multiple RMT definitions can also specify and use the line specified on the LINE= parameter. A /\*SIGNON JCL statement is required to start these RJE workstations.

**No** Indicates that no other RJE workstations can specify and use the line specified on the LINE= parameter.

**DEFAULT**

Indicates that you want JES2 to determine the value of this parameter based on all RJE workstations definitions. JES2 sets this parameter to SHARABLE=No if a specific line number (LINE=nnnnn) is specified on only one RMT(nnnnn) statement. JES2 sets this parameter to SHARABLE=Yes if a specific line number (LINE=nnnnn) is specified on multiple RMT(nnnnn) statements.

**Note:**

1. If a RMT(nnnnn) statement specifies a LINE= parameter with SHARABLE=NO, but another RMT(nnnnn) statement specifies the same LINE= value, JES2 forces SHARABLE=Yes on all RMT definitions with the LINE= value at the installation when initialization completes.
2. If only one RMT(nnnnn) statement specifies a line and you do not specify the SHARABLE= parameter at initialization, you must use the \$T command to set SHARABLE=Yes before you can use a \$ADD RMT(nnnnn) or a \$T RMT(nnnnn) command for another RMT definition that specifies the same LINE= value. Therefore, SHARABLE=Yes is recommended to avoid this situation, unless you want to specifically reserve a given line for use by a single RJE workstation.

**Modification:** \$T RMT(nnnnn) operator command.

**TRANSPAR=Yes|No**

Specifies whether (Yes) or not (No) this terminal has the text-transparency feature. If you specify TRANSPAR=Yes, you must also specify TRANSPAR=Yes on the LINE(nnnnn) statement that defines the line for this RJE workstation.

**Modification:** \$T RMT(nnnnn) operator command.

**WAITIME=nn|1**

Specifies the length of time in seconds (0-30) that RTAM should wait at the completion of the processing of any input stream, or printed or punched output stream, to allow the operator to enter an input stream at this RJE workstation.

**Modification:** \$T RMT(nnnnn) operator command when the remote is inactive.

---

## RMT(nnnnn) - SNA RJE Workstation

The RMT(nnnnn) statement specifies the characteristics of one RJE workstation. The following descriptions apply to the characteristics of a SNA remote terminal. For a description of the BSC RJE workstation, see "RMT(nnnnn) - BSC RJE Workstation" on page 355.

Specify a RMT(nnnnn) statement for each RJE workstation to be defined. RJE workstations can be numbered from RMT(1) to RMT(32767). You can use the subscript to specify a specific remote terminal (nnnnn), a range of terminals (n-\*) indicating n to the highest numbered terminal (32767), or all terminals (\*). This remote remains defined unless the RMT(nnnnn) device parameters NUMPRT=,

## RMT(nnnnn) (SNA)

NUMPUN=, and NUMRDR= are all set to zero, and CONS=NO thereby setting the device count to zero. All remote definitions are ignored if no LINES are defined.

An RJE workstation can be defined with all defaults if you specify a RMT statement that contains no operands.

**Note: Effectively, the defaults specify this remote as a 2770 BSC RJE workstation with no features, not a SNA RJE workstation.**

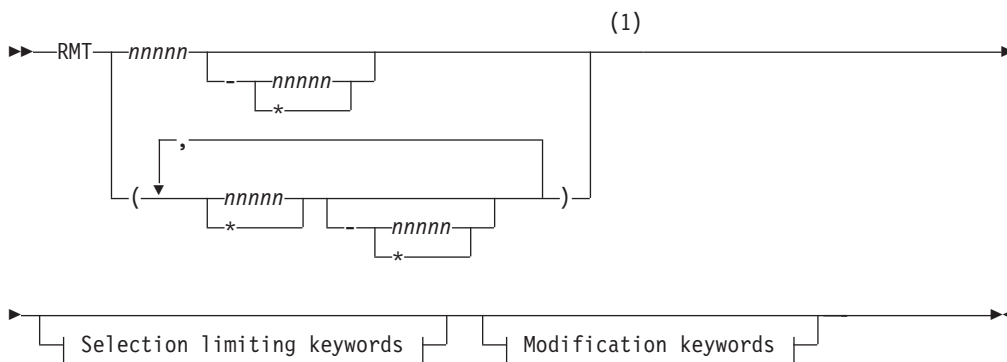
You don't have to define each RJE workstation to each member of your MAS. You only need to define each RJE workstation to one member of your MAS; however, be sure that each workstation has a unique subscript number (nnnnn in RMT(nnnnn)). For example, if you define RMT(13) on one member as a SNA LUTYPE1, RMT(13) should not be defined on **any other member**.

If an RJE workstation has attached devices, use the following initialization statements to describe their characteristics:

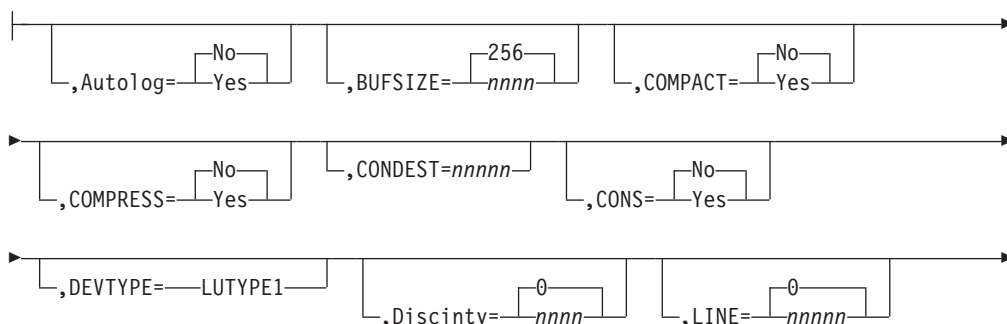
- R(nnnnn).PR(m)--specifies remote printer characteristics
- R(nnnnn).PU(m)--specifies remote punch characteristics
- R(nnnnn).RD(m)--specifies remote card reader characteristics

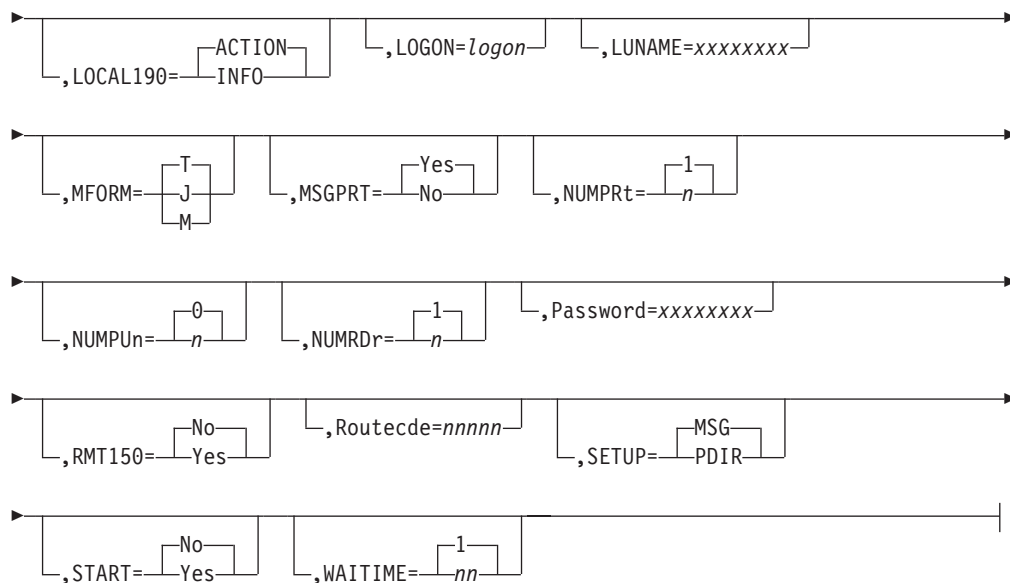
JES2 associates devices with RJE workstations by correlating the nnnnn in the above three statements to the nnnnn in an RMT(nnnnn) statement. SNA RJE workstation characteristics are specified by the following parameters.

## Format Description for RMT(nnnnn) (SNA)

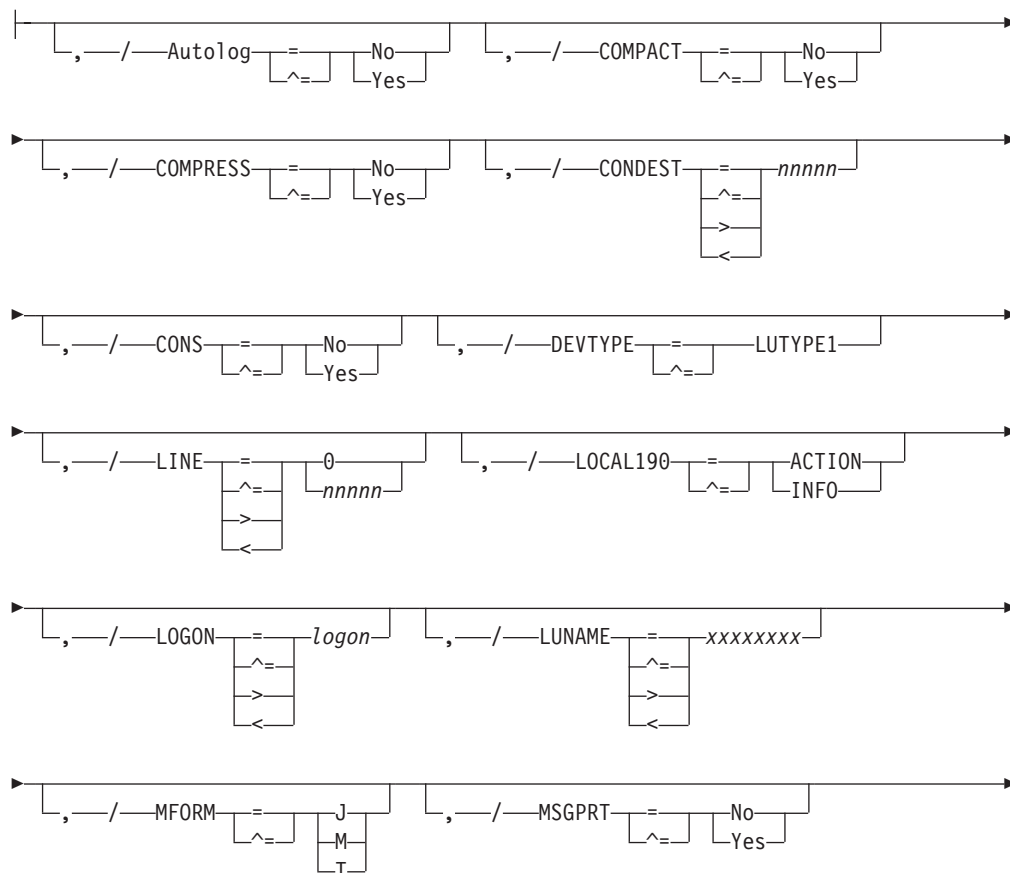


### Modification keywords:

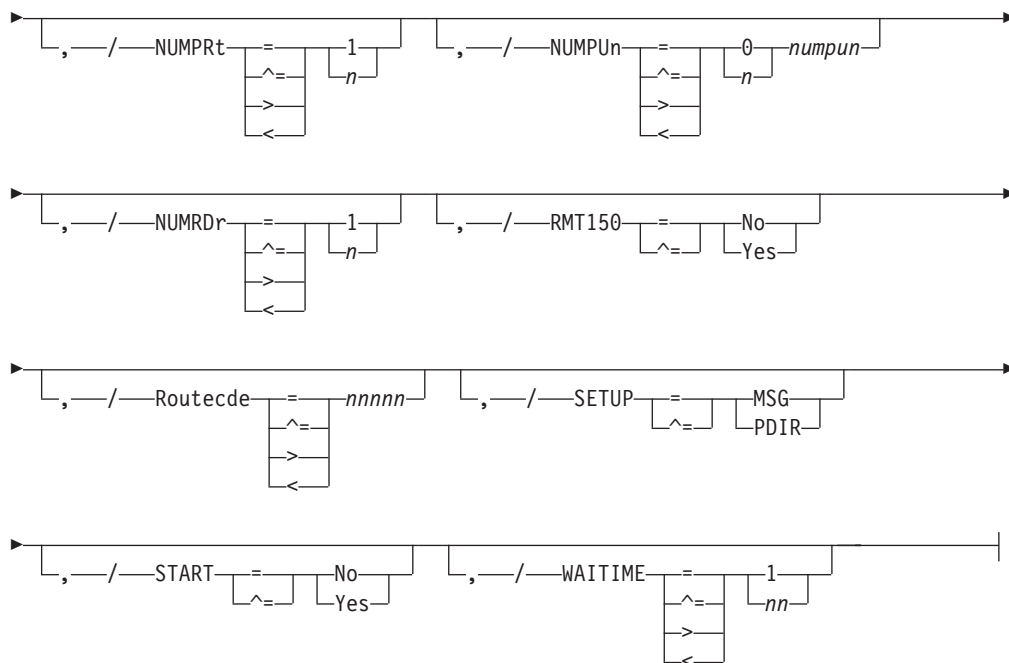




**Selection limiting keywords:**



## RMT(nnnnn) (SNA)



### Notes:

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for RMT(nnnnn) (SNA)

### **AutoLog=Yes|No**

Specifies whether (Yes) or not (No) this RJE workstation remote can be automatically logged on. You must be certain to also specify the LUNAME= parameter.

**Modification:** \$T RMT(nnnnn) operator command.

### **BUFSIZE=nnnnn|256**

Specifies the largest request unit (256-3840 bytes) that can be sent to or received from this SNA RJE workstation. A value of nnnnn outside this range defaults to 256.

**Performance Considerations:** Use this parameter to reduce JES2 processor overhead when driving multileaving remote workstations on high-speed lines. Proper specification can also increase throughput.

**Modification:** \$T RMT(nnnnn) operator command.

### **COMPACT=Yes|No**

Specifies whether (Yes) or not (No) this RJE workstation supports compaction, allowing a compaction table to be sent for use with a printer or punch data set. If more than one session is active and Yes is specified, all sessions are eligible to receive a compaction table.

Use the COMPACT initialization statement to define compaction tables. If more than one session is active and COMPACT=Yes, all sessions are eligible to receive a compaction table.

**Modification:** \$T RMT(nnnnn) operator command.

### **COMPRESS=Yes|No**

Specifies whether (Yes) or not (No) this SNA terminal will use the



compression/expansion feature. If COMPACT=Yes (compaction) is specified, compression (COMPRESS=Yes) is forced.

**Modification:** \$T RMT(nnnnn) operator command.

**CONDEST=nnnnn**

Specifies the route code (1-32767) to be used for responses to commands entered from this RJE workstation. The value specified here should be equivalent to the nnnnn specification on a RMT(nnnnn) statement.

**Note:** This routing only affects nonspooled responses. If you do not specify a value, JES2 assigns the number of this terminal (RMT(nnnnn) ) as its route code.

**Modification:** \$T RMT(nnnnn) operator command.

**CONS=Yes|No**

Specifies whether (Yes) or not (No) this RJE workstation has an operator console.

**Modification:** \$T RMT(nnnnn) operator command.

**Note:** This parameter should only be specified for those SNA RJE stations that have a separate console.

**DEVTYPE=LUTYPE1**

Specifies that this RJE workstation is a SNA terminal (for example, a 3770 terminal, a 3791 workstation, or a System/32 workstation) that can be accessed only by means of a logical line (that is, a line defined by a LINE(nnnnn) statement with the UNIT=SNA parameter).

**Modification:** \$T RMT(nnnnn) operator command. (If DEVTYPE= is changed to a valid value other than LUTYPE1, this SNA remote workstation will be changed to a BSC remote workstations.)

**Discintv=nnnnn|0**

Specifies the maximum interval (0-8160) in seconds after which, if there is no successful text transmission in either direction, JES2 ends the session between the SNA RJE workstation and the processing unit. Error recovery tries and idle time are not counted as successful text transmission. JES2 rounds this value to the next higher multiple of 32.

If you do not specify a value, this parameter defaults to 0, indicating that the session is not to be ended and the terminal is not to be disconnected.

**Modification:** \$T RMT(nnnnn) operator command.

**LINE=nnnnn|0**

Specifies the number (0-65535) of a logical line that is connected (and dedicated) to this RJE workstation. This line must be defined by a LINEnnnnn statement, with the UNIT=SNA parameter specified. An exception to this rule is specifying LINE=0, which causes JES2 to reset the remote to a nondedicated terminal.

If you specify no line number, JES2 uses a default of LINE=0 to indicate that the terminal is nondedicated and can use any nondedicated, SNA line.

**Modification:** \$T RMT(nnnnn) operator command.

**LOCAL190=INFO|ACTION**

Specifies the type for operator setup messages (\$HASP190) issued at the local processor console for this RJE workstation.

## RMT(nnnnn) (SNA)

### INFO

Specifies that these messages (\$HASP190) are to be “information” type messages that do not require an operator action to be deleted from a display console.

### ACTION

Specifies that these messages (\$HASP 190) are flagged as “action” messages that require a positive operator action to be deleted from a display console.

**Modification:** \$T RMT(nnnnn) operator command.

### LOGON=logon

Specifies the logon DCT to which this remote device should be connected as defined by the LOGON(nnn) initialization parameter.

### LUNAME=xxxxxxx

Specifies the logical unit name of this RJE workstation. If specified, this name must be the same as the name defined to VTAM at system initialization. A logical unit name must be specified if the automatic logon capability is used. The logical unit associated with the logical unit name should be the first of the terminal's logical units to logon to JES2. Otherwise, the LUNAME associated with the session is taken from the name pointed to by the parameter list VTAM passes to the JES2 logon exit.

**Modification:** \$T RMT(nnnnn) operator command.

### MFORM=J|M|T

Specifies the amount of information to be displayed in JES2 operator console messages for this remote workstation.

- J** Indicates that the message is displayed with the jobname and job ID of the issuer.
- M** Indicates that only the message text is displayed.
- T** Indicates that the message is displayed with a time stamp, jobname, and job ID of the issuer.

**Modification:** \$T RMT(nnnnn) operator command.

### MSGPRT=Yes|No

Specifies whether JES2 keeps messages on spool routed to an unavailable RJE workstation console.

MSGPRT=Yes causes JES2 to keep messages on spool if the remote console is unavailable. MSGPRT=No causes JES2 to discard messages if the RJE workstation does not have a console defined.

**Modification:** \$T RMT(nnnnn) operator command.

### NUMPRT=n|1

Specifies the number (0-7) of logical printers at this RJE workstation. If there is a separate printer for each console, do not include it in this count. The maximum value for NUMPRT= is 6 if CONS=Yes is specified, 7 otherwise. Use a zero to specify no printers. Use the R(nnnnn).PR(m) statement to specify the characteristics of the printer(s). A maximum total of 8 printers and punches can be defined for RJE workstations without a console or only 7 printers and punches for RJE workstations with a console defined.

**Modification:** \$T RMT(nnnnn) operator command.

**NUMPUN=n|0**

Specifies the number (0-7) of logical card punches at this RJE workstation. SNA RJE workstations can support up to 7 punch data streams. Use the R(nnnnn).PU(m) initialization statement to specify the characteristics of the card punch(s). A maximum total of 8 printers and punches can be defined for RJE workstations without a console or only 7 printers and punches for RJE workstations with a console defined.

**Modification:** \$T RMT(nnnnn) operator command.

**NUMRDR=n|1**

Specifies the number (0-7) of logical card readers at this RJE workstation. SNA RJE workstations can support up to 7 reader data streams. Use the R(nnnnn).RD(m) initialization statement to specify the characteristics of the reader(s).

**Modification:** \$T RMT(nnnnn) operator command.

**Password=xxxxxxx**

Specifies a security password to prevent unauthorized users from using this RJE workstation's resources.

**Modification:** \$T RMT(nnnnn) operator command.

**RMT150=Yes|No**

Yes specifies that if this RJE workstation has a console, the \$HASP150 message is first sent to this console and then also sent to the local operator. NO specifies that the \$HASP150 message is sent only to the local operator.

**Note:** Yes is only valid if CONS=Yes is also specified for this remote terminal.

**Modification:** \$T RMT(nnnnn) operator command.

**Routecde=nnnnn**

Specifies the route code (1-32767) to be assigned to this terminal and its associated printers, punches, and readers. The value specified here should be equivalent to the nnnnn specification on a RMT(nnnnn) statement.

If you do not specify a route code, JES2 assigns the number of this terminal (RMT(nnnnn)) as its route code.

**Modification:** \$T RMT(nnnnn) operator command.

**SETUP=PDIR|MSG**

PDIR specifies that a peripheral data information record (PDIR), containing setup information, is constructed and sent to the remote workstation. The remote workstation is responsible for processing the header and generating any required messages. SETUP=PDIR allows spooling of data and generation of multiple copies of a data set (from the original sent by JES2) at a remote workstation.

MSG specifies that JES2 is to inform the remote operator of any setup requirements through the \$HASP190 message. Upon completion of setup, the operator must issue a \$S command to start JES2 transmission.

**Modification:** \$T RMT(nnnnn) operator command.

**START=Yes|No**

Specifies whether (Yes) or not (No) JES2 should start this RJE workstation after initialization. To use this feature, you must be certain to specify the LUNAME= parameter. Also, you must start the LOGON(n) and LINE(nnnnn) that this RMT(nnnnn) uses earlier in the initialization stream.

## RMT(nnnnn) (SNA)

**Modification:** \$S RMTnnnnn operator command or \$P RMTnnnnn operator command.

**WAITIME=nn|1**

Specifies the length of time (0-30) in seconds that RTAM should wait at the completion of the processing of any input stream, printed output stream, or punched output stream to allow the operator to enter an input stream at this RJE workstation.

**Note:** If this parameter is set too low, contention might occur during SNA logon processing, resulting in \$HASPO94 messages and the termination of the SNA remote session. Increase this parameter to allow the SNA remote adequate time to respond during logon processing so that proper LU type 1 protocol is followed.

**Modification:** \$T RMT(nnnnn) operator command if the RJE workstation is inactive.

---

## SMFDEF - JES2 SMF Buffer Definition

The SMFDEF statement defines the System Management Facilities (SMF) buffers to JES2.

### Format Description for SMFDEF



#### Notes:

- 1 Omit the comma between initialization statement and first keyword

### Parameter Description for SMFDEF

**BUFNUM=nnnn|5**

Specifies the number (0-1000) of system management facilities (SMF) buffers JES2 obtains. If the value specified is less than 2, JES2 will neither produce SMF records nor take the SMF exit, IEFUJP.

When determining the value of nnnn, be aware that the SMF buffers used for the 3800 printer output remain in use until all associated output is stacked. Additionally, multiple SMF buffers can be active concurrently for the 3800. Therefore, the minimum number of SMF buffers, for an installation that uses 3800 printers should be:

$$5 + n + (30 / p) y + o + pu$$

where:

**n=** number of non-3800 printers

**p=** average number of pages per data set for each 3800 printer

**y=** number of 3800 printers

**o=** 3 x (number of offload devices)

**pu=** 2 x (number of purge processors)

Use your present SMF records to determine the average number of pages per data set currently processed by each 3800. Dividing 30 by this value (the average number of pages per data set currently processed by each 3800 printer) provides the average number (generally not more than 2) of job output elements (JOEs) that represent active work on all 3800 printers. (Active work is represented by those JOEs that were sent to the 3800 printer but have not been completely stacked.)

The value specified for BUFNUM is rounded up so that the storage used for SMF buffers is a whole number of pages.

**Note:** Use this parameter to increase the limit for the JNUM resource that is reported on the HASP050 message.

**Modification:** Single-member warm start.

#### BUFWARN=nnn|80

Specifies the percentage (0-100) of SMF buffers in use at which the operator will be alerted by message \$HASP050 JES2 RESOURCE SHORTAGE. If you specify 0, no alert is given.

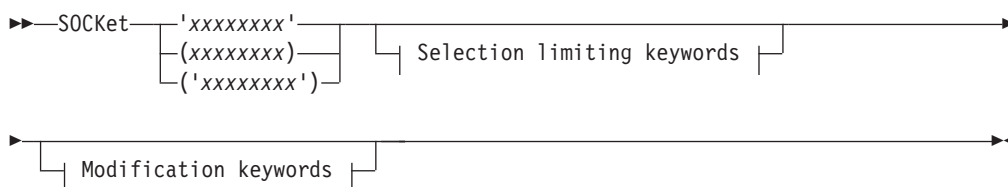
**Modification:** \$T SMFDEF operator command.

---

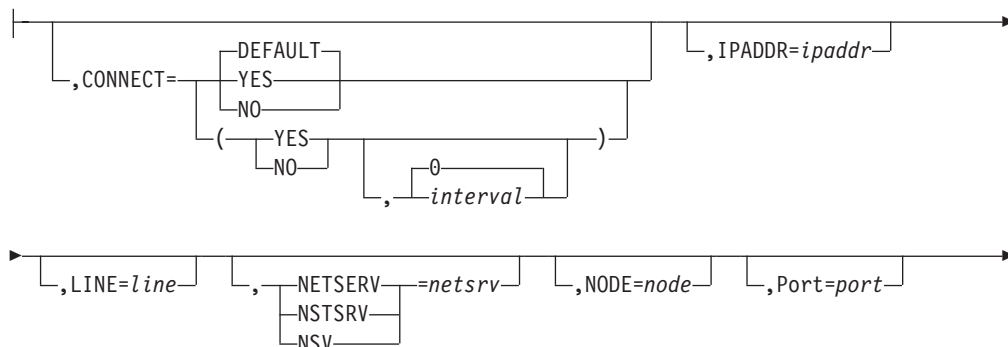
## SOCKET(xxxxxxxx) - Define NJE/TCP IP address and port

The SOCKET statement specifies a TCP/IP address and PORT combination that represents either a local address and port that is to be listened on by a NETSRV, or a remote address and port with which an NJE connection is established. The SOCKET statement maps the IP address to an NJE node name.

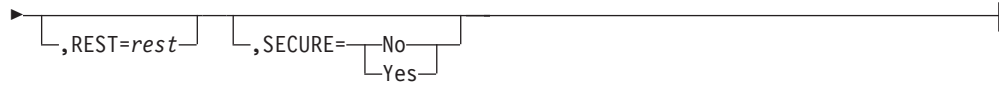
### Format Description for SOCKET(xxxxxxxx)



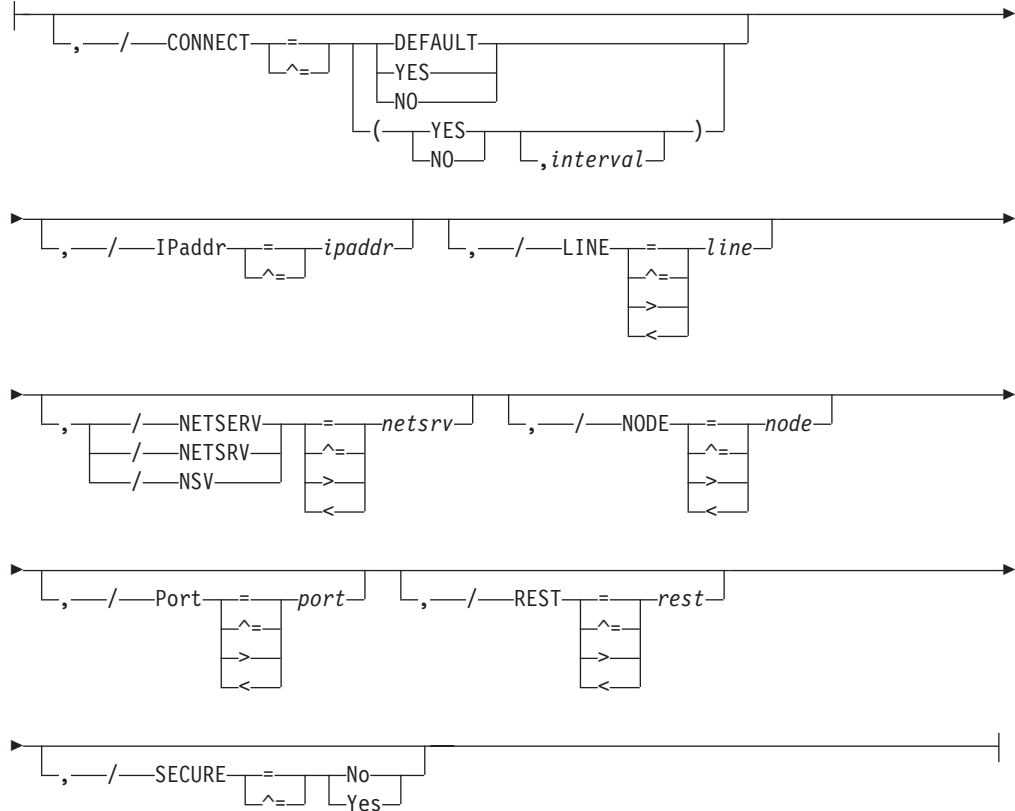
#### Modification keywords:



# SOCKET



## Selection limiting keywords:



## Parameter Description for SOCKET(xxxxxxxx)

### CONNECT= (Yes|No|DEFAULT, interval)

Specifies whether an NJE connection should be automatically attempted for this socket. If DEFAULT is specified, processing defers to the CONNECT=(YES|NO) value that is specified on the associated NODE statement. The *interval* is the approximate time (in minutes) between attempted connections. The valid range for *interval* is 0 to 1440. A value of 0 indicates that the default interval (from NJEDEF CONNECT=) should be used. The default CONNECT value is DEFAULT, and the default *interval* is 0.

### IPADDR=xxxxxxxx

Specifies the TCP/IP address or hostname associated with this socket. The default value, \*LOCAL, indicates all IP addresses available at the start netserver time are to be considered. The value for IPADDR= can be from 1 to 255 characters. However, because of limitations in the initialization deck, the maximum value in initialization is 63 characters.

**Modification:** \$T SOCKET command.

**LINE=nnnnn**

Specifies a TCP/IP line which is to be dedicated to this socket. The range of the value is 0-65535. The default of 0 means no dedicated line. (Model description after the one on APPL).

**Modification:** \$T SOCKET command.

**NETSRV=nnn**

Specifies the device number of the NETSRV to be used when connecting to this remote socket.

**Modification:** \$T SOCKET command.

**NODE=xxxxxxxx**

Specifies the NJE node associated with this socket.

**Modification:** \$T SOCKET command.

**PORT=xxxxxxxx**

Specifies the port number associated with this socket. The default is the value associated with VMNET (typically 175) if SECURE=NO, or the value associated with NJENET-SSL (typically 2252) if SECURE=YES.

**Modification:** \$T SOCKET command.

**REST=nnnn**

Specifies an integer (0-2000) that represents the resistance rating of the connection, which is viewed by the installation manager and coordinated with other installations. Resistance is an arbitrary value set to indicate a specific ability or inability of the socket to route work that has “normal” workload requirements. See *z/OS JES2 Initialization and Tuning Guide* for detailed information about selecting a resistance value.

**Modification:** \$T SOCKET command.

**SECURE=Yes|No**

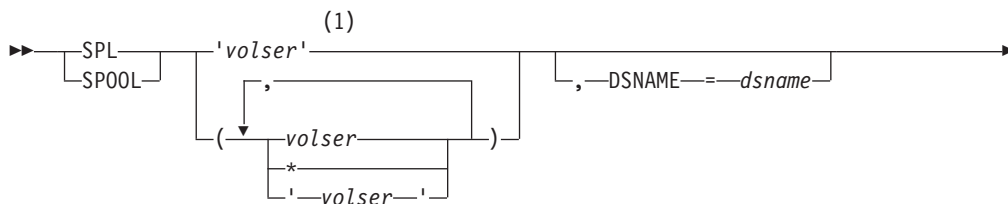
Specifies whether (YES) or not (NO) JES2 uses SSL/TLS when communicating with this socket.

**Modification:** \$T SOCKET command.

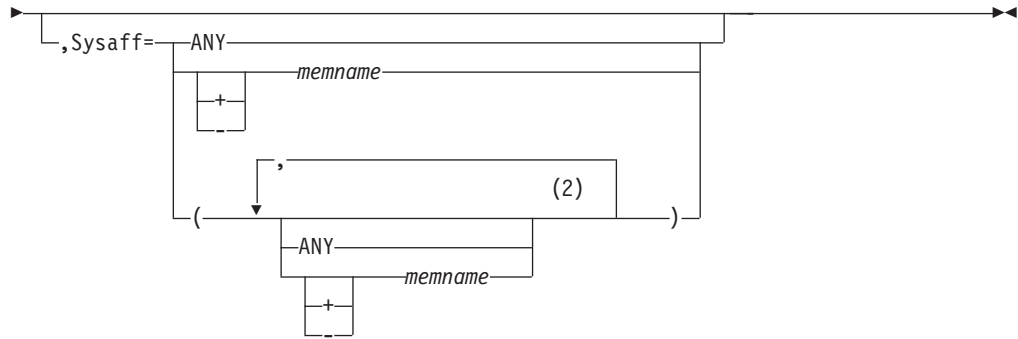
## SPOOL - Bind spool volumes

The SPOOL initialization statement binds the specified spool volumes for cold start scan processing. Binding can enhance performance if the spool prefix defined by the \$T SPOOLDEF command includes generic characters. Multiple spool initialization statements can be specified.

### Format Description for SPOOL



# SPOOL



**Notes:**

- 1 Omit the comma between initialization statement and first keyword
- 2 *sysaff* can be coded up to 32 times

## Parameter description for SPOOL

*volume*

Specifies one or more spool volumes to be scanned at cold start processing.

**DSName=dsname**

Specifies the 1-44 character name of a JES2 spool volume data set. If not specified, the default data set name, which is set by the **\$T SPOOLDEF** command, is used.

**Sysaff=sysaff**

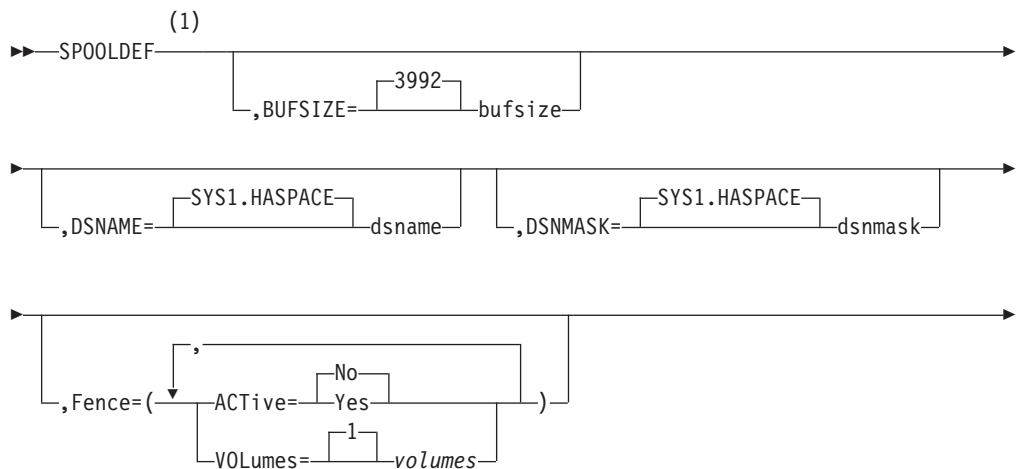
Specifies JES2 members to associate the specified spool volume with. The member list can include any combination of keywords, separated by commas.

---

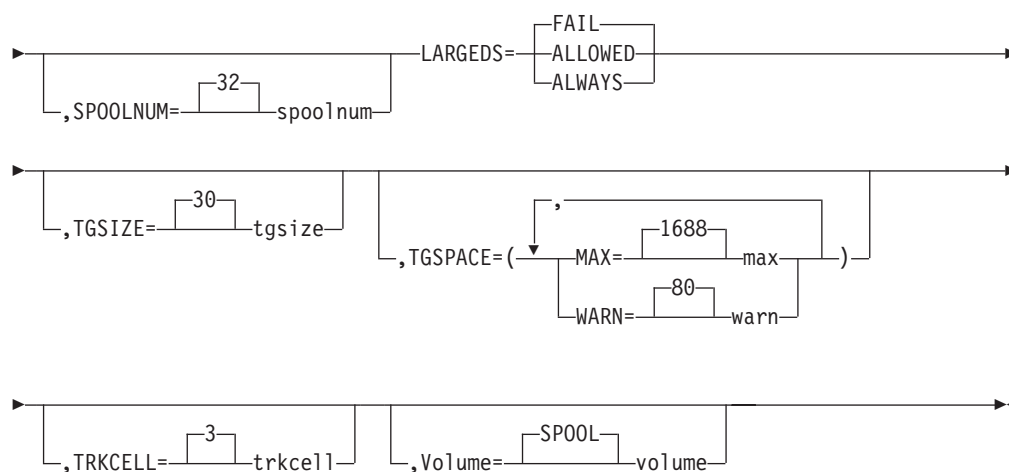
## SPOOLDEF - Spool Volume Definition

The SPOOLDEF statement defines the JES2 spooling environment.

### Format Description for SPOOLDEF





**Notes:**

- 1 Omit the comma between initialization statement and first keyword

**Parameter description for SPOOLDEF****BUFSIZE=nnnn | 3992**

Specifies the size (1944-3992) in bytes, of each JES2 buffer. If the value specified is not a multiple of 8, it is rounded up automatically.

Each JES2 buffer is allocated to virtual storage, such that input/output block (IOB), which is 88 bytes, and the data area (the number of bytes in BUFSIZE) are always contained in a single 4K-page. The maximum value, 3992, allows 10 buffers per track for a 3380 and 12 buffers per track for a 3390.

**Performance Considerations:** Specifying too small a value for BUFSIZE= increases the need for spool I/O activity, thereby degrading performance. A BUFSIZE= specification of 3992 maximizes both central and virtual storage utilization for most JES2 members. This value also provides good DASD utilization. See *z/OS JES2 Initialization and Tuning Guide* for DASD utilization values based on BUFSIZE= values.

The BUFSIZE= parameter specification affects the size of the track group map (TGM) and the number of peripheral data definition blocks (PDDBs) which can fit into each input/output table (IOT). Therefore, BUFSIZE= must be set in order to attain a balance between better DASD or processor utilization and central storage considerations.

**Modification:** Cold start.

**DSNAME=jxx...x | SYS1.HASPACE**

Specifies a 1- to 44-character name (hyphens (-) may be included for any character except the first) which is to be used as the data set name of the JES2 spool data set. This data set is normally named SYS1.HASPACE, but its name can be changed. For example, it could be named TESTING.HASPACE by specifying the following initialization statement:

```
SPOOLDEF DSNAME=TESTING.HASPACE /* ALTERNATE TEST SPOOL DATA SET */
```

**Modification:** Cold start.

**DSNMASK=jxx...x | SYS1.HASPACE**

Displays the 1-44 character data set mask name, including generic characters. If

## SPOOLDEF

the DSNNAME parameter is specified with the SPOOL initialization statement or the \$S SPOOL command, the DSNNAME value must match either the \$D SPOOLDEF DSNNAME value or the \$D SPOOLDEF DSNMASK value. If the \$D SPOOLDEF DSNMASK value is null, the DSNNAME value must match the \$D SPOOL DSNNAME value.

**Modification:** Cold start.

**FENCE=(ACTIVE=YES|NO[,VOLUMES=nnn|1])**

ACTIVE= Determines if any fencing is active at the time.

VOLUMES= Specifies the the number of volumes a job will be fenced to.

**Note:**

1. Setting FENCE=(ACTIVE=YES,VOLUMES=1) will cause JES2 to function as it did previously with FENCE=YES. For compatibility, the code will allow FENCE=YES and convert it to ACTIVE=YES and VOLUMES=1.
2. See *z/OS JES2 Installation Exits* for a discussion of how this initialization statement relates to Exit 11, \$TRACK and Exit 12, \$STRAK.

**Modification:** \$T SPOOLDEF operator command. This parameter **cannot** be changed on a warm start.

**SPOOLNUM=nnn|32**

Specifies the maximum number (1-253, rounded up to a multiple of 32 or 253) of spool volumes which can be defined at any one time to a multi-access spool complex. Spool volumes are defined by either use of the VOLUME= parameter on this initialization statement during a JES2 cold start, or they can be defined by using the \$S SPL (start spool) operator command. This parameter can be increased with a \$T SPOOLDEF command after an \$ACTIVATE command has been issued in the MAS.

**Note:**

1. If you specify other than a multiple of 32 volumes, JES2 automatically rounds that value up to a multiple of 32. Also, a \$D SPOOLDEF command will display the JES2-defined (rounded-up) value, not the value specified here if that value was not a multiple of 32.
2. A value for SPOOLNUM= of 254-256 is automatically decreased to 253 by JES2.
3. To avoid a future cold start, set this value to a value greater than your current requirements dictate and use the \$S SPL command to start volumes, as required.

**Performance Considerations:** As you set this parameter to values greater than 32, storage in the JES2 address space is used accordingly. For each additional 32 volumes specified, the JQE control block is increased by 4 bytes; these bytes are required for the JQE spool volumes-used mask.

**Modification:** \$T SPOOLDEF operator command or JES2 cold start to decrease.

**LARGEDS=FAIL|ALLOWED|ALWAYS**

Specifies whether large SPOOL data sets (greater than 65,535 tracks) can be started or not. Also, indicates when to use the new format SPOOL record addresses (MTTRs).

**FAIL** Specifies any attempt to start a SPOOL data set with more than 65,535 tracks is to fail.

**ALLOWED**

Specifies that SPOOL data set with up to the current size limit

(1,048,575 tracks) is allowed. New format SPOOL addresses are used when starting a new volume that contains a SPOOL data set with greater than 65535 tracks.

#### ALWAYS

Processing is the same as ALLOWED, except the new format SPOOL addresses are used when stating any volume, regardless of data set size. This setting is intended for testing applications that may use SPOOL addresses to access records on SPOOL when an actual large data set is not available.

#### Note:

1. When LARGEDS is set to ALLOWED or ALWAYS, JES2 members at levels earlier than z/OS V1R7 can join the MAS until a COLD start is performed. IBM suggests not setting LARGEDS to ALLOWED or ALWAYS until all MAS members have stabilized on a z/OS release 7 level of JES2 or later.
2. Even if LARGEDS is set to ALLOWED or ALWAYS, SPOOL volumes with more than 15 records per track (for example, when using buffer sizes less than 2943 on a 3390) cannot use the new format for SPOOL record addresses, and do not support data sets larger than 65535 tracks.
3. LARGEDS=FAIL is not supported in z11 mode. In z11 mode, on a COLD start, JES2 defaults to LARGEDS=ALLOWED; on all other starts, it defaults to the value that was used when JES2 shut down. If LARGEDS=FAIL is specified on a COLD start, the default value of ALLOWED will be used.

**Modification:** \$T SPOOLDEF operator command or JES2 cold start.

#### TGFSIZE=nnn|30

Specifies the number (1-255) of JES2 buffers to be contained in a track group. JES2 uses this value to determine the number of tracks in a track group on each spool device. This is the default value for the number of track groups for each new spool volume added to the complex. Because the number of tracks in a track group will vary based on the track capacity of the device, the resultant value is rounded to the minimum integral number of tracks that can contain the specified number of buffers.

If you specify TGFSIZE=, it must contain a value from 1 to 255. Regardless of the value specified, the minimum resulting track group size is one track and the maximum is the smaller of 255 and the number of tracks in the first extent of the SYS1.HASPACE data set with the least number of tracks.

**Note:** If you do not specify TGFSIZE= as the same value on all members of the complex, JES2 might not use the value specified here for a new spool volume.

**Performance Considerations:** Attempt to tailor the value of TGFSIZE to fit the majority of the jobs in your system. SMF type 26 records can be used to assist your choice of a value for this parameter.

Small values for TGFSIZE= can cause an excessive number of track group allocations per job thus increasing processor overhead. For example, an IEFBR14 job requires 13 spool buffers for control blocks and JCL data sets; therefore, set the value of TGFSIZE= greater than 13. Large values for TGFSIZE= can waste spool space and unnecessarily increase seek time.

**Modification:** Minimum action to modify is \$T SPOOLDEF to increase and a JES2 cold start to decrease.

#### TGSPACE=(MAX=nnnnnnnn|16288[,WARN=nnn|80])

MAX= specifies the maximum number (1-16581181) of track groups required

## SPOOLDEF

before the next cold start. This value should include the track groups for all concurrently mounted spool volumes and for all planned spool additions when determining each spool volume's requirement. Specify TGSPACE=(MAX=) as a multiple of 16288. If you do not, JES2 will automatically increase your specification to the next highest multiple of 16288 without returning a message. Therefore, if you display the SPOOLDEF parameters by the \$D SPOOLDEF command, the value returned by JES2 will not match the value originally specified here.

**Note:** If the number of track groups you have allocated on each spool volume is not divisible by 8, there will be a discrepancy between the maximum allocatable track groups and the sum of the allocated track groups plus the number of track groups available.

**Note:** Use this parameter to increase the limit for the JNUM resource that is reported on the HASP050 message.

Table 92 lists the number of track groups per volume for various devices:

Table 92. The Number of Track Groups per Volume Listed by Device Type (and TGFSIZE=30)

DEVICE	BUFSIZE	CYL/VOL	TRKS/GRP*	TRACK GRPS/VOL*
3390-3	3992	3339	3	16690
3390-9	3992	10017	3	50080

\* This assumes the default TGFSIZE=30 was used. See *z/OS JES2 Initialization and Tuning Guide* for further statistics relating to the specification of this parameter and resultant DASD utilization.

**Note:** Assume that cylinder 0 is not available; it is used to hold the VTOC.

**Performance Considerations:** The should consider future spool volume additions. *nnnnnnn* should be large enough to accommodate planned expansion; therefore, set this parameter significantly higher than your present requirements dictate. The performance cost should be minimal; storage is calculated as follows:

$$(((nnnnnn + 16287) / 16288) \times 16288) / 8) \times 4$$

The values chosen for this parameter, BUFSIZE= and TGFSIZE= (as specified on this initialization statement), are related and thus all affect efficient use of spool devices. (See *z/OS JES2 Initialization and Tuning Guide* for selected values that affect spool device utilization and for selected values that affect device utilization in storage-constrained environments.)

If you do not specify a value, this parameter defaults to 16288 (This is the number of track groups needed to allow all three track groups (master, JES2-detected badtracks, and the BADTRACK statement-specified tracks) to efficiently fit on one page of storage.)

If you use the \$T SPOOLDEF command to increase TGSPACE=(MAX=), only do so when you can allow your system to experience temporary performance degradation while all JES2 systems read the checkpoint data set.

WARN= specifies a percentage (1-99) threshold of track groups usage that triggers message \$HASP050 JES2 RESOURCE SHORTAGE. The WARN= percentage is calculated only from spool volumes that are active and can have space allocated (ACTIVE and RESERVED=NO).

**Modification:** \$T SPOOLDEF operator command to increase, or using a cold start. A JES2 cold start must be used to decrease.

**Note:** This parameter cannot be modified through a hot start, quick start, or single-member warm start.

### **TRKCELL=nnn|3**

Specifies the size (1-120) of a track cell in terms of spool buffers; that is, TRKCELL= specifies the number of direct-access spool records to be logically ordered on a spool track and the number of records to be despoiled (read from the spool) in one operation during print processing. A data set will use the track-cell method only if the SYSOUT class of the data set has the TRKCELL= characteristic; see the description of the OUTCLASS(v) initialization statement. Similarly, track cells, rather than single buffers, are despoiled during print processing only if the printer is defined with the TRKCELL=YES parameter on the PRTnnnn statement (see the description of the PRTnnnn initialization statement in this chapter).

If TRKCELL= is greater than the number of records on a track of a spool volume, the entire track is considered a track cell. If TRKCELL= is less than or equal to the number of records on a track of a spool volume, the track is divided into as many track cells as will fit evenly. For further information, see *z/OS JES2 Initialization and Tuning Guide*.

After this division, any remaining records are used as follows:

- If the number of remaining records is greater than or equal to one-half the TRKCELL= value, the records are available to any data set (with or without the track-cell characteristic).
- If the number of remaining records is less than one-half the TRKCELL= value, the records are available only for data sets without the track-cell characteristic.

**Performance Considerations:** The following performance specification considerations should be noted when defining a value for TRKCELL=.

- In the NJE environment, the SYSOUT receiver flags the data sets in a class (with TRKCELL= specified on the OUTCLASS statement) it receives with the TRKCELL= attribute. To avoid degraded performance when printing these data sets on a printer which supports track-cell despooling (TRKCELL=YES parameter on the PRTnnnn statement), the TRKCELL= specification should be selected to prevent spool tracks from containing "short" track-cells (that is, those track-cells with a length less than half TRKCELL=).
- Print buffers typically reside in central storage during JES2 printing and despooling operations. Therefore, a large value for TRKCELL= increases JES2 central storage requirements.

**Modification:** Cold start.

### **Volume=xxxxx|SPOOL**

Specifies the 4- to 5-character prefix assigned to JES2's spool volumes. The first four to five characters of the volume serial must be identical to the characters specified by this parameter. Those volumes beginning with this prefix and a data set named the same as the DSNAME specification are considered JES2 volumes.

The maximum number of spool volumes in use by JES2 must not exceed 253 at any one time.

IBM suggests that you limit the prefix to 4 characters only so that you are not restricted to a maximum of 39 volumes as is the case if you use a 5-character prefix which also limits the suffix to a single character (A-Z, 0-9, \$, #, @). This will help you avoid future cold starts.

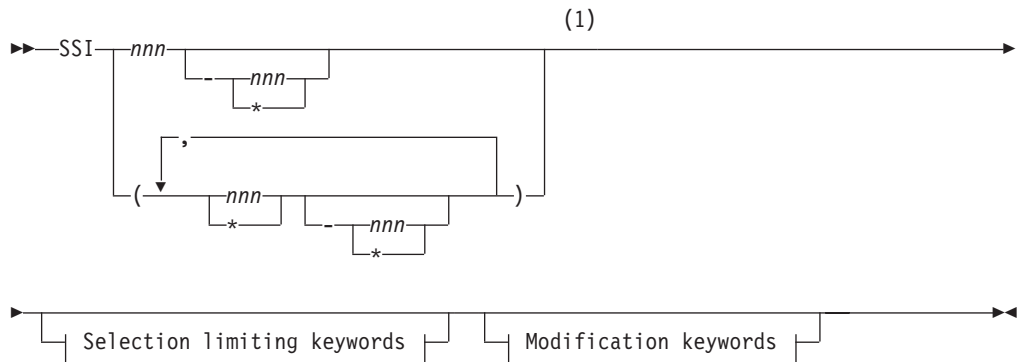
**Modification:** Cold start. If originally specified with 5 characters and the fifth character is removed, then \$T operator command is allowed.

## SSI(nnn) - Subsystem Interface Definition

The SSI(nnn) statement specifies whether tracing is available for individual subsystem interface function definitions. Specify nnn as a number (1-256); see *z/OS MVS Using the Subsystem Interface* for the SSI number.

**Note:** If you modify SSI(nnn) parameter values and then restart JES2 with a hot start, the parameter values in effect before termination will be used.

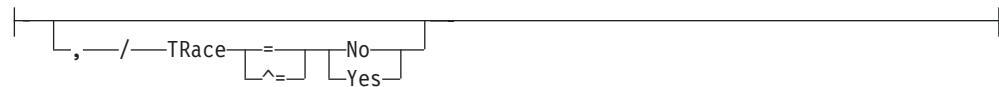
### Format Description for SSI(nnn)



#### Modification keywords:



#### Selection limiting keywords:



#### Notes:

- Omit the comma between initialization statement and first keyword

### Parameter Description for SSI(nnn)

#### TRace=Yes|No

Specifies whether (Yes) or not (No) tracing is active for the specified subsystem interface function.

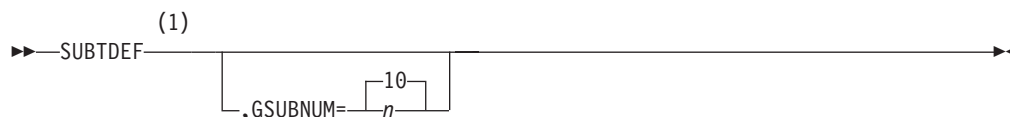
**Note:** If TRace=Yes, JES2 does not create any trace data for SSI function 54.

Modification: \$T SSI(nnn) operator command.

## SUBTDEF - Define General Purpose Subtasks

SUBTDEF specifies the number of general purpose subtasks you need attached during JES2 initialization.

### Format Description for SUBTDEF



#### Notes:

- 1 Omit the comma between initialization statement and first keyword

### Parameter Description for SUBTDEF

#### GSUBNUM=n | 10

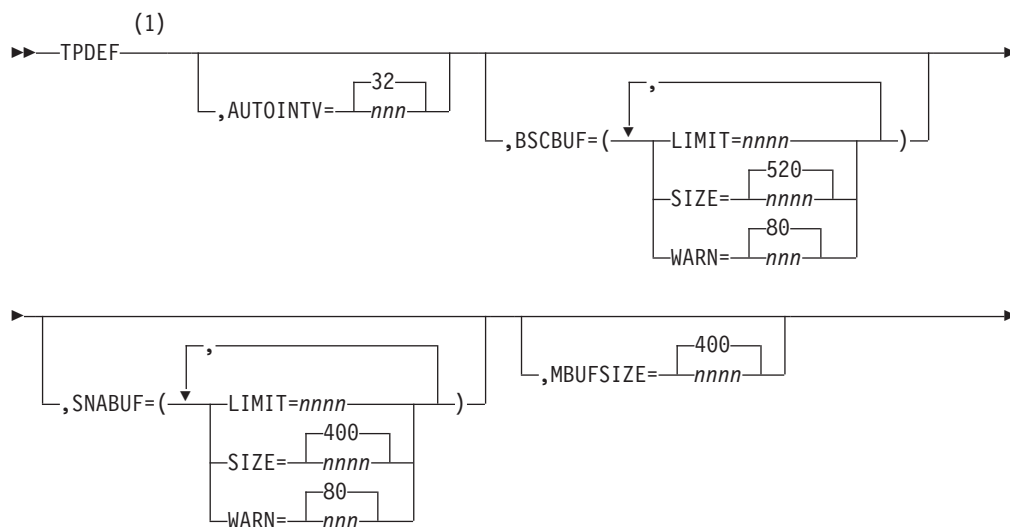
Defines the maximum number (1-50) general purpose subtasks available. This allows you to call service routines from the JES2 main task. (See *z/OS JES2 Initialization and Tuning Guide* for additional information about using the general purpose subtasking facility.)

Modification: Hot start.

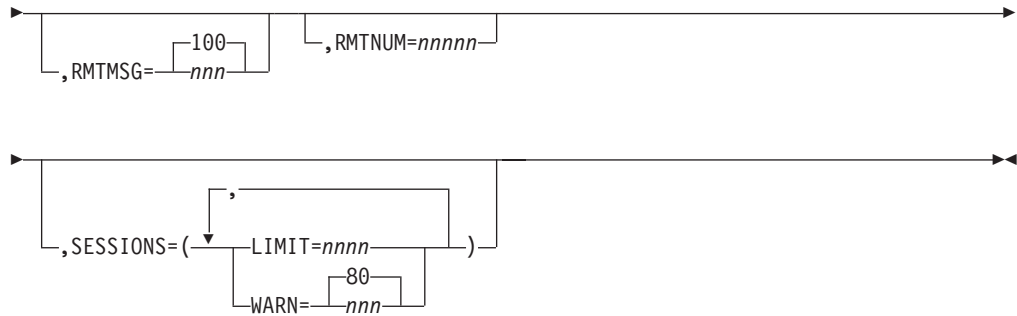
## TPDEF - Teleprocessing Definitions

The TPDEF statement defines the JES2 teleprocessing characteristics.

### Format Description for TPDEF







**Notes:**

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for TPDEF

**AUTOINTV=nnn|32**

Specifies the autologon timer interval (10-600 seconds) (the time between JES2 automatic logon attempts) for this installation. The timer is necessary only when a previous logon attempt by an autologon remote has failed or messages are queued for the remote, and the normal events (output for the remote, JES2 RJE resources becoming available, and so forth) that would drive the autologon scan have not occurred.

Proper specification of this parameter decreases the number of unnecessary output searches. Too low a number could cause excessive time spent searching the queues, resulting in performance degradation. Too high a number could cause excessive spool usage because messages for remotes that are not logged on are using up the spool.

**Modification:** \$T TPDEF operator command.

**BSCBUF=**

Specifies information about the BSC teleprocessing buffers JES2 allocates below 16 megabytes in virtual storage.

**LIMIT=nnnn**

Specifies the maximum number (10-9999) of BSC teleprocessing buffers JES2 allocates below 16 megabytes in virtual storage.

**Performance Considerations:** Each signed-on JES2 multileaving terminal requires at least two JES2 teleprocessing buffers. Each signed-on NJE member requires at least two JES2 teleprocessing buffers and should normally have one additional for input, one additional for each output transmitter, plus additional (spare) buffers for console and path manager communications. All other signed-on terminals require at least one buffer each.

If a multileaving terminal has more than one output function running concurrently, additional buffers can be used to increase performance. If your installation is not storage-constrained and can tolerate a greater use of virtual storage, over specifying the LIMIT= parameter on the BUFDEF statement and the LIMIT= parameter on this statement can prove useful. Over specifying these parameters can prevent system degradation caused by a lack of available buffers and does not increase the working set for buffers which are not used. For additional information, see the SIZE= subparameter and the MBUFSIZE= parameter.



This parameter defaults to the greater of either:

2 x (number of BSC lines specified by LINE(nnnn) statements)

--or--

10

**Modification:** \$T TPDEF operator command to increase the limit. Hot Start to decrease the limit.

#### **SIZE=nnnn | 520**

Specifies the size (520-3960) in bytes of the BSC teleprocessing buffers JES2 allocates below 16 megabytes in virtual storage.

**Note:** Use the \$D NJEDEF command to display the actual SIZE= value.

If necessary, JES2 increases the value specified for SIZE= without notice to the appropriate minimum value indicated above if RMT(nnnnn) initialization statements are specified for the above terminal types with the indicated features.

**Performance Considerations:** BSC buffers do not span MVS pages. Therefore, be certain that the value specified for this parameter allows for reasonable utilization of a 4K-page after JES2:

- Adds the 24-byte buffer prefix plus the 112-byte IOB (input/output buffer) for a total of 136 bytes.
- Does any necessary automatic upward rounding to a multiple of 8, and to evenly fit buffers on a page.

**Modification:** Warm start.

#### **WARN=nnn | 80**

Specifies a threshold percentage (0-100) of the maximum use of teleprocessing buffers below 16 megabytes in virtual storage at which JES2 issues the \$HASP050 to warn the operator of a resource shortage. If you specify 0, no alert is given.

**Modification:** \$T TPDEF operator command.

#### **SNABUF=**

Specifies information about the SNA teleprocessing buffers JES2 allocates above 16 megabytes in virtual storage.

**Note:** If necessary, JES2 increases the value specified for SIZE= without notice if the BUFSIZE= parameter on the RMT(xx) statement is larger than the specified size on the TPDEF statement. Also note that any change to buffer size will affect both RJE and NJE.

#### **LIMIT=nnnn**

Specifies the maximum number (10-9999) of teleprocessing buffers JES2 allocates above 16 megabytes in virtual storage.

LIMIT= defaults to the greater of either:

2 x (number of SNA lines specified by LINE(nnnnn) statements)

--or--

10

**Modification:** \$T TPDEF operator command to increase the limit. Hot Start to decrease the limit.

#### **SIZE=nnnn | 400**

Specifies the size (256-32512) in bytes of the JES2 teleprocessing buffers JES2 allocates above 16 megabytes in virtual storage.

**Performance Considerations:** Be certain that the value specified for this parameter allows for reasonable utilization of a 4K-page after JES2:

- Adds the 24-byte buffer prefix plus the 232-byte RPL (request parameter list) for a total of 256 bytes.
- Does any necessary automatic upward rounding to a multiple of 8, and to evenly fit buffers on a page.

**Modification:** Warm start.

**WARN=nnn | 80**

Specifies a threshold percentage (0-100) of the maximum use of teleprocessing buffers above 16 megabytes in virtual storage at which JES2 issues the \$HASP050 to warn the operator of a resource shortage. If you specify 0, no alert is given.

**Modification:** \$T TPDEF operator command.

**MBUFSIZE=nnnn | 400**

Specifies the size (128-3960) in bytes (dependent upon JES2 macro expansions) of each JES2 multileaving buffer. The specification for this parameter must be a positive even integer. Satisfactory support of one device of each type (reader, printer, punch console) on 8K-terminal processors is based on the assumption that MBUFSIZE= not be increased above 400, even if support of a non-programmable terminal requires increasing the value specified in the BSCBUF= parameter to 516. In support of 8K-multileaving workstations, this parameter can be increased above 400 if the BUFSIZE= parameter on the corresponding RMT(nnnnn) statement is likewise increased. A smaller multileaving buffer size may be specified for a particular remote terminal on its RMT(nnnnn) initialization statement.

MBUFSIZE= must be a multiple of 2. If not, it is automatically rounded up. If the value specified is greater than that specified on SIZE= for BSCBUF= on SNABUF=, then BSCBUF= and SNABUF= are rounded up.

**Note:**

1. To avoid having the SIZE= subparameters for both BSCBUF= and SNABUF= overwritten by the MBUFSIZE= parameter, ensure that the value of both SIZE= subparameters is greater than that specified by MBUFSIZE=.
2. This parameter is only valid for BSC-programmable terminals that have been specified as MULTILV=YES and do not also have BUFSIZE= specified. This parameter does not affect hardware remotes, SNA remotes, BSC NJE terminals, or SNA NJE terminals.
3. If you want a specific multileaving terminal to use a different buffer size, you should explicitly specify that buffer size on the BUFSIZE parameter of the RMT(nnnnn) (BSC) initialization statement.

**Modification:** Hot start.

**RMTMSG=nnn | 100**

Specifies the maximum number (1-255) of messages that may be queued by RTAM to a multileaving remote console. When the count is exceeded, messages will be spooled until the message backlog for that remote console goes to zero.

**Modification:** \$T TPDEF operator command.

**Performance Considerations:** Always set the value for RMTMSG= to a value considerably lower than the value set for the BUFNUM= parameter on the

CONDEF statement. This will ensure that no one BSC multi console can acquire all of the communication buffers (CMBs) and thereby lock out host console messages.

**RMTNUM=nnnnn**

Specifies the highest number (0-32767) that can be defined for an RJE workstation on this member. When JES2 is active, RJE workstations cannot be added if they specify a higher subscript than this value.

If you do not specify this parameter or an RMTnnnnn initialization statement specifies an RJE workstation higher than the RMTNUM= specification, JES2 sets RMTNUM= to the highest number specified for an RJE workstation on this member during initialization.

**Performance Considerations:** Because RMTNUM= allocates storage (68 bytes of storage below 16Mb of virtual storage for each RJE workstations) whether they are defined or not, you should set this parameter low enough to minimize the unused virtual storage at your installation. However, setting this value conservatively higher than the number of currently defined RJE workstations can be useful should you need to add RJE workstations without restarting JES2. See *z/OS JES2 Initialization and Tuning Guide* for further information on providing for future growth of your RJE workstation environment.

**Modification:** Hot start.

**SESSIONS=**

Specifies information about the maximum of VTAM sessions.

**LIMIT=nnnn**

Specifies the maximum number (1-9999) of VTAM sessions (nnnn) that can be active at any one time. Terminals or SNA NJE nodes attempting to log on when nnnn sessions are already active are not allowed to log on.

If you do not specify a value for this parameter, it defaults to the number of LINE(nnnn) initialization statements specifying the UNIT=SNA keyword.

**Note:**

1. The default value is not sufficient to allow all SNA RJE and NJE lines to be simultaneously connected to JES2 if some of the terminals represent multiple logical units.
2. Although the valid range for this parameter is 1-9999, if you do not define any sessions, by using the LINE initialization statement with UNIT=SNA defined, SESSIONS= defaults to 0.

**Note:** Use this parameter to increase the limit for the JNUM resource that is reported on the HASP050 message.

**WARN=nnn|80**

Specifies a threshold percentage (0-100) of the maximum used number of VTAM sessions at which JES2 issues the \$HASP050 to warn the operator of a resource shortage.

**Modification:** \$T TPDEF command.

## TRACE(n) - Initial tracing value setting

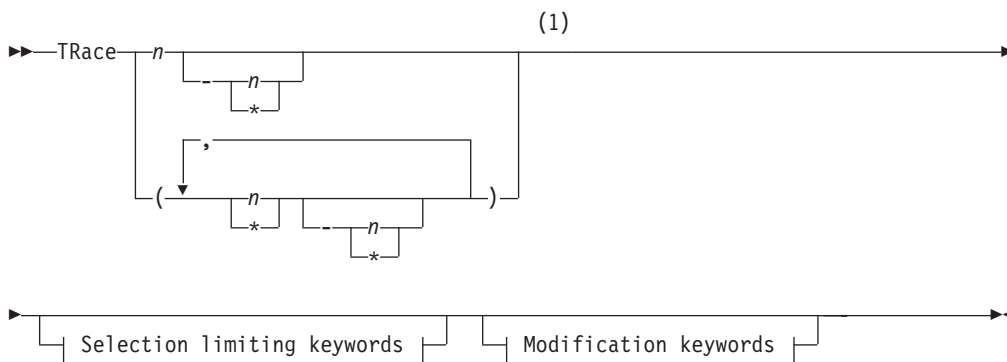
The TRACE initialization statement is used to set the initial values for tracing options. The operator can override these values with the \$S and \$P TRACE(n) commands.

The TRACE statement can control an individual trace ID (TRACE(n) ), a range of trace IDs (TRACE(n-m) ), or a generic range of trace IDs (TRACE(n-\*) ). If, for example, you specify TRACE(1-\*), all defined trace IDs from 1 through 255 are activated.

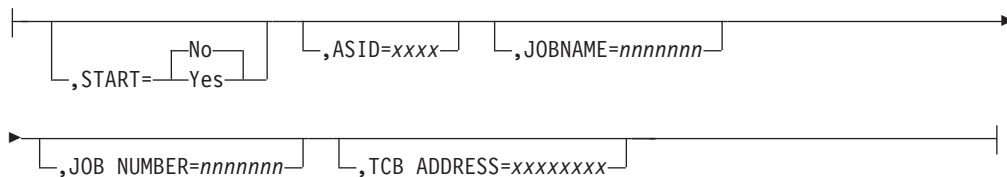
### Note:

1. Individual trace IDs can be started or stopped independent of the overall trace facility by using the START=Yes|No parameter on this statement whether or not the trace facility is active (that is, ACTIVE=Yes or No on TRACEDEF is also specified).
2. Trace IDs 1 through 47 are defined for use by JES2.
3. If you modify this parameter value and then restart JES2 with a hot start, the parameter value in effect before termination will be used.

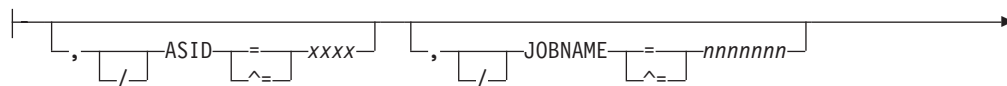
## Format Description for TRACE(n)

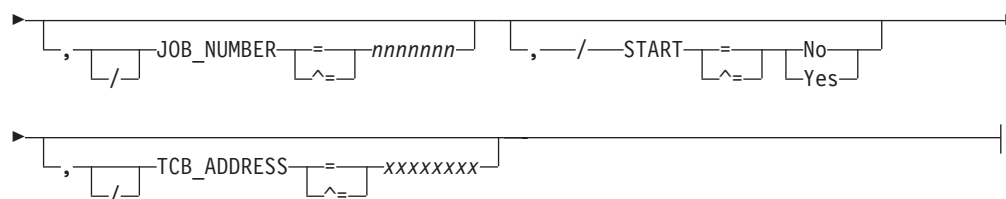


### Modification keywords:



### Selection limiting keywords:



**Notes:**

- 1 Omit the comma between initialization statement and first keyword

## Parameter Description for TRACE(n)

**START=Yes|No**

Specifies whether (Yes) or not (No) a specific trace ID or range of IDs is activated. The range of trace IDs used by JES2 is 1-47.

**Note:** Do not confuse this parameter with the ACTIVE=Yes|No parameter specification on the TRACEDEF statement that is used to turn the entire TRACE facility on or off.

**Modification:** \$S TRACE(n) operator command or \$P TRACE(n) operator command.

**ASID= xxxx**

Specifies the ASID used when filtering this JES2 trace point.

**JOBNAME=nnnnnnn**

Specifies the jobname used when filtering this JES2 trace point.

**JOB\_NUMBER=nnnnnnn**

specifies the job number used when filtering this JES2 trace point.

**Note:** If more than one of ASID=, JOBNAME=, and JOB\_NUMBER= are specified for a specific trace ID, only one of the conditions must match for the trace to be taken. In the JES2 address space, the values specified always refer to the job that JES2 is processing. For example, never specify the JES2 address space as ASID= because JES2 never processes requests on the behalf of JES2. Outside the JES2 address space, these filters refer to the address space where the trace is being taken. For jobs being submitted through the internal reader, it is the job name, job number, and ASID of the submitter of a job that are compared to the filters, not the values of the job being submitted. The same applies to FSS or SAPI devices. The filters refer to the SAPI or FSS address space, not the job that the FSS or SAPI application is processing.

**TCB\_ADDRESS=xxxxxxx**

Specifies the TCB address in order to further limit tracing to the specified TCB. This is in addition to any filtering that is applied. This operand is ignored if ASID=, JOBNAME=, and JOB\_NUMBER= are not specified. The TCB address must match even in the JES2 address space.

---

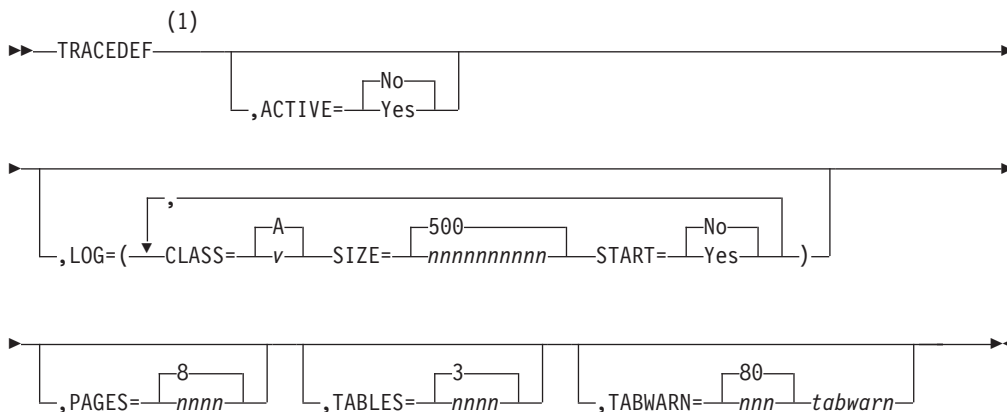
## TRACEDEF - Trace Facility Definition

The TRACEDEF initialization statement controls the overall status of the TRACE facility and the amount of storage you will allow the TRACE facility to use in your complex. Individual trace ids are controlled by the TRACE(n) initialization statement.

## TRACEDEF

**Note:** If you modify TRACEDEF parameter values and then restart JES2 with a hot start, the parameter values in effect before termination will be used.

### Format Description for TRACEDEF



#### Notes:

- 1 Omit the comma between initialization statement and first keyword

### Parameter Description for TRACEDEF

#### **ACTIVE=Yes|No**

Specifies whether (Yes) or not (No) the TRACE facility is started. The operator can use the \$T TRACEDEF, ACTIVE= command to start tracing if it was initially set off (that is, ACTIVE=No).

**Note:** Do not confuse this parameter with the START=Yes|No parameter specification on the TRACE(n) statement which is used to activate individual (or a range of) trace IDs.

**Modification:** \$T TRACEDEF operator command.

#### **LOG=(CLASS=, SIZE=, START=)**

Specifies the trace table logging environment.

#### **CLASS=v|A**

Specifies the output class (A-Z, 0-9) of the trace log data set.

**Modification:** \$T TRACEDEF operator command.

#### **SIZE=nnnnnnnnnn|500**

Specifies the maximum size (100-2147483647) (in bytes) that the trace log data set may attain before it is queued for printing.

**Note:** The proper setting for this parameter will assure that JES2 will not use all available virtual storage in CSA.

**Modification:** \$T TRACEDEF operator command.

#### **START=Yes|No**

Specifies whether (Yes) or not (No) the trace log information is formatted and periodically added to the trace log data set. Yes further specifies that the trace log data set will be spun off and printed before it exceeds its maximum size (as specified by the SIZE= subparameter).

**Modification:** \$T TRACEDEF operator command.

**PAGES=nnnn|8**

Specifies the number (8–1000) of 4K-pages available to each trace table. The default value is 8. Specifying values 1 through 7 will be increased to 8 automatically. There is a limit of 3000 pages for maximum trace storage which is the number of tables times the number of pages per table. This will limit the number of tables to 333 max.

**Modification:** Single-member warm start.

**TABLES=nnnn|3**

Specifies the number (0-333) of trace tables that JES2 creates at initialization. Each table is 4K-bytes x PAGES= value in size. If you specify 1 or 2, the value is automatically increased to 3. If 0 is specified, the TRACE facility cannot be started or tracing will be deactivated when the number of tables is reduced to 0.

**Note:** Use this parameter to increase the limit for the JNUM resource that is reported on the HASP050 message.

**Modification:** \$T TRACEDEF operator command.

**TABWARN=nnn|80**

Specifies the percentage (0-100) of trace table use at which the operator will be alerted through message \$HASP050 JES2 RESOURCE SHORTAGE. If you specify 0, no alert will be given.

**Modification:** \$T TRACEDEF operator command.

---

## VERify - Verifying Code Through the JES2 Patching Facility

The VERify initialization statement is one of several statements used by the JES2 patching facility. For the other statements, see “REP - Replacing Code Through the JES2 Patching Facility” on page 347 and “NAME - Naming the Module to Change Through the JES2 Patching Facility” on page 195. The JES2 patching facility allows you to verify data (patches) for the following:

- Any module in JES2 (for example, HASJES20 or an installation exit load module)
- Any absolute storage address from the address space where JES2 is loaded.
- On a hot start, any address in a data space created by JES2 (that is, owned by JES2AUX)
- On any warm start, any address in the JES2 checkpoint data set.

**Note:** You can verify data patches for HASCxxxx modules if they do not reside in read-only storage (PLPA).

The JES2 patching facility applies temporary patches to the in-storage copy of JES2 modules. You place patching facility statements in the JES2 initialization stream; these patches are applied when you initialize JES2. Because some of the initialization code has already been executed before the patch facility initialization statements are processed, patches made to those portions of the code are ineffective; those portions of code **do not** execute again until you restart JES2. Most patches are applied immediately as the statements are processed. However, checkpoint updates are deferred until the checkpoint record is read. Non-checkpoint patches are not saved across a warm start. JES2 reloads the load modules at different stages in processing:

- Subsystem support modules are reloaded during all starts except a hot start.



## VERify

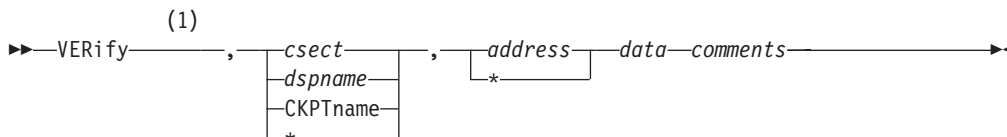
- HASPJES20 is reloaded in response to a JES2 START command any time the subsystem is started.

In addition, you should be aware that the JES2 patching facility does **not** support:

- Patching a module or data area residing in read-only storage. For example, you cannot use the facility to modify modules in PLPA or PSA.
- Patching a HASPFSSM load module that has been loaded into a functional subsystem address space. Use AMASPZAP (the service aid program that modifies both instructions and data) must be used to patch the HASPFSSM load module.
- Altering the JES2 dump formatting exit modules (HASMxxxx).
- Using a patch across a restart of JES2. Because these patches are valid only until a load module is reloaded, they must be reapplied every time JES2 is started.

The JES2 patching facility statements in the JES2 initialization data set can be specified in either the JES2 patching format or in the AMASPZAP format. All patches in the JES2 patching form should precede any AMASPZAP patches. If you supply the NAME statement or first format type of the AMASPZAP patch, JES2 resets prior verification errors. If a VERify statement fails, following REP statements are rejected until the next NAME statement is reached. For more information on AMASPZAP patches, see "SPZAP" in *z/OS MVS Diagnosis: Tools and Service Aids*.

## Format Description for VERify



### Notes:

- 1 Omit the comma between initialization statement and first keyword or variable

## Parameter Description for VERify

### VERify

The data on the statement is compared with the data at the location specified by the **csect** and **address** fields. If the data does not match, an error message is displayed in the parameter library list data set.

**csect** | **dspname** | **CKPTname** | \*

Specifies the control section (or control block), dataspace name, or checkpoint CTENT in which the data to be verified resides.

If an asterisk (\*) is coded, JES2 uses the CSECT, dataspace, or CTENT in effect on the previous JES2 patch statement. Table 93 on page 391 contains a list of the possible patch names which can be coded and area to which these names refer. If the CSECT is listed in Table 93 on page 391, you can specify the last four characters of the CSECT name. See Table 89 on page 348 for more information.

If an installation exit CSECT is referenced, the JES2 patching facility requires the entire module name, except for the reserved names HASPXJ00-HASPXJ31.



If you do not linkedit the installation exit routines HASPXJ00-HASPXJ31 with the HASJES20 load module, you must specify the full 8-character CSECT name.

Furthermore, do not name an exit with the same three or four characters (xxxx) as used for a JES2 module. For example, an installation-defined exit named CKPT or TABS (that is, HASPCKPT or HASPTABS, with the HASP characters removed) would modify the IBM-supplied HASPCKPT or HASPTABS module.

Table 93. Patch Name to CSECT Reference

CSECT Referenced	AMASPZAP Patch Name	JES2 Patch Name
HASCARMS	HASCARMS	ARMS
HASCARSO	HASCARSO	ARSO
HASCBLDM	HASCBLDM	BLDM
HASCCNVS	HASCCNVS	CNVS
HASCDAU	HASCDAU	DAU
HASCDSAL	HASCDSAL	DSAL
HASCDSOC	HASCDSOC	DSOC
HASCDSS	HASCDSS	DSS
HASCENF	HASCENF	ENF
HASCGGKY	HASCGGKY	GGKY
HASCGGST	HASCGGST	GGST
HASCHAM	HASCHAM	HAM
HASCINJR	HASCINJR	INJR
HASCJBST	HASCJBST	JBST
HASCJBTR	HASCJBTR	JBTR
HASCLINK	HASCLINK	LINK
HASCNJAS	HASCNJAS	NJAS
HASCNJEX	HASCNJEX	NJEX
HASCNJGP	HASCNJGP	NJGP
HASCNJE	HASCNJE	NJE
HASCNJJR	HASCNJJR	NJJR
HASCNJJT	HASCNJJT	NJJT
HASCNJSR	HASCNJSR	NJSR
HASCNJST	HASCNJST	NJST
HASCNJRC	HASCNJRC	NJRC
HASCNJRQ	HASCNJRQ	NJRQ
HASCOFST	HASCOFST	OFST
HASCPHAM	HASCPHAM	PHAM
HASCPOOL	HASCPOOL	POOL
HASCRQUE	HASCRQUE	RQUE
HASCSAPI	HASCSAPI	SAPI
HASCSCAN	HASCSCAN	SCAN
HASCSIJJ	HASCSIJJ	SIJJ
HASCSIRQ	HASCSIRQ	SIRQ
HASCSISC	HASCSISC	SISC
HASCSJFA	HASCSJFA	SJFA
HASCSJFS	HASCSJFS	SJFS
HASCSRAX	HASCSRAX	SRAX
HASCSRDS	HASCSRDS	SRDS
HASCSRIC	HASCSRIC	SRIC
HASCSRIP	HASCSRIP	SRIP
HASCSRJB	HASCSRJB	SRJB
HASCTP	HASCTP	TP
HASCUBES	HASCUBES	UBES
HASCUBFR	HASCUBFR	UBFR
HASCUBRM	HASCUBRM	UBRM

Table 93. Patch Name to CSECT Reference (continued)

CSECT Referenced	AMASPZAP Patch Name	JES2 Patch Name
HASCUBSR	HASCUBSR	UBSR
HASCXJCT	HASCXJCT	XJCT
Absolute Storage Location	-	ABS
HASPARM	HASPARM	ARM
HASPARMO	HASPARMO	ARMO
HASPBSC	HASPBSC	BSC
HASPCFAL	HASPCFAL	CFAL
HASPCFBF	HASPCFBF	CFBF
HASPCFDE	HASPCFDE	CFDE
HASPCFE	HASPCFE	CFE
HASPCFFC	HASPCFFC	CFFC
HASPCFLE	HASPCFLE	CFLE
HASPCFMT	HASPCFMT	CFMT
HASPCFQL	HASPCFQL	CFQL
HASPCFQU	HASPCFQU	CFQU
HASPCFRD	HASPCFRD	CFRD
HASPCFRE	HASPCFRE	CFRE
HASPCFRL	HASPCFRL	CFRL
HASPCFRS	HASPCFRS	CFRS
HASPCFR2	HASPCFR2	CFR2
HASPCFSI	HASPCFSI	CFSI
HASPCFT1	HASPCFT1	CFT1
HASPCFUN	HASPCFUN	CFUN
HASPCFWP	HASPCFWP	CFWP
HASPCFWR	HASPCFWR	CFWR
HASPCKDS	HASPCKDS	CKDS
HASPCKPT	HASPCKPT	CKPT
HASPCKRR	HASPCKRR	CKRR
HASPCKVR	HASPCKVR	CKVR
HASPCNVT	HASPCNVT	CNVT
HASPCOMM	HASPCOMM	COMM
HASPCON	HASPCON	CON
HASPCSV	HASPCSV	CSV
HASPDOC	HASPDOC	DOC
HASPDYN	HASPDYN	DYN
HASPEVTL	HASPEVTL	EVTL
HASPFSSM	HASPFSSM*	--
HASPFSSP	HASPFSSP	FSSP
HASP Common Communication Table	-	HCCT
HASPHOPE	HASPHOPE	HOPE
HASPIRA	HASPIRA	IRA
HASPIRDA	HASPIRDA	IRDA
HASPIRMA	HASPIRMA	IRMA
HASPIRPL	HASPIRPL	IRPL
HASPIRRE	HASPIRRE	IRRE
HASPIRSI	HASPIRSI	IRSI
HASPJOS	HASPJOS	JOS
HASPJQS	HASPJQS	JQS
HASPMISC	HASPMISC	MISC
HASPMMSG	HASPMMSG	MSG
HASPNATS	HASPNATS	NATS
HASPNET	HASPNET	NET

Table 93. Patch Name to CSECT Reference (continued)

CSECT Referenced	AMASPZAP Patch Name	JES2 Patch Name
HASPNJT	HASPNJT	NJT
HASPNPM	HASPNPM	NPM
HASPNRM	HASPNRM	NRM
HASPNSR	HASPNSR	NSR
HASPNST	HASPNST	NST
HASPNUC	HASPNUC	NUC
HASPODSM	HASPODSM	ODSM
HASPPRPU	HASPPRPU	PRPU
HASPPSO	HASPPSO	PSO
HASPRAS	HASPRAS	RAS
HASPRDR	HASPRDR	RDR
HASPRTAM	HASPRTAM	RTAM
HASPSASR	HASPSASR	SASR
HASPSERV	HASPSERV	SERV
HASPSIR	HASPSIR	SIR
HASPSJFR	HASPSJFR	SJFR
HASPSNA	HASPSNA	SNA
HASPSPIN	HASPSPIN	SPIN
HASPSPOL	HASPSPOL	SPOL
HASPTCP	HASPTCP	TCP
HASPSSRV	HASPSSRV	SSRV
HASPSTAB	HASPSTAB	STAB
HASPSTAC	HASPSTAC	STAC
HASPSTAM	HASPSTAM	STAM
HASPSUBS	HASPSUBS	SUBS
HASPSXDV	HASPSXDV	SXDV
HASPSXIT	HASPSXIT	SXIT
HASPSXJB	HASPSXJB	SXJB
HASPSXNJ	HASPSXNJ	SXNJ
HASPSXOT	HASPSXOT	SXOT
HASPTABS	HASPTABS	TABS
HASPTERM	HASPTERM	TERM
HASPTRAK	HASPTRAK	TRAK
HASPWARM	HASPWARM	WARM
HASPCF	HASPCF	PCF
HASPCXCF	HASPCXCF	PCXCF
HASPCXEQ	HASPCXEQ	PCXEQ
HASPCXJ00-HASPCXJ31	HASPCXJ00-HASPCXJ31	PCXJ00-PCXJ31**
xxxxxxx***	xxxxxxx	xxxxxxx
* This module cannot be modified by using JES REP (replace) facilities.		
** Reserved names for installation exit modules.		
*** Any load module previously specified in a LOADMOD control statement.		

**address | \***

Specifies the 1- to 8-digit hexadecimal address of the data to be verified. This address does not have to be aligned in any way. The address should be taken directly from a JES2 assembler listing that contains the referenced CSECT.

If an asterisk (\*) is coded, the address will be interpreted as one greater than the last address reference on the previous JES2 patch statement.

**data**

Specifies the bytes of data to be verified at the specified location. Specify this

## VERIFY

number as a multiple of 2 hexadecimal digits. The data within the parameter may be separated by commas, never blanks. If all the data will not fit into one patch statement (71 bytes), use another patch statement.

If the data specifies a location within a JES2 CSECT, as specified at assembly time, the JES2 patch processing routine will relocate this data by the base location of the CSECT if indicated. Specify this relocation by following the data to be relocated with the name of the CSECT (abbreviated as in "csect" above) enclosed in parentheses. The address specified in the data field should be taken directly from a JES2 assembly listing containing the referenced CSECT. You can specify a minimum of 6 hexadecimal digits (3 bytes), and a maximum of 8 digits (4 bytes) for relocation.

### comments

Following the last required parameter and its blank delimiter, the rest of the control statement space can be used for comments.

Examples of JES2 patching facility statements are shown in Figure 4 and Figure 5 on page 395.

```
/*
/*
/*          CORRECT PROGRAMMING ERROR IN HASPRDR          */
/*
/*
*****
VER RDR      1E2      41E00001          /* VERIFY INSTRUCTION */
REP *        1E2      4590B258          /* BAL TO PATCH SPACE */
VER NUC      258      B258,B25A,B25C,B25E,B260 /* VERIFY PATCH SPACE */
REP *        258      41202000          /* ADD INSTRUCTION   */
REP *        *        41E00001          /* REPLACE INSTRUCTION*/
REP *        *        07F9             /* RETURN             */
*****
/*
/*          CORRECT BAD ADDRESS CONSTANT IN HASPPRPU          */
/*
/*
*****
VER PRPU     32E      58F0C65C          /* VERIFY INSTRUCTION */
REP *        330      B264             /* MODIFY DISPLACEMENT*/
VER NUC      264      B264,B266          /* VERIFY PATCH SPACE */
REP *        264      00000520(PRPU)    /* ADDRESS CONSTANT   */
*****
/*
/*          MODIFY BLOCK CHARACTER TABLE TO SLASH          */
/*          THE LETTER Z (POSITION 26) AND THE NUMBER ZERO  */
/*          (POSITION 27) ON OUTPUT SEPARATORS.            */
/*          --A TABLE ENTRY IS 24 BYTES LONG--            */
/*
/*
*****
```

Figure 4. Examples of JES2 Patching Format

```

/*****
/*
/*          CORRECT PROGRAMMING ERROR IN HASPRDR          */
/*
/*****
NAME HASPRDR HASPRDR          /* IDENTIFY SECTION */
VER 1E2 41E00001          /* VERIFY INSTRUCTION */
REP 1E2 4590B258          /* BAL TO PATCH SPACE */
NAME HASPNUC HASPNUC          /* IDENTIFY SECTION */
VER 258 B258,B25A,B25C,B25E,B260 /* VERIFY PATCH SPACE */
REP 258 41202000          /* ADD INSTRUCTION */
REP * 41E00001          /* REPLACE INSTRUCTION*/
REP * 07F9          /* RETURN */
/*****
/*
/*          CORRECT BAD ADDRESS CONSTANT IN HASPPRPU          */
/*
/*****
NAME HASPPRPU HASPPRPU          /* IDENTIFY SECTION */
VER 32E 58F0C65C          /* VERIFY INSTRUCTION */
REP 330 B264          /* MODIFY DISPLACEMENT*/
NAME HASPNUC HASPNUC          /* IDENTIFY SECTION */
VER 264 B264,B266          /* VERIFY PATCH SPACE */
REP 264 00000520(PRPU)          /* ADDRESS CONSTANT */
/*****
/*
/*          MODIFY BLOCK CHARACTER TABLE TO SLASH          */
/*          THE LETTER Z (POSITION 26) AND THE NUMBER ZERO   */
/*          (POSITION 27) ON OUTPUT SEPARATORS.              */
/*          --A TABLE ENTRY IS 24 BYTES LONG--              */
/*
/*****

```

Figure 5. Examples of JES2 AMASPZAP Format

## ZAPJOB

**Attention:** If improperly used, the ZAPJOB initialization statement can cause JES2 ABENDs including ABENDs on multiple systems. Be certain to review the entire ZAPJOB documentation before using this initialization statement.

Use ZAPJOB to remove all traces of a job structure from the JES2 job queue. It is intended to be used in situations where a job cannot be removed using normal JES2 commands or by a JES2 restart. **Ensure that the job and any output it might have created is not active in any JES2 process or active on a device.** Zapping a job that is active can lead to ABENDs and the loss of a PCE until JES2 is restarted. ZAPJOB will not correct queue errors. If the JOB or output queue has an error, a JES2 restart is required to rebuild the job queue.

When specifying a job to zap, IBM suggests specifying as many operands as are known for that job. This reduces the possibility of accidentally zapping the wrong job because of a typing error.

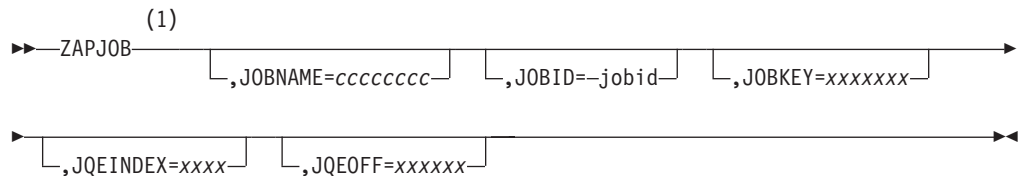
- A \$ZAPJOB command can be placed in the initialization data set. This is not the same as using the ZAPJOB initialization statement. A \$ZAPJOB command in the initialization data set is processed after JES2 initialization has completed. A ZAPJOB initialization statement removes the job before verifying the job queue. Because of the risk of forgetting to remove it, IBM suggests that you do not place \$ZAPJOB commands in the initialization data set.
- The ZAPJOB initialization statement can only be entered from CONSOLE mode. This prevents you from forgetting a ZAPJOB statement that you placed into the

## ZAPJOB

initialization data, thereby impacting jobs on future JES2 starts. See the JES2 Initialization and Tuning Guide for information on how to enter CONSOLE mode during initialization.

- On ZAPJOB, you must specify one of: JOBID=, JOBKEY=, JQEINDEX=, or JQEOFF=.
- If a job has a job key of zero (job has not had a job key assigned or has partially purged) you must specify JOBKEY=0, JQEINDEX= or JQEOFF= to "zap" the job.

### Format Description for ZAPJOB



#### Notes:

- 1 Omit the comma between initialization statement and first keyword

### Parameter Description for ZAPJOB

#### **JOBNAME=cccccccc**

The name of the job to be zapped. JOBNAME is an optional keyword; however, JOBNAME= cannot be specified by itself. You must also specify one of JOBID=, JOBKEY=, JQEINDEX=, or JQEOFF=.

#### **JOBID=jjjnnnnn/j0nnnnnn**

The JES2 JOBID of the job to be zapped. You can specify any of the valid formats for a JES2 JOBID such as J12345, JOB12345, S12345, STC12345, T12345, TSU12345. If your system is **not** in z2 mode, you can only use the job id formats: JOB12345, STC12345, and TSU12345. You must be in z2 mode if you want to specify jobs greater than 99,999.

#### **JOBKEY=xxxxxxxx**

The hexadecimal job key that is associated with the job. You can normally obtain the JOBKEY= value from a dump. If you specify JOBKEY=0, then you must also specify JOBID=, JQEINDEX=, or JQEOFF=.

#### **JQEINDEX=xxxx**

The index (in hexadecimal) of the JQE to be zapped. You can normally obtain the JQEINDEX= value from a dump.

#### **JQEOFF=xxxxxx**

The offset (in hexadecimal) of the JQE to be zapped. You can normally obtain the JQEOFF= value from a dump.

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## Appendix A. Sample JES2 initialization data set

The following initialization data set is available in SYS1.SHASSAMP so that you do not have to code the entire data set. However, it is only an example.

**Note:** To enhance readability, the code and comments have been separated. The JES2 initialization data set does not have column restrictions or dependencies.

```
/******PROPRIETARY-STATEMENT*****/ 00000800
/*                                     */ 00001600
/*   LICENSED MATERIALS-PROPERTY OF IBM   */ 00002400
/*   5694-A01 (C) COPYRIGHT IBM CORP 1994, 2005 */ 00004000
/*                                     */ 00005600
/*   STATUS: HJE7720                       */ 00006400
/*                                     */ 00007200
/*01* EXTERNAL CLASSIFICATION: NONE        */ 00007400
/*01* END OF EXTERNAL CLASSIFICATION:      */ 00007600
/*                                     */ 00007800
/******END-OF-PROPRIETARY-STATEMENT*****/ 00008000
/*                                     */ 00008800
/******/ 00010000
/*                                     */ 00020000
/*   HASIPARM - sample template for coding initialization */ 00022000
/*               statements for the JES2 component of MVS. */ 00024000
/*                                     */ 00026000
/*   HASIPARM contains sample templates for the JES2 */ 00028000
/*   initialization parameter statements. It is part of the set */ 00030000
/*   of HASIxxxx example files which should be tailored, */ 00032000
/*   renamed, and placed in production libraries as part of the */ 00034000
/*   installation of the JES2 component of MVS. */ 00036000
/*                                     */ 00040000
/*   Refer to the JES2 Initialization and Tuning Guide and */ 00050000
/*   Reference publications for complete descriptions of each */ 00060000
/*   statement and its parameters, and other information about */ 00070000
/*   JES2 initialization. */ 00080000
/*                                     */ 00100000
/*   WARNING: This data set will NOT "run" as it is presented */ 00101000
/*   here. Minimally, you MUST remove all the ¢¢ and @@ */ 00102000
/*   symbols. The ¢¢s are used to flag parameters for which */ 00103000
/*   there either is no JES2 default or that default is based on */ 00104000
/*   other parameter specifications. The @@s are used to flag */ 00105000
/*   those parameters whose default values you should carefully */ 00106000
/*   study to avoid blindly using them without consideration */ 00107000
/*   of your specific requirements. For those with terminals */ 00108000
/*   without the cent sign (? and at sign (@), they are */ 00108500
/*   hex '4A' and '7C', respectively. */ 00109000
/*   Note also that some statements below violate the */ 00110000
/*   continuation rules to provide additional comments where */ 00120000
/*   they would not normally be valid. */ 00130000
/*                                     */ 00139000
/******/ 00148000
/*                                     */ 00157000
/* Init Deck Management Considerations */ 00166000
/* ----- */ 00175000
/*                                     */ 00175200
/* Placement + PDS Member Partitions */ 00175400
/* ----- */ 00175600
/*                                     */ 00175800
/* In order for the JES2 component to be started, a subsystem */ 00176000
/* cataloged JCL procedure (PROC) is required. The JCL procedure */ 00176200
/* used for JES2 should point to a file (or files) containing JES2 */ 00176400
/* initialization parameters, such as the HASIPARM file. */ 00176600
/*                                     */ 00176800
```

```

/* Historically, IBM has distributed JES2 initialization          */ /* 00177000
/* parameters in the SYS1.PARMLIB dataset. The sample JES2    */ /* 00177200
/* cataloged JCL procedure, HASIPROC, still specifies the     */ /* 00177400
/* JES2PARM member of SYS1.PARMLIB in its HASPPARM DD. The   */ /* 00177600
/* choice of SYS1.PARMLIB or some other dataset should be    */ /* 00177800
/* made based on the local installation's multi-system dataset */ /* 00178000
/* sharing requirements, system programmer management         */ /* 00178200
/* procedures, performance (e.g. using a dataset that has a   */ /* 00178400
/* large block size), etc.                                    */ /* 00178600
/*                                                            */ /* 00178800
/* By default, JES2 uses the HASPPARM DD within its PROC to   */ /* 00179000
/* read initialization parameters.                             */ /* 00179200
/*                                                            */ /* 00179400
/* To simplify the management of initialization statements, IBM */ /* 00179600
/* recommends that most of the members be shared across all   */ /* 00179800
/* members in the JESplex.                                    */ /* 00180000
/*                                                            */ /* 00180200
/* The DD that points to the JES2 initialization parameters    */ /* 00180400
/* can point to a concatenation of files. An installation     */ /* 00180600
/* may wish to use the HASIPARM sample information, and then  */ /* 00180800
/* place their final initialization parameters in multiple     */ /* 00181000
/* files. This may allow the sharing of a large percentage    */ /* 00181200
/* of the parameters between multiple JES2 subsystems in the */ /* 00181400
/* installation's complex, facilitate management of the       */ /* 00181600
/* parameters by different groups of programmers, and lessen  */ /* 00181800
/* the number of files that need to be updated for a new     */ /* 00182000
/* release of JES2.                                          */ /* 00182200
/*                                                            */ /* 00182400
/* The JES2 parameters must be read from a dataset(s) that has */ /* 00182600
/* a fixed record format (RECFM), such as RECFM=FB, and that  */ /* 00182800
/* has 80 character records (LRECL=80). The dataset(s) can be */ /* 00183000
/* blocked with a BLKSIZE that is a multiple of 80.         */ /* 00183200
/*                                                            */ /* 00183400
/* The following example of partitioning the JES2 initialization */ /* 00183600
/* statements may be useful in managing the parameters and    */ /* 00183800
/* maintaining the order dependencies listed below.           */ /* 00184000
/*                                                            */ /* 00184200
/* - xxxDEF - Global Definitions (alphabetically or functional) */ /* 00184400
/* - NODE, APPL, CONNECT, NJE LINES                          */ /* 00184600
/* - DESTID                                                  */ /* 00184800
/* - Local Devices (RDR, PRT, PUN)                          */ /* 00185000
/* - RMT & RJE LINES                                         */ /* 00185200
/* - RJE, NJE Passwords (protect in a separate data set)    */ /* 00185400
/* - Parameters unique to each system                        */ /* 00185600
/*                                                            */ /* 00185800
/* Here is a sample JES2 start-up procedure that uses symbolic */ /* 00186000
/* parameters so any of the members can be changed through an */ /* 00186200
/* operator provided override. (This is probably an extreme   */ /* 00186400
/* example of breaking up the parameters, and there is nothing */ /* 00186600
/* wrong with keeping all the statements in a single member.)  */ /* 00186800
/*                                                            */ /* 00187000
/* //JES2 PROC MDEF=J2DEF,MNOD=J2NJE,MDST=J2DEST,           */ /* 00187200
/* //          MLOC=J2LOCL,MRJE=J2RJE,PASS=J2PASS,          */ /* 00187400
/* //          SYSN=          <== Don't Default this member */ /* 00187600
/* //**          -- Specify on S JES2,SYSN=x command        */ /* 00187800
/* //IEFPROC EXEC PGM=HASJES20,...                          */ /* 00188000
/* //HASPPARM DD DSN=SYS1.PARMLIB(&MDEF),DISP=SHR Global Definitions */ /* 00188200
/* //          DD DSN=SYS1.PARMLIB(&MNJE),DISP=SHR NJE      */ /* 00188400
/* //          DD DSN=SYS1.PARMLIB(&MDST),DISP=SHR Symbolic Dests */ /* 00188600
/* //          DD DSN=SYS1.PARMLIB(&MLOC),DISP=SHR Local Devices */ /* 00188800
/* //          DD DSN=SYS1.PARMLIB(&MRJE),DISP=SHR RJE      */ /* 00189000
/* //          DD DSN=SYSZ.PARMLIB(&PASS),DISP=SHR In a protected lib */ /* 00189200
/* //          DD DSN=SYS1.PARMLIB(J2SYS&SYSN.),DISP=SHR Unique */ /* 00189400
/* //          etc.                                         */ /* 00189600
/*                                                            */ /* 00189800
/* Common Parameters for all JESplex Members                */ /* 00190000
/* -----                                                */ /* 00190200

```



```

/*                                                    */ 00190400
/* The following statements should have identical parameter */ 00190600
/* settings across all members in the JESplex:           */ 00190800
/* - xxxDEF (global parameters) except where noted below */ 00191000
/* - JOBCLASS, OUTCLASS, etc.                           */ 00191200
/* - NODE, DESTID, CONNECT, RMT, LINE                   */ 00191400
/* - Local Devices (RDRs, PRTs, PUNs), OFFLOAD         */ 00191600
/*                                                    */ 00191800
/* Consider letting the MASDEF OWNMEMB parameter default to */ 00192000
/* the SMFPRMxx SID value.                               */ 00192200
/*                                                    */ 00192400
/* The following parameters will probably be set differently on */ 00192600
/* each system:                                          */ 00192800
/* - INIT(nnn) classes tailored for each system        */ 00193000
/* - AUTOESYS RESTART=YES|NO                            */ 00193200
/* - Local Device & Line definitions unique to each system */ 00193400
/* - START parameter can only be YES on one system for   */ 00193600
/*   local devices & lines shared by all                */ 00193800
/* - MASDEF HOLD= and DORMANCY= values                  */ 00194000
/* - LOGON(n) should specify a unique APPLID for JES2 on each */ 00194200
/*   member                                              */ 00194400
/* - CONDEF CONCHAR must be different if you are using   */ 00194600
/*   SCOPE=SYSPLEX (but needs to be the same if you want */ 00194800
/*   to exploit the MVS ROUTE *ALL command for JES2 commands). */ 00195000
/* - PCEDEF Number of PCEs should vary with JES2 workload */ 00195200
/*                                                    */ 00196200
/* Order Dependencies                                    */ 00196400
/* -----                                              */ 00196600
/*                                                    */ 00196800
/* There are a few cases where the order of JES2 initialization */ 00197000
/* statements is significant.                             */ 00197200
/* The cases where order does make a difference are:      */ 00197400
/*                                                    */ 00197600
/* - EXIT(19) statement must be before any statements    */ 00197800
/*   that are to be scanned by the exit routine.        */ 00198000
/* - DESTDEF must come before DESTID statements, or     */ 00198200
/*   destination names whose meaning might be changed   */ 00200400
/*   by the DESTDEF statement.                          */ 00200500
/* - NODE names before references to the node name in   */ 00200600
/*   the following statements:                           */ 00200700
/*   - CONNECT                                          */ 00200800
/*   - APPL                                            */ 00200900
/*   - DESTID                                          */ 00201000
/*   - Device Route Codes                             */ 00201100
/* - DESTID names before references by Device Route Codes */ 00201200
/*                                                    */ 00201300
/* Here is a suggested order for JES2 initialization statements: */ 00201400
/* - xxxDEF - global system definitions for MAS, Ckpt, Spool, */ 00201500
/*   Buffers, Job, Output, queues, Exits, etc.         */ 00201600
/* - NJE NODE, APPL, CONNECT                           */ 00201700
/* - DESTID                                             */ 00201800
/* - Devices - Local, LINEs, Remotes, Spool Off.      */ 00201900
/* .                                                  */ 00202000
/* Ranges                                              */ 00204000
/* -----                                              */ 00206000
/*                                                    */ 00206200
/* Use Ranges in Subscripts of JES2 initialization statements */ 00206400
/* to manage in groups. For example:                  */ 00206600
/*                                                    */ 00206800
/* INIT(11-21) CLASS=X,START=YES                       */ 00207000
/* JOBCLASS(*) COMMAND=IGNORE,LOG=YES                 */ 00207200
/* SSI(*) TRACE=NO                                    */ 00207400
/*                                                    */ 00207600
/* Caution                                           */ 00207800
/* -----                                              */ 00208000
/*                                                    */ 00208200
/* Don't use an asterisk subscript (*, or n-*) on device */ 00208400

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/* statements because of excessive overhead during JES2          */ 00208600
/* initialization. For example, NODE(*) means NODE(1-32767)     */ 00208800
/* and will significantly elongate JES2 initialization time.    */ 00209000
/*                                                                */ 00209200
/* Keeping up with Dynamic Changes                               */ 00209400
/* -----                                                    */ 00209600
/*                                                                */ 00209800
/* If any changes to initialization parameter settings with the $T, */ 00210000
/* $ADD or $DEL commands, you must also make these changes to your */ 00210200
/* initialization decks or they will be lost when JES2 restarts.   */ 00210400
/* For additional information on the effect of a hot start, refer  */ 00210600
/* to The Init and Tuning Guide and The Init and Tuning Reference. */ 00210800
/*                                                                */ 00211000
/* The MVS ROUTE *ALL command can be used to change or add       */ 00211200
/* symmetrically to the JESplex via $T and $ADD commands         */ 00211400
/* (if the command characters are identical).                    */ 00211600
/*                                                                */ 00211800
/******                                                    */ 00212000
/*                                                                */ 00212200
/* SYNTAX RULES for JES2 Initialization Statements:              */ 00212400
/*                                                                */ 00212600
/* - Statements may be coded free-form in Columns 1 through 71   */ 00212800
/* - Column 72 may be used for a Continuation Character, but is  */ 00213000
/*   NOT Required. A trailing comma indicates continuation.     */ 00213200
/* - Comments and Blanks may appear anywhere before, after, or  */ 00213400
/*   in-between statements, parameters, and delimiters.         */ 00213600
/* - Comments are NOT allowed within a range.                   */ 00213800
/* - Comments must be bounded by the slash-asterisk,            */ 00214000
/*   asterisk-slash type delimiters.                            */ 00214200
/* - Statements must have at least one parameter coded on the   */ 00214400
/*   same line as the statement name.                           */ 00214600
/*                                                                */ 00214800
/******                                                    */ 00215000
/*                                                                */ 00215200
/* NOTES on the Format of this Member:                            */ 00215400
/*                                                                */ 00215600
/* - The Order of Statements is Alphabetical within the following */ 00215800
/*   categories:                                                */ 00216000
/* - ALL Initialization Statements, showing new statements,     */ 00216200
/*   new and changed operands, etc.                            */ 00216400
/* - An abbreviated list of statements and operands ADDED       */ 00216600
/*   in the JES2 SP 4.1.0 and later releases                   */ 00216800
/* - An abbreviated list of statements and operands CHANGED     */ 00217000
/*   in the JES2 SP 4.1.0 and later releases                   */ 00217200
/* - An abbreviated list of statements and operands DELETED     */ 00217400
/*   in SP 2.2.0 JES2 or later releases.                       */ 00217600
/* - An abbreviated list of statement operands which cannot     */ 00217800
/*   be changed without a COLD start.                          */ 00218000
/*                                                                */ 00218200
/* COLUMN layouts of the following statements are as follows:    */ 00218400
/*                                                                */ 00218600
STMT    PARAMETER=DEFAULT,      COMMENTS                      CHG-CODE*/ 00218800
/*                                                                */ 00219000
/* 1- 8 - Statement Name                                         */ 00219200
/* 10-29 - Parameters set to default values                      */ 00219400
/*      ¢¢ - Indicates there is no default, or the default is   */ 00219600
/*           based on other parameters.                         */ 00219800
/*      @@ - Indicates the default should not be taken blindly.*/ 00220000
/* 30-60 - Comments                                              */ 00220200
/* 62-69 - How the Parameter can be changed. One or more of the */ 00220400
/*           following flags will appear in the change code list. */ 00220600
/*           They are listed in order of flexibility and power, but */ 00220800
/*           these capabilities are not hierarchical. For example, */ 00221000
/*           some parameters can be changed only by cold starts   */ 00221200
/*           and commands.                                        */ 00221400
/*                                                                */ 00221600
/*           a - can be added by $ADD                            */ 00221800

```

```

/*          o - can be altered by operand $T          */ 00222000
/*          r - can be removed by $DEL                */ 00222200
/*          h - can be altered/added by a hot start    */ 00222400
/*          (if no H, the parm is ignored during hot start) */ 00222600
/*          w - can be altered/added by JES2 Warm or Quick Start */ 00222800
/*          n - can be altered/added by a JES2        */ 00223000
/*          All Member Warm Start                    */ 00223200
/*          c - can be altered/added by JES2 Cold Start */ 00223400
/*                                                    */ 00223600
/******/ 00223800
/*                                                    */ 00224000
/**01* Change Activity:                               */ 00224200
/*                                                    */ 00225000
/* $430P429=10X      HJE4430 920811 HGF: JES2 to SAMPLIB(HASIPROC) */ 00225900
/*                                                    */ 00226200
/* $510P307=PL10307 HJE5510 931020 :      Init Deck Sample Updates */ 00226500
/*                                                    */ 00226700
/* $520LJQV=         HJE5520 940115 JPK: JES2 TO SAMPLIB(HASIPARM) */ 00226900
/* $520D001=MODRJE   HJE5520 940415 T_K1: Modifiable RJE           */ 00227100
/* $520P112=SNIFFER HJE5520 941006 GMD: Spool reclaim changes       */ 00227300
/*                                                    */ 00227400
/* $R01P003=PTM      HJE6601 950914 VLC: PTM 3 (External Classifi */ 00227500
/*                                                    */ 00227600
/* $R04LCMD=WLM      HJE6604 960913 CLW: Job Commands                */ 00227900
/* $R04LWLM=WLM      HJE6604 970313 CLW: Sampling anomalies         */ 00228200
/* $R04P144=WLM      HJE6604 970619 CLW: Misc. errors.             */ 00228300
/* $ES1BSZ=PTMS      HJE6608 990325 E_S7: Increase SNA Buffer Size  */ 00228400
/*                                                    */ 00228400
/* $ES1BSZ=PERF      HJE7703 990427 E_S7: Increase SNA Buffer Size  */ 00308400
/* $JS2LSPA=PERF     HJE7703 990817 JMS: Spool allocation           */ 00348400
/* $CLWP038=BASEQ    HJE7703 000131 CLW:                            */ 00388400
/* $CLWP038=BASEQ    HJE7703 000201 CLW: Dynamic BLOB resizing     */ 00428400
/* $ES7P037=PAGS     HJE7703 000208 E_S7: Set Tracedef pages=9     */ 00468400
/* $ES7P037=PAGS     HJE7703 000208 E_S7: Set Tracedef pages=9     */ 00508400
/* $JK0LLRJ=LRJOB    HJE7705 000608 J_K2: Long Running Job Support */ 00510000
/* $JK1LLRJ=LRJOB    HJE7705 000829 J_K2: Long Running Job Support */ 00520000
/* $JK0LLRJ=LRJOB    HJE7705 000919 J_K2: Long Running Job Support */ 00522000
/* $JK1LLRJ=LRJOB    HJE7705 000919 J_K2: Long Running Job Support */ 00531000
/* $TW4P118=MONITOR HJE7707 020411 T_JW: Increase RDINUM default   */ 00540000
/* $CW9MLM=NJETCP    HJE7720 030212 CLW: Line manager recovery     */ 00544000
/* $CW9MLM=NJETCP    HJE7720 030328 CLW: Line manager recovery     */ 00546000
/* $NW1BLD=BASEQ     HJE7720 040315 NAW: Fix PROCLIB continuation  */ 00547000
/* $NW1BLD=BASEQ     HJE7720 040322 NAW: Fix PROCLIB continuation  */ 00547400
/* $OA07604=APAR     HJE7720 040524 S_F: was closed as sug         */ 00547500
/* $CWXLTCP=NJETCP   HJE7720 041117 CLW: Sample/test exits        */ 00547600
/* $CWXLTCP=NJETCP   HJE7720 050131 CLW: Sample exits              */ 00548000
/*                                                    */ 00548400
/* A000000-999999    Created for JES2 4.3.0                       */ 00588400
/******/ 00628400
/*                                                    */ 00668400
/*                                                    */ 00800000
/*                                                    */ 00810000
/******/ 00820000
/*                                                    */ 00830000
/*                                                    */ 00840000
/*          *-----*                                           */ 00840000
/*          | ALL Initialization Parameters |                       */ 00850000
/*          *-----*                                           */ 00860000
/*                                                    */ 00900000
/*          Note: Not ALL Parameters are shown, especially for devices. */ 00905000
/*                                                    */ 00905600
/******/ 00910000
/*                                                    */ 00920000
/*          *-----*                                           */ 00930000
/*          | SNA/NJE Applications |                               */ 00935000
/*          | VTAM Application ID | aohwnc |                       */ 00940000
/*          *-----*                                           */ 00950000
/*                                                    */ 00950000
APPL(#####) COMPACT=##, /* APPL - VTAM Application ID aohwnc*/ 00960000

```

```

/* (pre-SP311 APPL APPLID=) */ 00965000
/* COMPACT - Compaction Table Num ohwnc*/ 00975000
LINE=cccc /* Line dedicated to the SNA NJE ohwnc*/ 00981000
/* session (added SP410) */ 00982000
LOGON=1, /* LOGON DCT to be used by this ohwnc*/ 00982200
/* session (added OS240) */ 00982500
LOGMODE=, /* Logon mode table entry name ohwnc*/ 00983000
/* (added SP410) */ 00984000
NODE=cccc, /* NJE Node Number ohwnc*/ 00985000
REST=cccc, /* Session Resistance ohwnc*/ 00993000
/* */ 01000000
/* */ 01010000
/*****/ 01020000
/* -----* 01030000
| Addresses of Bad Spool Tracks | 01040000
| Note: Statement is not displayable | 01041000
| | 01044000
*-----* 01050000
/* 01060000
BADTRACK VOL=cccccc, /* Full Spool Volume Serial Number hwnc*/ 01070000
ADDR=(cccccccc-cccccccc) 01080000
/* Starting cyl/head of Bad Track hwnc*/ 01090000
/* - Ending cyl/head of Bad Track hwnc*/ 01100000
/* */ 01110000
/* */ 01120000
/*****/ 01130000
/* -----* 01140000
| LOCAL BUFFERS | 01150000
*-----* 01160000
/* 01170000
BUFDEF BELOWBUF= /* Characteristics for buffers below */ 01185000
/* 16 meg line (added SP410) */ 01190000
(LIMIT=ccc, /* Number of Buffers ohwnc*/ 01200000
/* (pre-SP410=BUFNUM=cc) */ 01210000
WARN=80), /* Warning Threshold % ohwnc*/ 01230300
/* (pre-SP410=BUFWARN) */ 01231200
EXTBUF= /* Characteristics for extended buffers */ 01232100
/* (added SP410) */ 01233000
(LIMIT=ccc, /* Number of Buffers ohwnc*/ 01233900
/* (pre-SP410=BUFNUM=cc) */ 01234800
WARN=80) /* Warning Threshold % ohwnc*/ 01237500
/* (pre-SP410=BUFWARN) */ 01238400
/* */ 01240000
/* */ 01250000
/*****/ 01260000
/* -----* 01270000
| CHECKPOINT PARAMETERS | 01280000
| This example assumes CKPT1 is | 01282000
| on DASD and CKPT2 is on a | 01284000
| Coupling Facility. | 01286000
| CKPT1 and CKPT2 can be on either. | 01288000
*-----* 01290000
/* 01300000
CKPTDEF CKPT1=(DSNAME=cccc, /* 1-44 char. dsn for 1st CKPT ds onc*/ 01310000
VOLSER=cccc, /* 1st CKPT volume onc*/ 01350000
INUSE=NO), @/* initial status of CKPT1 onc*/ 01390000
/* NOTE: Refer to the Commands Manual */ 01395000
/* for additional information */ 01400000
CKPT2=(STRNAME=cccc, /* 1-16 char. structure name for onc*/ 01410000
/* 2nd CKPT data set. */ 01450000
/* (STRNAME added in SP510) */ 01460000
INUSE=NO), @/* initial status of CKPT2 onc*/ 01490000
CKPTOPT=HIGHEST, /* Which ckpt to use on JES2 restart onc*/ 01495000
/* (added SP430) */ 01500000
DUPLEX=ON, /* MODE=DUPLEX - whether to use ohwnc*/ 01502000
/* CKPT2 as the duplex data set */ 01503000
/* MODE=DUAL - ignored */ 01504000

```

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LOGSIZE=cc,          /* Number of 4k pages for change log  nc*/ 01506000
MODE=DUPLEX,        /* method of CKPT operation           onc*/ 01508000
NEWCKPT1=(DSNAME=ccc,
              /* 1-44 char. CKPT1 replacement   ownc*/ 01520000
              VOLSER=cccc), /* Replacement volume for CKPT1      ownc*/ 01540000
NEWCKPT2=(STR=cccc), /* 1-16 char. structure name for     */ 01560000
              /* CKPT2 replacement                   ownc*/ 01570000
              /* (added in SP510)                       */ 01575000
OPVERIFY=YES,       /* Prompt oper. to confirm action     ownc*/ 01580000
              /* to be taken for an I/O error on CKPT */ 01590000
              /* (added in SP510)                       */ 01600000
RECONFIG=NO,        /* Use the most recently used         ownc*/ 01610000
              /* checkpoint datasets                 */ 01620000
VERSIONS=(NUMBER=0, /* Number of checkpoint versions     ohwnc*/ 01752000
              /* JES2 will maintain-0 indicates       */ 01754300
              /* JES2 will determine the maximum       */ 01754400
              /* number of versions to maintain.     */ 01754600
              /* (added SP410)                       */ 01754800
              WARN=80), /* Threshold percentage at which     ohwnc*/ 01755700
              /* operator is to be notified.           */ 01756400
              /* (added SP410)                       */ 01757100
VOLATILE=(ONECKPT=WTOR,
              /* Specifies JES2 should issue WTOR to */ 01757800
              /* determine action if one CKPT is on a */ 01758500
              /* volatile coupling facility       */ 01759200
              /* (added in SP510)                   ohwnc*/ 01759900
              ALLCKPT=WTOR)
              /* Specifies JES2 should issue WTOR to */ 01760600
              /* determine action if all CKPTs are on */ 01763600
              /* volatile coupling facilities     */ 01767000
              /* (added in SP510)                   ohwnc*/ 01790000
              /* (added in SP510)                   ohwnc*/ 01800000
              /* (added in SP510)                   ohwnc*/ 01810000
/*                                                    */ 01812000
/******                                                    */ 01818000
/*                                                    */ 01824000
/*                                                    |-----*
/*                                                    | Checkpoint Space Definitions | 01830000
/*                                                    |-----*
/*                                                    */ 01836000
/*                                                    */ 01842000
CKPTSPACE BERTNUM=cccccc, @@ /* Number of BERTs                   oc*/ 01848000
              /* (added in OS/390 R4)                       */ 01854000
              BERTWARN=80, /* $HASP050 threshold for BERTs     ohwnc*/ 01860000
              /* (added in OS/390 R4)                       */ 01866000
/*                                                    */ 01880000
/******                                                    */ 01890000
/*                                                    */ 01900000
/*                                                    |-----*
/*                                                    | Compaction Table Definitions | 01910000
/*                                                    |-----*
/*                                                    */ 01920000
/*                                                    */ 01930000
COMPACT NAME=ccccccccc, /* Name of Compaction Table          hwnc*/ 01940000
NUMBER=cc, /* Compaction Table Number           hwnc*/ 01950000
              /* Table Definition                       */ 01960000
CHARS=(cc, /* - Number of Master Characters     hwnc*/ 01970000
        ??????.. /* - Master Characters                hwnc*/ 01980000
        ??????..) /* - Non-Master Characters            hwnc*/ 01990000
/*                                                    */ 02000000
/*                                                    */ 02010000
/******                                                    */ 02020000
/*                                                    |-----*
/*                                                    | CONSOLE PARAMETERS          | 02030000
/*                                                    |-----*
/*                                                    */ 02040000
/*                                                    */ 02050000
/*                                                    */ 02060000
CONDEF AUTOCMD=20, /* Number of Auto Ccmds              hwnc*/ 02070000
BUFNUM=100, @@ /* Number of CMBs                   ohwnc*/ 02110000
BUFWARN=80, /* Warning Threshold %              ohwnc*/ 02130000
CMDNUM=100, /* Maximum number of CMBs for JES2  */ 02140000
              /* commands from common storage     ownc*/ 02150000
              /* (added in SP510)                       */ 02160000
CONCHAR=$, /* Console Cmd Character             ownc*/ 02170000

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DISPLEN=64,          /* $SCAN Cmd/init Display Length  ohwnc*/ 02182000
DISPMAX=100,        /* $SCAN Cmd/init Max Lines       ohwnc*/ 02186000
MASMSG=200,         /* Number of Queued Msgs          ohwnc*/ 02190000
RDIRAREA=Z,         /* Default console out-of-line    ohwnc*/ 02210000
                    /* area (added SP410)            */ 02220000
RDRCHAR=$,          /* Reader Cmd Character            ohwnc*/ 02230000
SCOPE=SYSTEM        /* Specifies scope of command     wnc*/ 02241000
                    /* prefix (added SP410)          */ 02244000
/*                                                           */ 02250000
/*                                                           */ 02260000
/*****
/*
|-----*
|   Static NJE Connections   | 02290000
|-----*
|                               | 02300000
|                               | 02310000
CONNECT NODEA=cccc, /* Overall Statement - oarhwnc*/ 02320000
                    /* Node number or node name     hwnc*/ 02322000
                    /* on 'A' end                   */ 02325000
MEMBERA=1,          /* Member number on 'A' end     hwnc*/ 02330000
                    /* (pre-SP311=MEMBA, required) */ 02331000
                    /* (SP311 - defaults to 1)     */ 02334000
NODEB=cccc,         /* Node number or node name     hwnc*/ 02340000
                    /* on 'B' end                   */ 02345000
MEMBERB=1,          /* Member number on 'B' end     hwnc*/ 02350000
                    /* (pre-SP311=MEMBB, required) */ 02352000
                    /* (SP311 - defaults to 1)     */ 02355000
PATHMGR=cc?        /* Support path manager protocols o*/ 02356000
                    /* (added SP410)                */ 02357000
REST=0              /* Resistance of connection     ohwnc*/ 02360000
                    /* NOTE: the values for REST= CANNOT */ 02370000
                    /* be 0 (as shown here).          */ 02380000
                    /* If the parameter is not       */ 02390000
                    /* coded at all, then the default */ 02400000
                    /* will be 0. The parameter is   */ 02410000
                    /* shown this way only to include */ 02420000
                    /* the default value here.       */ 02430000
/*                                                           */ 02440000
/*                                                           */ 02450000
/*****
/*
|-----*
|   DEBUG PARAMETERS         | 02480000
|   (revised by OW05639)    | 02481000
|   Do not use unless necessary | 02484000
|-----*
|                               | 02490000
|                               | 02500000
DEBUG BERT=YES,     /* ABEND if BERT error detected  ohwnc*/ 02501000
CKPT=NO,           /* Verify integrity of checkpoint ohwnc*/ 02502000
MISC=NO,           /* Count certain JES2 events     ohwnc*/ 02503000
SECURITY=NO,       /* Issue WTO for security failures ohwnc*/ 02503500
STORAGE=NO,        /* Verify GETWORKed areas       ohwnc*/ 02504000
SYMREC=NO,         /* Issue $WTO with SYMREC       ohwnc*/ 02505000
VERSION=NO         /* Verify integrity of ckpt vers  ohwnc*/ 02507000
/*                                                           */ 02508000
/*                                                           */ 02511000
/*****
/*
|-----*
|                               | 02511900
|                               | 02512800
|   Defining How Destinations | 02513700
|   Are Processed             | 02514600
|   (added by OY54524)       | 02515500
|-----*
|                               | 02516400
|                               | 02517300
DESTDEF LOCALNUM=9999, /* 9999 is the maximum special local wnc*/ 02518200
                    /* routing allowed on this member nc*/ 02519100
NDEST=Node,         /* JES2 interprets Nnnnn as node  nc*/ 02520000
NODENAME=OPTIONAL, /* userids can be specified without nc*/ 02520900
                    /* a node specification         */ 02521800
RDEST=Remote,       /* JES2 interprets Rnnnn as remote nc*/ 02522700

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RMDEST=Remote, /* JES2 interprets RMnnnn as remote nc*/ 02523600
RMTDEST=Remote, /* JES2 interprets RMTnnnn as remote nc*/ 02524500
UDEST=SPLOCAL, /* JES2 interprets Unnnn as special nc*/ 02525400
/* local routing nc*/ 02526300
SHOWUSER=NOLOCAL /* local dests are displayed ohwnc*/ 02527200
/* without 'LOCAL' as the prefix */ 02528100
/* */ 02530000
/* */ 02540000
/***** */ 02550000
/* -----* 02560000
| Symbolic Destinations | 02570000
*-----* 02580000
/* 02590000
DESTID(#####) DEST=#####, /* DESTID - User-Defined Name aownc*/ 02600000
/* (pre-SP311 DESTID NAME=) */ 02601000
/* DEST - NJE/RJE/LOCAL Routecode ownc*/ 02610000
PRIMARY=NO /* Do not display the destid for ownc*/ 02611000
/* job and SYSOUT routing */ 02611500
/* */ 02612000
/* */ 02630000
/***** */ 02640000
/* -----* 02650000
| Default Estimated Sysout Bytes/Job | 02660000
*-----* 02670000
/* 02680000
ESTBYTE NUM=99999, /* 99999000 Bytes for 1st Msg ohwnc*/ 02690000
INT=99999, /* then 99999000 Byte Intervals ohwnc*/ 02700000
OPT=0 /* Allow Jobs to Continue ohwnc*/ 02710000
/* */ 02720000
/* */ 02730000
/***** */ 02740000
/* -----* 02750000
| Default Estimated Execution Time | 02760000
*-----* 02770000
/* 02780000
ESTIME NUM=2, /* 2 minutes for 1st Message ohwnc*/ 02790000
INT=1, /* then at 1 minute Intervals ohwnc*/ 02800000
OPT=NO /* No HASP308 message ohwnc*/ 02810000
/* */ 02820000
/* */ 02830000
/***** */ 02840000
/* -----* 02850000
| Default Estimated Sysout Lines/Job | 02860000
*-----* 02870000
/* 02880000
ESTLNCT NUM=2, /* 2000 Lines for 1st Message ohwnc*/ 02890000
INT=2000, /* then at 2000 Line Intervals ohwnc*/ 02900000
OPT=0 /* Allow Jobs to Continue ohwnc*/ 02910000
/* */ 02920000
/* */ 02930000
/***** */ 02940000
/* -----* 02950000
| Default Estimated Sysout Pages/Job | 02960000
*-----* 02970000
/* 02980000
ESTPAGE NUM=40, /* 40 Pages for 1st Message ohwnc*/ 02990000
INT=10, /* then at 10 Page Intervals ohwnc*/ 03000000
OPT=0 /* Allow Jobs to Continue ohwnc*/ 03010000
/* */ 03020000
/* */ 03030000
/***** */ 03040000
/* -----* 03050000
| Default Estimated Sysout Cards/Job | 03060000
*-----* 03070000
/* 03080000
ESTPUN NUM=100, /* 100 Cards for 1st Message ohwnc*/ 03090000
INT=2000, /* then at 2000 Card Intervals ohwnc*/ 03100000

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OPT=0          /* Allow Jobs to Continue          ohwnc*/ 03110000
/*                                                    */ 03120000
/*                                                    */ 03130000
/*****/ 03140000
/*          *-----*
|          | Exit Number - Routine Association | 03160000
|          |-----*
          */ 03180000

EXIT(NNN)  ROUTINES=cccccccc, /* Name on $ENTRY statement          wnc*/ 03190000
          STATUS=ENABLED,    /* The Exit is Enabled initially      ownc*/ 03200000
          TRACE=NO          /* Tracing not active                  ownc*/ 03220000
/*                                                    */ 03230000
/*                                                    */ 03240000
/*****/ 03250000
/*          *-----*
|          | Functional Subsystem Definition | 03270000
|          |-----*
          */ 03290000

FSS(cccccccc) PROC=cccccccc, /* FSS - Token for PRINTERnn FSS= aownc*/ 03300000
/*          (pre-SP311 FSSDEF FSSNAME=)          */ 03303000
/*          PROC -FSS Procedure to Start FSS      ownc*/ 03310000
          HASPFSSM=HASPSSM, /* FSS Load Module for FSS Support    ownc*/ 03320000
          AUTOSTOP=NO      /* Can FSS addr. space be removed     orwnc*/ 03326000
/*          */ if all printers are inactive?          */ 03327000
/*                                                    */ 03330000
/*                                                    */ 03340000
/*****/ 03344000
/*          *-----*
|          | Include additional init decks | 03360000
|          |-----*
          */ 03376000

INCLUDE  DSNAME=cc(cc), /* Up to 44 char data set name & member */ 03384000
          VOLSER=cccccc, /* Volume serial for data set          */ 03392000
          UNIT=ccc      /* Unit information for data set       */ 03400000
/*                                                    */ 03408000
/*                                                    */ 03416000
/*****/ 03430000
/*          *-----*
|          | Logical Initiators          | 03450000
|          |-----*
          */ 03470000

INIT(nnnn) NAME=ccc, /* Initiator Name                      wnc*/ 03480000
          CLASS=A,   /* Initial Job Classes                  ownc*/ 03500000
          START=YES  /* Start Automatically                  wnc*/ 03510000
/*                                                    */ 03520000
/*                                                    */ 03530000
/*****/ 03540000
/*          *-----*
|          | Logical Initiator definition | 03560000
|          |-----*
          */ 03580000

INITDEF  PARTNUM=3 @@ /* Number of Initiators                wnc*/ 03590000
/*                                                    */ 03610000
/*                                                    */ 03620000
/*****/ 03630000
/*          *-----*
|          | Internal Readers          | 03650000
|          |-----*
          */ 03660000
          */ 03670000

INTRDR  AUTH=(JOB=NO, /* Allow Job cmds                      ownc*/ 03672000
          DEVICE=NO, /* Allow Device Cmds                   ownc*/ 03674000
          SYSTEM=NO), /* Allow system cmds                   ownc*/ 03676000
/*          (pre-SP420 AUTH=0 for all 3          */ 03678000
          subparameters)                      */ 03680000
          BATCH=YES, /* Allow batch jobs to use             wnc*/ 03682000
/*          internal readers                   */ 03684000
/*          (added SP420)                      */ 03686000

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CLASS=A,          /* Default Job Class          ownc*/ 03690000
HOLD=NO,          /* Don't Hold Jobs Read      ownc*/ 03700000
HONORLIM=NO,     /* Do output excession for INTRDR ownc*/ 03702000
                  /* (added by OW06743)       */ 03705000
PRTYINC=0,       /* Don't Prty Age Jobs       wnc*/ 03710000
PRTLIM=15,       /* Limit Job Prty to 15      wnc*/ 03720000
TRACE=NO         /* Allow tracing             ownc*/ 03784000
                  /* (added SP420)            */ 03785000
/*                                                       */ 03790000
/*                                                       */ 03800000
/*****
/* -----*
| Job Class definitions | 03830000
|-----*
JOBCLASS(? ACCT=NO, /* Acct# not req          oc*/ 03860000
ACTIVE=NO,          /* Class not used on new jobs */ 03865000
AUTH=ALL,           /* Allow all Cmd           oc*/ 03870000
BLP=NO,            /* Ignore BLP              oc*/ 03880000
COMMAND=VERIFY,    /* Verify Cmds             oc*/ 03885000
CONDPURG=NO,       /* Conditional purge for   oc*/ 03886000
                  /* JOBCLASS(STC) or JOBCLASS(TSU) */ 03887000
                  /* (moved in OS/390 R4)     */ 03888000
COPY=NO,           /* Not TYPRUN=COPY         oc*/ 03890000
GROUP=name,        /* Associate jobclass with group name / 03893000
HOLD=NO,           /* Not TYPRUN=HOLD         oc*/ 03895000
IEFUJP=YES,        /* Take SMF Job Purge Exit oc*/ 03900000
IEFUSO=YES,        /* Take SYSOUT Excess Exit oc*/ 03910000
JESLOG=(NOSPIN),  /* JOBLLOG/SYSMSG spin specifications oc*/ 03915000
JOURNAL=YES,       /* Journal this Job Class  oc*/ 03920000
LOG=YES,           /* Print JES2 JOB LOG      oc*/ 03930000
MODE=JES,          /* Run in JES mode, not WLM mode oc*/ 03931000
                  /* (added in OS/390 R4)     */ 03932000
MSGCLASS=A,        /* Message class for JOBCLASS(STC) oc*/ 03933000
                  /* or JOBCLASS(TSU)        */ 03934000
                  /* (moved in OS/390 R4)     */ 03935000
MSGLEVEL=(0,1),    /* Job, All Msgs           oc*/ 03940000
OUTDISP=(,),       /* Disposition of system output oc*/ 04092000
                  /* normal termination and abnormal */ 04093000
                  /* termination (added SP410)      */ 04094000
                  /* (pre-SP410=CONDPURG)           */ 04095000
OUTPUT=YES,        /* Produce Output for Job  oc*/ 04110000
QHELD=NO,          /* Hold jobs prior to execution oc*/ 04116000
                  /* (added by APAR OW06439)         */ 04122000
PERFORM=000,       /* SRM Performance Group 0  oc*/ 04130000
PGMRNAME=NO,       /* Pgmrmn not rq           oc*/ 04135000
PROCLIB=00,        /* Use //PROC00 DD         oc*/ 04140000
REGION=1M,         /* Region Size             oc*/ 04143000
                  /* (format changed SP410)         */ 04146000
RESTART=NO,        /* No Requeue (XEQ) on IPL oc*/ 04150000
SCAN=NO,           /* Not TYPRUN=SCAN         oc*/ 04170000
SCHENV=cccccccc,  /* Default SCHENV          oc*/ 04180000
SWA=BELOW,         /* SWA cbs below 16m line  oc*/ 04190000
                  /* (added by APAR OY02574)         */ 04200000
                  /* (superseded by APAR OY03444)     */ 04210000
TIME=(0030,00),    /* Job Step Time           oc*/ 04212000
                  /* (format changed SP410)         */ 04215000
TYPE6=YES,         /* Produce SMF 6 Records   oc*/ 04220000
TYPE26=YES,        /* Produce SMF 26 Records  oc*/ 04240000
XBM=cccccccc,     /* Proc name for XBM/2 job oc*/ 04274000
                  /* (changed in SP313)             */ 04278000
XEQCOUNT=MAX=*   /* Maximum jobs allowed in this oc*/ 04278500
                  /* class simultaneously          */ 04279000
                  /* (added in OS/390 R4)           */ 04279500
/*                                                       */ 04280000
/*                                                       */ 04290000
/*****

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```

/*
|-----* 04310000
| Job Characteristics | 04320000
|-----* 04330000
*/ 04340000
JOBDEF ACCTFLD=OPTIONAL, /* Accounting field optional ohwnc*/ 04350000
      BAD_JOBNAME_CHAR=?, /* The character used to ohwnc*/ 04350200
      /* substitute for bad jobname */ 04350400
      /* characters */ 04350600
      CNVT_ENQ=FAIL, /* Fail job conversion if a DSN */ 04351000
      /* ENQ is not available onc*/ 04352000
      DUPL_JOB=DELAY, /* Don't allow jobs with duplicate */ 04355000
      /* names to execute concurrently onc*/ 04360000
      /* (added OS130) */ 04365000
      JCLERR=NO, /* No Term. Job w/JCL Error ohwnc*/ 04370000
      JNUMWARN=80, /* Warn Threshold % for Job Numb. onc*/ 04380000
      JOBNUM=1000, /* Job Queue Size oc*/ 04410000
      JOBWARN=80, /* Warning Threshold % For JQEs onc*/ 04430000
      PRTYHIGH=10, /* Upper Limit for Aging onc*/ 04450000
      PRTYJECL=YES, /* PRIORITY JECL Supported ohwnc*/ 04470000
      PRTYJOB=NO, /* PRTY= on JOB Not Sup'd ohwnc*/ 04490000
      PRTYLOW=5, /* Lower Limit for Aging onc*/ 04510000
      PRTYRATE=0, /* Prty Aging Rate X/Day onc*/ 04530000
      RANGE=(1-9999), /* Local Job Number Range oc*/ 04550000
      RASSIGN=YES, /* Allow assignment of job numbers ohwnc*/ 04560000
      /* outside RANGE (added OW20844) */ 04570000
/*
*/ 04590000
/*
*/ 04600000
/*****/ 04610000
/*
|-----* 04620000
| Default PRTY Calculations | 04630000
|-----* 04640000
*/ 04650000
JOBPRTY(1) PRIORITY=9, /* Job Prty=9 if ohwnc*/ 04660000
          TIME=2 /* < 2 min. exec. time ohwnc*/ 04670000
JOBPRTY(2) PRIORITY=8, /* Job Prty=8 if */ 04710000
          TIME=5 /* < 5 min. exec. time */ 04720000
          /* etc. */ 04722000
/*
*/ 04724000
/*
*/ 04726000
/*****/ 04728000
/*
|-----* 04728500
| Line JOB Transmitters | 04729000
|-----* 04729500
*/ 04729700
L(NNNN).JT(N) LIMIT=(0-*), /* Select Any # Lines ohwnc*/ 04729900
          /* (added OS240) */ 04730100
          WS=(/) /* Work selection criteria ohwnc*/ 04730300
          /* (added OS240) */ 04730500
/*
*/ 04730700
/*
*/ 04731300
/*****/ 04732000
/*
|-----* 04732700
| Line SYSOUT Transmitters | 04733400
|-----* 04734100
*/ 04734800
L(NNNN).ST(N) LIMIT=(0-*), /* Select Any # Lines ohwnc*/ 04735500
          /* (added SP430) */ 04736200
          OUTDISP=, /* Select output dispositions ohwnc*/ 04736400
          /* (added OS130) */ 04736600
          PLIM=(0-*), /* Select Any # Pages ohwnc*/ 04736900
          /* (added SP430) */ 04737600
          WS=(/) /* Work selection criteria ohwnc*/ 04738300
          /* (added SP430) */ 04739000
/*
*/ 04740000
/*
*/ 04750000
/*****/ 04760000
/*
|-----* 04770000

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|          TP Lines for RJE/NJE          |          04780000
|          BSC Line                      |          04785000
*-----*                               |          04790000
|                                         |          */ 04800000
LINE(NNNN) AUTODISC=YES,                |          /* Alternate name for LINE: LNE n */ 04803000
|                                         |          /* automatic disconnect (NO) aohwnc*/ 04806000
|                                         |          /* (pre-SP311=ADISCON/NOADISC) */ 04808000
CODE=A,                                  |          /* BSC adapter code (B) ohwnc*/ 04810000
|                                         |          /* (pre-SP311=CODEA/CODEB) */ 04812000
COMPRESS=YES,                            |          /* Data compression avail. ohwnc*/ 04815000
|                                         |          /* (pre-SP311=COMP/NOCOMP) */ 04818000
DUPLEX=HALF,                             |          /* Half duplex line (FULL) ohwnc*/ 04818600
|                                         |          /* (pre-SP311=HDUPLEX/FDUPLEX) */ 04819200
INTERFAC=A,                              |          /* BSC adapter interface (B) ohwnc*/ 04819800
|                                         |          /* (pre-SP311=IFACEA/IFACEB) */ 04820400
JRNUM=DEFAULT,                           |          /* Number of job receivers on hwnc*/ 04821000
|                                         |          /* this line (Range=0-7) */ 04821600
|                                         |          /* (added SP430) */ 04822200
JTNUM=DEFAULT,                           |          /* Number of job transmitters on hwnc*/ 04822800
|                                         |          /* this line (Range=0-7) */ 04823400
|                                         |          /* (added SP430) */ 04824000
LINECHR=EBCDIC,                          |          /* Line control char. form (USASCII) */ 04824600
|                                         |          /* (pre-SP311=EBCDIC/USASCII) ohwnc*/ 04825200
LOG=N,                                    |          /* Monitor channel end completions (Y) */ 04827000
|                                         |          /* or discontinue monitor (N) ohwnc*/ 04830000
PASSWORD=,                                |          /* 1-8 char. security password ohwnc*/ 04840000
REST=0,                                   |          /* Resistance rating of the line ohwnc*/ 04840900
SPEED=LOW,                                |          /* <=9600 bits per second (HIGH) ohwnc*/ 04841800
|                                         |          /* (Used for models 360/20 2&4) */ 04842700
|                                         |          /* (pre-SP311=LOWSPEED/HISPEED) */ 04843600
SRNUM=DEFAULT,                            |          /* Number of SYSOUT receivers on hwnc*/ 04844500
|                                         |          /* this line (Range=0-7) */ 04845400
|                                         |          /* (added SP430) */ 04845600
STNUM=DEFAULT,                            |          /* Number of SYSOUT transmitters hwnc*/ 04845800
|                                         |          /* on this line (Range=0-7) */ 04846000
|                                         |          /* (added SP430) */ 04846200
TRACEIO=NO,                              |          /* Trace i/o operations on line (YES) */ 04846800
|                                         |          /* or stop tracing (NO) ohwnc*/ 04847200
|                                         |          /* */ 04848000
|                                         |          /* NOTE: The following parameters are */ 04850000
|                                         |          /* ignored if UNIT=SNA */ 04860000
TRANSPAR=NO,                              |          /* Text transparency (YES) ohwnc*/ 04960000
|                                         |          /* (Required for BSC NJE lines) */ 04970000
|                                         |          /* (pre-SP311=NOTRANSP/TRANSP) */ 04975000
UNIT=¢¢¢¢                                |          /* Unit address EP, CTC or 'SNA' ohwnc*/ 04976300
/*                                         |          *-----* 04976400
|          TP Lines for RJE/NJE          |          04976500
|          SNA Line                      |          04976600
*-----*                               |          04976700
|                                         |          */ 04976800
LINE(NNNN) LOG=N,                        |          /* Monitor channel end completions (Y) */ 04976900
|                                         |          /* or discontinue monitor (N) aohwnc*/ 04977000
JRNUM=DEFAULT,                            |          /* Number of job receivers on ohwnc*/ 04977100
|                                         |          /* this line (Range=0-7) */ 04977200
|                                         |          /* (added SP430) */ 04977300
JTNUM=DEFAULT,                            |          /* Number of job transmitters on ohwnc*/ 04977400
|                                         |          /* this line (Range=0-7) */ 04977500
|                                         |          /* (added SP430) */ 04977600
PASSWORD=,                                |          /* 1-8 char. security password ohwnc*/ 04977800
SRNUM=DEFAULT,                            |          /* Number of SYSOUT receivers on ohwnc*/ 04978000
|                                         |          /* this line (Range=0-7) */ 04978200
|                                         |          /* (added SP430) */ 04978400
STNUM=DEFAULT,                            |          /* Number of SYSOUT transmitters ohwnc*/ 04978600
|                                         |          /* on this line (Range=0-7) */ 04978800
|                                         |          /* (added SP430) */ 04979000
TRACEIO=NO,                              |          /* Trace i/o operations on line (YES) */ 04979200
|                                         |          /* or stop tracing (NO) ohwnc*/ 04979400

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UNIT=SNA          /* Indicate SNA device          ohwnc*/ 04979600
/*              */ 04980000
/*              */ 04990000
/*****/ 05000000
/*              *-----* 05010000
|          Exit Load Modules          | 05020000
*-----* 05030000
/*              */ 05040000
LOADMOD(module_name) STORAGE=PVT          05045000
/* Exit load module name ($MODULE) hwnca*/ 05050000
/* (pre-SP311 LOAD module_name)      */ 05050500
/* Load module into private also hwnca*/ 05051000
/* CSA and LPA                        */ 05052000
/*              */ 05060000
/*              */ 05070000
/*****/ 05080000
/*              *-----* 05090000
|          Identify JES2 APPLIDs to VTAM | 05100000
*-----* 05110000
/*              */ 05120000
LOGON(n) Applid=JES2, /* Access control blk (ACB) name aohwnc*/ 05130000
LOG=Y, /* Monitor VTAM interface (Y) ohwnc*/ 05131000
/* or discontinue monitoring (N)      */ 05132000
TRACEIO=NO, /* Trace i/o activity (YES) ohwnc*/ 05136000
/* or stop tracing activity (NO)      */ 05137000
PASSWORD= /* 1-8 char. security password ohwnc*/ 05140000
/*              */ 05150000
/*              */ 05160000
/*****/ 05170000
/*              *-----* 05180000
|          Multi-Access Spool          | 05190000
|          MASDEF - this members      | 05193000
|          characteristics            | 05196000
*-----* 05200000
/*              */ 05210000
/* Times are in 1/100 sec. unless spec'd*/ 05220000
MASDEF AUTOEMEM=OFF, /* Restart this members work ohwnc*/ 05230000
/* if this member fails              */ 05232000
CKPTLOCK=ACTION, /* Issue HASP479 during JES start hwnca*/ 05236000
/* if needed                          */ 05240000
DORMANCY=(100, /* Minimum Dormancy Time ohwnc*/ 05244000
500), /* Maximum Dormancy Time ohwnc*/ 05250000
HOLD=99999999, /* Minimum Hold Time ohwnc*/ 05270000
LOCKOUT=1000, /* Lock-out Warning Time ohwnc*/ 05290000
OWNMEMB=cccc, /* Member identifier of this member wnc*/ 05310000
/* This replaces OWNSID in SP510      */ 05316000
RESTART=NO, /* This member cannot $ESYS others ohwnc*/ 05322000
SHARED=CHECK, /* Check for Shared DASD oc*/ 05330000
/* replaced by MEMBER statements wnc*/ 05350000
/* in SP510                          */ 05360000
SYNCTOL=120, /* Synch.Tolerance (Sec.) ohwnc*/ 05370000
XCFGRPNM=cccc /* 1-8 char. MAS unique XCF groupname nc*/ 05380000
/*              */ 05390000
/*              *-----* 05390100
|          Multi-Access Spool          | 05391000
|          MEMBER - Used to define all | 05391900
|          members                    | 05392800
*-----* 05393700
/*              */ 05394600
MEMBER(n) NAME=cccc /* Member number (1-32) and 1-4 wnc*/ 05395500
/* character member name              */ 05396400
/* This replaces SID parm from MASDEF */ 05397300
/* as of SP510                        */ 05398200
/*              */ 05400000
/*****/ 05410000
/*              *-----* 05420000
|          Network/Local Account # Translation | 05430000

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                                *-----* 05440000
                                */ 05450000
NETACCT  NACCT=cccccccc, /* Network Account Number wnc*/ 05460000
          NTHRU=cccccccc, /* Upper limit for NACCT wnc*/ 05470000
          JACCT=cccccc, /* JES2 Account Number wnc*/ 05480000
          JTHRU=cccccc, /* Upper limit for JACCT wnc*/ 05490000
          TYPE=cc? /* Translate Both Ways wnc*/ 05500000
/*
/*
/*****/ 05502600
/*
                                *-----* 05503500
                                | Network Server definitions | 05504400
                                *-----* 05505300
                                *-----* 05506200
NETSRV(n) SOCKET=cccccccc, /* Socket for IP address and port ownc*/ 05507100
          STACK=cccccccc, /* TCP/IP stack to use ownc*/ 05507200
          TRACE=NO /* Trace traffic on server ownc*/ 05508000
                                05508900
/*
/*
/*****/ 05510000
/*****/ 05520000
/*****/ 05530000
/*
                                *-----* 05540000
                                | NJE Definitions | 05550000
                                *-----* 05560000
                                *-----* 05570000
                                *-----* 05575000
NJDEDEF DELAY=120, /* Max. Msg Delay Time ohwnc*/ 05580000
          HDRBUF=(LIMIT=cccc, /* number of NJE header + trailer ohwnc*/ 05584000
                /* buffers */ 05588000
                /* (added in SP510) */ 05592000
                WARN=80), /* Warning threshold ohwnc*/ 05596000
          JRNUM=0, /* Num. of job receivers hwnc*/ 05600000
          JTNUM=0, /* Num. of job xmitters hwnc*/ 05620000
          LINENUM=0, /* Num. of lines for NJE hwnc*/ 05640000
          MAILMSG=NO, /* Don't automatically issue ohwnc*/ 05645000
                /* notification message */ 05650000
          MAXHOP=0, @@ /* Num. of iterations to limit hwnc*/ 05655000
                /* hoping in network */ 05660000
                /* 0 means no hop counting */ 05665000
                /* (added SP420) */ 05670000
          NODENUM=1, /* Max. Number of NJE nodes ownc*/ 05680000
          OWNNODE=1, /* This Node's Number c*/ 05720000
          PATH=1, /* Num. of Paths/Alt'nate wnc*/ 05740000
          RESTMAX=79992000, /* Max. resistance tolerance ohwnc*/ 05760000
          RESTNODE=100, /* This node's resistance ohwnc*/ 05780000
          RESTTOL=0, /* Alt. resistance tolerance ohwnc*/ 05800000
          SRNUM=0, /* Num. of sysout receivers hwnc*/ 05820000
          STNUM=0, /* Num. of sysout transmitters hwnc*/ 05840000
          TIMETOL=20 /* Time variation between clocks ohwnc*/ 05853000
                /* (added SP410) */ 05856000
/*
/*
/*****/ 05900000
/*****/ 05910000
/*****/ 05920000
/*
                                *-----* 05930000
                                | NJE Node Definitions | 05940000
                                | This statement needs to be | 05941000
                                | BEFORE any statement referring | 05942000
                                | to this node name in a | 05943000
                                | production init deck. This | 05944000
                                | includes: APPL, CONNECT, | 05945000
                                | DESTID and device route codes | 05946000
                                *-----* 05950000
                                *-----* 05960000
NODE(NNNN) AUTH=(DEVICE=YES, /* Authority at this node ohwnc*/ 05970000
                /* Device Authority at this node ohwnc*/ 05980000
                /* (pre-SP311=DEVAUTH/NODEVATH) */ 05985000
                JOB=YES, /* Job Authority at this node ohwnc*/ 05990000

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NET=NO, /* (pre-SP311=JOBAUTH/NOJOBATH) */ 06000000
/* No Network Auth at this node ohwnc*/ 06005000
/* (pre-SP311=NONETATH/NETAUTH) */ 06006000
SYSTEM=YES), /* System Authority at this node ohwnc*/ 06010000
/* (pre-SP311=SYSAUTH/NOSYSATH) */ 06015000
COMPACT=0, /* No compaction hwnc*/ 06016000
DIRECT=NO, /* This node should always be ownc*/ 06017000
/* directly attached (adjacent) */ 06018000
/* (added ZOS170) */ 06019000
ENDNODE=NO, /* This node is eligible for store ownc*/ 06020000
/* and forward operations */ 06022000
HOLD=NONE, /* Whether or not to hold jobs ohwnc*/ 06025000
/* that are received at this node */ 06030000
LINE=cccc, /* Line dedicated to session ohwnc*/ 06035500
/* (added SP410) */ 06036000
LOGON=1, /* LOGON DCT to be used by this ohwnc*/ 06036100
/* session (added OS240) */ 06036200
LOGMODE=, /* Logon mode table entry name ohwnc*/ 06036500
/* (added SP410) */ 06037000
NAME=cccccccc, /* Node name ownc*/ 06037100
PASSWORD=(SEND=cccccccc,VERIFY=cccccccc), 06037300
/* 1-8 char. security passwords ohwnc*/ 06037400
PATHMGR=YES, /* Connection to adjacent node ownc*/ 06037500
/* (added SP410) */ 06038000
PENCRYPT=NO, /* Password encryption option ohwnc*/ 06038100
/* (added in SP313) */ 06038200
PRIVATE=NO, /* Broadcast connection to node ownc*/ 06038500
/* (added SP410) */ 06039000
RECEIVE=BOTH, /* Receive both jobs and sysout ohwnc*/ 06040000
REST=0, /* Nodal Resistance ohwnc*/ 06041000
SENTREST=ACCEPT, /* Use partial resistance from ohwnc*/ 06042000
/* this node during signon */ 06043000
/* (added by OY52946) ohwnc*/ 06044000
SIGNON=COMPAT, /* Use compat or secure signon */ 06044200
/* protocol ohwnc*/ 06044400
/* (added ZOS170) */ 06044600
SUBNET=$$$$$$, /* Subnet name which includes ownc*/ 06045000
/* node (added SP410) */ 06046000
TRACE=NO, /* Specifies tracing connection ohwnc*/ 06047000
/* (added SP410) */ 06048000
TRANSMIT=BOTH, /* Transmit both jobs and sysout ohwnc*/ 06049000
/* No SNA Capability hwnc*/ 06050000
/* (SP311=BSC/SNA deleted) */ 06055000
/* */ 06060000
/* */ 06070000
/*****/ 06080000
/* *-----* 06090000
| Offload Data Set | 06100000
*-----* 06110000
*/ 06120000
/* Defines a logical offload device */ 06130000
OFFLOAD1 DSN=cc, /* Up to 44 char. data set name ohwnc*/ 06150000
ARCHIVE=ONE, /* Hold as archived on ONE or ALL */ 06160000
/* offload devices ohwnc*/ 06170000
/* (added OS110) */ 06180000
CRTIME=RESET, /* Set new create time for ohwnc*/ 06185000
/* reloaded jobs */ 06190000
/* (added ZOS170) */ 06195000
LABEL=SL, /* Type of label processing done ohwnc*/ 06200000
/* (added in APAR OZ92050) */ 06210000
PROTECT=NO, /* Whether ds has SAF protection ohwnc*/ 06220000
/* (added in APAR OZ92050) */ 06230000
RETPD=cccc, /* DS retention period (in days) ohwnc*/ 06240000
/* (added in APAR OZ92050) */ 06250000
UNIT=(cccccccc, /* Unit addr/dev type/group name ohwnc*/ 06251000
/* (added in APAR OZ92050) */ 06252000
1), /* No. of devices allocated to ds ohwnc*/ 06252500

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                /*      (pre-0Z92050 UNITCT=)                */ 06253000
VALIDATE=YES,   /* Validate header record      ohwnc*/ 06253200
                /*      (added OS110)                */ 06253800
VOLS=çç?       /* Device volume number        hownc*/ 06255000
                /*      (added in SP420)                */ 06256000
/*                                                     */ 06260000
/*                                                     */ 06270000
/*****                                               */ 06280000
/*                                                     */ 06290000
                |-----|
                | Offload Job Receiver | 06300000
                |-----|
                *-----*
                */ 06330000
OFF1.JR CLASS=, /* Reload All Classes          ohwnc*/ 06340000
        CREATOR=, /* Reload All Users           ohwnc*/ 06342000
                /*      (added in SP420)                */ 06345000
        HOLD=,   /* Reload Held & Non-Held     ohwnc*/ 06350000
        JOBNAME=, /* Reload Any Job Name       ohwnc*/ 06360000
                /*      Modify Jobs on Reload                */ 06370000
        MOD=(CLASS=, /* - Don't Change Class      ohwnc*/ 06380000
            HOLD=,   /* - Don't Change Hold       ohwnc*/ 06390000
            ROUTECDE=, /* - Don't Change Dest'n    ohwnc*/ 06400000
            SYSAFF=), /* - Don't Change SysAff.   ohwnc*/ 06410000
        NOTIFY=NO, /* Don't Notify on Reload    ohwnc*/ 06420000
        RANGE=J1-2147483647, /*                               06430000
                /*      Reload All Job Numbers          ohwnc*/ 06435000
        ROUTECDE=(), /* Reload Jobs w/Any Dest    ohwnc*/ 06440000
                /*      (modified SP410)                */ 06445000
        START=YES, /* Started with $S OFFLOAD   hwnc*/ 06450000
        SYSAFF=(), /* Reload Jobs with Any Aff  ohwnc*/ 06460000
        WS=(CLASS/) /* Job Selection Criteria    ohwnc*/ 06470000
/*                                                     */ 06480000
/*                                                     */ 06490000
/*****                                               */ 06500000
/*                                                     */ 06510000
                |-----|
                | Offload Job Transmitter | 06520000
                |-----|
                *-----*
                */ 06550000
OFF1.JT CLASS=, /* Select No Classes          ohwnc*/ 06560000
        CREATOR=, /* Select Any users           ohwnc*/ 06565000
        DISP=DELETE, /* Purge after Offload       ohwnc*/ 06570000
        HOLD=,   /* Select Held & Non-Held     ohwnc*/ 06580000
        JOBNAME=, /* Select Any Job Name       ohwnc*/ 06590000
        NOTIFY=NO, /* Don't Notify on Offld.    ohwnc*/ 06600000
        RANGE=J1-65534, /* Select All Job Numbers    ohwnc*/ 06610000
        ROUTECDE=(), /* Select Jobs w/Any Dest    ohwnc*/ 06620000
                /*      (modified SP410)                */ 06625000
        START=YES, /* Started with $S OFFLOAD   hwnc*/ 06630000
        SYSAFF=(), /* Select Jobs with Any Aff  ohwnc*/ 06640000
        VOLUME=(), /* Select Any Spool Volume   ohwnc*/ 06650000
        WS=(CLASS/) /* Job Selection Criteria    ohwnc*/ 06660000
/*                                                     */ 06670000
/*                                                     */ 06680000
/*****                                               */ 06690000
/*                                                     */ 06700000
                |-----|
                | Offload Sysout Receiver | 06710000
                |-----|
                *-----*
                */ 06730000
                */ 06740000
OFF1.SR BURST=, /* Select Any Burst Setting   ohwnc*/ 06750000
        CREATOR=, /* Select Any Users           ohwnc*/ 06756000
                /*      (added in SP420)                */ 06762000
        FCB=,   /* Select Any FCB            ohwnc*/ 06770000
        FLASH=, /* Select Any/No Flash       ohwnc*/ 06780000
        FORMS=, /* Select Any FORMS ID      ohwnc*/ 06790000
        HOLD=,   /* Select Held/Non-Hld Jobs  ohwnc*/ 06800000
        JOBNAME=, /* Select Any Job Name       ohwnc*/ 06810000
        MOD=(BURST=, /* - Don't Change Burst     ohwnc*/ 06810300
            FCB=,   /* - Don't Change FCB       ohwnc*/ 06810600

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FLASH=,          /* - Don't Change Flash          ohwnc*/ 06810900
FORMS=,          /* - Don't Change Forms          ohwnc*/ 06811200
HOLD=,           /* - Don't Change Hold           ohwnc*/ 06811500
OUTDISP=,        /* - Output disposition change    ohwnc*/ 06811800
                  /* (pre SP410 DSHOLD=)          */ 06812100
PRMODE=,         /* - Don't Change PRMODE         ohwnc*/ 06812400
QUEUE=,          /* - Don't Change Class          ohwnc*/ 06812700
ROUTECD=,        /* - Don't Change Destn         ohwnc*/ 06813000
UCS=,            /* - Don't Change UCS           ohwnc*/ 06813300
WRITER=),        /* - Don't Change writer         ohwnc*/ 06813600
NOTIFY=NO,       /* Don't Notify on reload        ohwnc*/ 06813900
OUTDISP=(W,H,K,L), /* Specifies output disposition ohwnc*/ 06815000
                  /* (pre SP410 was DS=ANY)      */ 06820000
                  /* (added SP410)                */ 06822000
                  /* Modify Following on Reload    ohwnc*/ 06825000
PRMODE=(),       /* Select Any PRMODE            ohwnc*/ 06950000
QUEUE=,          /* Select Any Sysout Class       ohwnc*/ 06960000
RANGE=J1-2147483647,
                  /* Reload All Job Numbers        ohwnc*/ 06975000
ROUTECD=(),      /* Select Jobs w/Any Dest        ohwnc*/ 06980000
                  /* (modified SP410)             */ 06985000
START=YES,       /* Started with $S OFFLOAD       hwnc*/ 06990000
UCS=,            /* Select any UCS                ohwnc*/ 07000000
WRITER=,         /* Select any Writer             ohwnc*/ 07010000
WS=(Q,OUTDISP/) /* Job Selection Criteria        ohwnc*/ 07020000
                  /* - Output disposition match    */ 07032000
                  /* (added SP410)                */ 07035000
/*                                                       */ 07040000
/*                                                       */ 07050000
/*****                                                    */ 07060000
/* -----*                                               */ 07070000
| Offload Sysout Transmitter | 07080000
|-----*                                               */ 07100000
/* -----*                                               */ 07110000
OFF1.ST BURST=,      /* Select Any Burst Set'g        ohwnc*/ 07120000
CREATOR=,        /* Select Any Users              ohwnc*/ 07122000
                  /* (added in SP420)              */ 07125000
DISP=DELETE,     /* Purge after Offload           ohwnc*/ 07130000
FCB=,            /* Select Any FCB                ohwnc*/ 07150000
FLASH=,          /* Select Any/No Flash           ohwnc*/ 07160000
FORMS=,          /* Select Any FORMS ID           ohwnc*/ 07170000
HOLD=,           /* Selct Held&Non-Hld Jobs      ohwnc*/ 07180000
JOBNAME=,        /* Select Any Job Name           ohwnc*/ 07190000
LIMIT=(0-*),     /* Select Any # Lines            ohwnc*/ 07200000
NOTIFY=NO,       /* Don't Notify on Offld.        ohwnc*/ 07210000
OUTDISP=(W,K),   /* Specifies output disposition ohwnc*/ 07212000
                  /* (pre SP410 DS=)              */ 07215000
PLIM=(0-*),      /* Select Any # Pages            ohwnc*/ 07220000
PRMODE=(),       /* Select Any PRMODE            ohwnc*/ 07230000
QUEUE=,          /* Select Any Sysout Class       ohwnc*/ 07240000
RANGE=J1-65534,  /* Select All Job Numbers        ohwnc*/ 07250000
ROUTECD=(),      /* Select Jobs w/Any Dest        ohwnc*/ 07260000
                  /* (modified SP410)             */ 07265000
START=YES,       /* Started with $S OFFLOAD       hwnc*/ 07270000
UCS=,            /* Select any UCS                ohwnc*/ 07280000
VOLUME=(),       /* Select Any Spool Volume       ohwnc*/ 07290000
WRITER=,         /* Select any Writer             ohwnc*/ 07300000
WS=(Q,OUTDISP/) /* Job Selection Criteria        ohwnc*/ 07310000
                  /* - Output disposition match    ohwnc*/ 07323000
                  /* (added SP410)                */ 07326000
/*                                                       */ 07330000
/*                                                       */ 07340000
/*****                                                    */ 07341000
/* -----*                                               */ 07342000
| JES2 Options Definition | 07343000
|-----*                                               */ 07345000
/* -----*                                               */ 07346000

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OPTSDEF LIST=NO,          /* Do not copy following init.      hwnc*/ 07347000
          LOG=YES,        /* stmts. to HARDCOPY console       */ 07347200
          SPOOL=NOVALIDATE /* Copy following init stmts to     hwnc*/ 07347400
                                /* printer defined on HASPLIST      */ 07347600
                                /* Do not validate track group map   nc*/ 07347800
                                /*-----*/ 07348000
                                /* The following options can only    */ 07348200
                                /* be overridden when the JES2      */ 07348400
                                /* initialization process is in     */ 07348600
                                /* CONSOLE mode.                   */ 07348700
                                /*-----*/ 07348800
/*      CKPTOPT=HIGHEST   /* Use highest checkpoint to        hwnc*/ 07350000
          /* restart                               */ 07350300
/*      CONSOLE=YES       /* Prompt for more init. stmts.     hwnc*/ 07350400
/*      LISTOPT=NO        /* Support LIST start option         hwnc*/ 07351200
/*      LOGOPT=YES        /* Support LOG start option          hwnc*/ 07353900
/*      RECONFIG=YES      /* Allow op to specify RECONFIG     hwnc*/ 07354800
/*      REQMSG=YES        /* Display HASP400 message          hwnc*/ 07355700
/*                                                                */ 07356600
/*                                                                */ 07357500
/*-----*/ 07358400
/*      *-----* 07360000
          | Output Class Attributes | 07370000
          *-----* 07390000
          /*-----*/ 07400000
OUTCLASS(A) BLNKTRNC=YES, /* Truncate trailing blanks         wnc*/ 07410000
          OUTDISP=(WRITE,WRITE), /* SYSOUT disposition normal/       ownc*/ 07440000
                                /* abnormal job termination         */ 07450000
                                /* (pre SP410 HOLD=,CONDPURG=)     */ 07460000
          OUTPUT=PRINT,     /* Print class                       wnc*/ 07490000
          TRKCELL=YES       /* TRACK-CELL this class             wnc*/ 07510000
/*                                                                */ 07530000
/*                                                                */ 07540000
/*-----*/ 07550000
/*      *-----* 07560000
          | Output Characteristics | 07570000
          *-----* 07580000
          /*-----*/ 07590000
OUTDEF  BROADCAST=NO,      /* Whether shared broadcasting       oc*/ 07600000
          /* is in use by this complex     */ 07610000
          COPIES=255,      /* Max. # of Copies Allowed          ohwnc*/ 07630000
          DMNDSET=NO,     /* No Demand Setup                   wnc*/ 07650000
          JOENUM=@@,      /* Max. # of JOEs                    oc*/ 07670000
          JOEWARN=80,     /* Warning Threshold %               ohwnc*/ 07710000
          OUTTIME=CREATE, /* Specifies when JOE time saved     ohwnc*/ 07722000
                                /* (added SP410)                     */ 07725000
          PRTYHIGH=255,   /* Ceiling for PRTY Aging            ohwnc*/ 07730000
          PRTYLOW=0,     /* Floor for PRTY Aging              ohwnc*/ 07750000
          PRTYOUT=NO,    /* No PRTY= on // OUTPUT             ohwnc*/ 07770000
          PRYORATE=0,    /* Don't priority age                ohwnc*/ 07776000
          SEGLIM=100,    /* Max. number output segments      ownc*/ 07782000
                                /* (added SP410)                     */ 07785000
          STDFORM=STD,   /* Default Forms ID                  wnc*/ 07790000
          USERSET=NO    /* No User Demand-Setup              wnc*/ 07810000
/*                                                                */ 07830000
/*-----*/ 07840000
/*      *-----* 07850000
          | Default Output Priority | 07860000
          *-----* 07870000
          /*-----*/ 07880000
          /* based on records (line mode)     */ 07890000
          /* or pages (page mode)           */ 07900000
OUTPRTY(1) PRIORITY=144, /* Output PRTY is 144 if             ohwnc*/ 07910000
          RECORD=2000,   /* < 2000 records (LINE)           ohwnc*/ 07920000
          PAGE=50        /* or < 50 pages (PAGE)            ohwnc*/ 07930000
OUTPRTY(2) PRIORITY=128, /* Output PRTY is 128 if             ohwnc*/ 07970000

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RECORD=5000,      /* < 5000 records (LINE)          ohwnc*/ 07980000
PAGE=100          /* or < 100 pages (PAGE)         ohwnc*/ 07990000
                  /* etc.                          */ 08030000
/*                                                      */ 08040000
/*                                                      */ 08050000
/*****
/*          *-----*
|          | JES2 Processor Numbers |          | 08080000
|          |-----*
|          |          |          | 08090000
|          |          |          | 08100000
/*
PCEDEF  CNVTNUM=2,      /* Number of Converter PCEs      hwnc*/ 08110000
        OUTNUM=2,      /* Number of Output PCEs        hwnc*/ 08130000
        PSONUM=2,     /* Number of PSO PCEs          hwnc*/ 08150000
        PURGENUM=2,   /* Number of Purge PCEs        hwnc*/ 08170000
        SPINNUM=3,    /* Number of Spin PCEs         hwnc*/ 08180100
                  /* (added in SP420)           */ 08180400
        STACNUM=2     /* Number of STATUS/CANCEL PCEs hwnc*/ 08181000
                  /* (added in SP313)         */ 08184000
/*                                                      */ 08190000
/*                                                      */ 08200000
/*****
/*          *-----*
|          | Printing Characteristics |          | 08220000
|          |-----*
|          |          |          | 08230000
|          |          |          | 08240000
|          |          |          | 08250000
/*
PRINTDEF CCNUM=cc,     /* # CCWs / Print Buffer          wnc*/ 08260000
        DBLBUFR=YES,  /* Double Buffer Lcl Prts        wnc*/ 08280000
        FCB=6,        /* Initial FCB Loaded           wnc*/ 08300000
        LINECT=61,    /* 61 Lines/Page                ohwnc*/ 08320000
        NIFCB=****,   /* No 3800 FCB Loaded           wnc*/ 08340000
        NIFLASH=****, /* No 3800 Flash Loaded         wnc*/ 08360000
                  /* NOTE: the values for NIFCB= and */ 08380000
                  /* NIFLASH= CANNOT be null or   */ 08390000
                  /* asterisks (as shown here).   */ 08400000
                  /* If the statements are not     */ 08410000
                  /* coded at all, then the default */ 08420000
                  /* will be asterisks. The       */ 08430000
                  /* statements are shown this way */ 08440000
                  /* only to include the default   */ 08450000
                  /* values here.                 */ 08460000
        NIUCS=GF10,   /* 3800 Char. Set Loaded        wnc*/ 08470000
        RDBLBUFR=NO, /* Single Buffer Rmt Prts       wnc*/ 08490000
        SEPPAGE=(LOCAL=DOUBLE,
                  /* Separator page defaults      ohwnc*/ 08520000
                  /* (added SP410)                */ 08525000
                  /* Local printer (pre SP410 SEPLINE) */ 08530000
                  /* Remote printer (pre SP410 RSEPLINE) */ 08540000
        REMOTE=HALF), /* PN-Xlate for 1403/Rm.Pr     wnc*/ 08550000
        TRANS=YES,   /* Bypass UCS-Loading          wnc*/ 08570000
        UCS=0
/*                                                      */ 08590000
/*                                                      */ 08600000
/*****
/*          *-----*
|          | Dynamic PROCLIB definition |          | 08601600
|          |-----*
|          |          |          | 08602300
|          |          |          | 08603000
/*
PROCLIB(cccccccc) DD(nn)=(DSNAME=cc, /* Concatenated DD num   aorhwnc*/ 08603700
                  /* Up to 44 character     ohwnc*/ 08604400
                  /* data set name       ohwnc*/ 08605100
                  VOLSER=ccccc, /* Volser for data set   ohwnc*/ 08605800
                  UNIT=cccc), /* Unit info for data set ohwnc*/ 08606500
                  UNCONDITIONAL /* Create PROCLIB if error ohwnc*/ 08607200
/*                                                      */ 08607900
/*                                                      */ 08608600
/*****
/*          *-----*
|          | Local Printers          |          | 08630000
|          |-----*

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                                *-----* 08640000
                                */ 08650000
                                /* Alternate name for PRTn:      */ 08660000
                                /* PRINTERn                      aohwnc*/ 08670000
PRT(nnnn) CKPTLINE=0,          /* Max lines in a logical page ohwnc*/ 08700000
          CKPTPAGE=100,        /* Max seconds before a CKPT   ohwnc*/ 08710000
          Queue=AJ,            /* Job class that can be chosen ohwnc*/ 08711000
                                /* (Alias for CLASS is QUEUE) */ 08712000
          CREATOR=,            /* User to choose               ohwnc*/ 08715000
                                /* (added in SP420)            */ 08720000
          DEVFCB=cccc,         /* Specifies printer default FCB ohwnc*/ 08721000
                                /* (added in SP313)            */ 08724000
          FCB=cccc,            /* Forms control buffer image   ohwnc*/ 08730000
                                /* (Alias for FCB is C)        */ 08740000
          FORMS=cccc,          /* Form identifier              ohwnc*/ 08750000
          HONORTRC=YES,        /* TRC specification on OUTPUT JCL ohwnc*/ 08751000
                                /* statement will be honored    */ 08754000
          JOBNAME=,            /* Job name to choose           ohwnc*/ 08760000
          LIMIT=0-*,           /* Amount of output (in records) ohwnc*/ 08770000
          MODE=JES,            /* PRT is started in JES mode   ohwnc*/ 08775000
          PAUSE=NO,            /* PRT won't pause between      ohwnc*/ 08780000
                                /* datasets.                    */ 08785000
                                /* (modified SP420)            */ 08790000
          PRMODE=LINE,         /* Process mode                 ohwnc*/ 08792000
          RANGE=J?cccc,        /* Job range to choose from     ohwnc*/ 08794000
          ROUTECDE=LOCAL,      /* Route code assigned to prt    ohwnc*/ 08796000
                                /* (modified SP410)            */ 08800000
          SEP=YES,              /* Separator pages printed      ohwnc*/ 08805000
                                /* (modified SP420)            */ 08810000
/* SPACE=,                     /* SPACING FOR PRINTER TO USE   o*/ 08815000
                                /* (added in SP420)            */ 08820000
          SEPDS=NO,            /* No separator pages between   ohwnc*/ 08880000
                                /* output groups within same job */ 08885000
                                /* (modified SP420)            */ 08890000
          SETUP=HALT,          /* Specifies optional printer    ohwnc*/ 08890200
                                /* halt for setup               */ 08890500
                                /* (added in SP313)            */ 08890800
          START=YES,           /* printer comes up started     hwnc*/ 08891100
                                /* (modified SP420)            */ 08891400
          TRACE=NO,            /* No tracing on printer        ohwnc*/ 08892000
                                /* output groups within same job */ 08895000
          TRKCELL=NO,          /* Records despoiled 1 at a time ohwnc*/ 08895300
                                /* (added by APAR OY01334)     */ 08895600
          TRANS=DEFAULT,       /* Use PRINTDEF default for     ohwnc*/ 08896000
                                /* translating line of print    */ 08897000
                                /* (added SP430)                */ 08898000
          UCS=cccc,            /* Print Train                   ohwnc*/ 08900000
                                /* For 3800, character arrangement table*/ 08910000
                                /* (Alias for UCS is T)        */ 08920000
          UCSVERIFY=NO,        /* No UCS verification          ohwnc*/ 08922000
                                /* (added in SP420)            */ 08925000
          UNIT=cccc,           /* Unit address of device        ohwnc*/ 08930000
          VOLUME=(),           /* VOLS that jobs are chosen from ohwnc*/ 08940000
          WRITER=,             /* Writer name assigned to PRT   ohwnc*/ 08960000
          WS=(W,R,Q,PRM,LIM/F,UCS,FCB)
                                /* Work selection criteria      ohwnc*/ 08970000
                                /*                               */ 09010000
/*                               *-----* 09010200
                                | 3800 Printer statement - subset | 09010400
                                | of important parameters for      | 09010600
                                | this device type                  | 09010800
                                *-----* 09011000
                                */ 09011100
PRT(NNNN) QUEUE=AJ,          /* Job class that can be chosen ohwnc*/ 09011400
                                /* (Alias for CLASS is QUEUE)   */ 09011800
          DEVFCB=cccc,         /* Specifies printer default FCB ohwnc*/ 09012000
                                /* (added in SP313)            */ 09012200

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FCB=cccc,          /* Forms control buffer image      ohwnc*/ 09012600
                  /* (Alias for FCB is C)           */ 09012800
MODE=JES,          /* PRT is started in JES mode      ohwnc*/ 09013500
UNIT=cccc,        /* Unit address of device          ohwnc*/ 09014600
                  /*                                 */ 09018100
                  /* The following parameters are    */ 09020000
                  /* honored for 3800 defined printers.*/ 09030000
                  /*                                 */ 09040000
                  /*                                 */ 09050000
BURST=NO,         /* Output is not burst             ohwnc*/ 09052000
                  /* (modified SP420)               */ 09054000
DEVFLASH=cccc,   /* Default forms overlay          ohwnc*/ 09056000
                  /* (added by APAR OY67855)        */ 09058000
                  /* DEVFLASH and FLASH are        */ 09060000
                  /* synonymous at initialization   */ 09062000
                  /* but different for $T          */ 09064000
FLASH=cccc,      /* Initial forms overlay          ohwnc*/ 09070000
                  /* (alias for FLASH is 0)        */ 09080000
MARK=NO,         /* No mark on sep page edge(MARK) ohwnc*/ 09090000
                  /* (modified SP420)               */ 09092000
/* MODIFY=,      /* 3800 printer copy identification */ 09094000
                  /* module                          o*/ 09096000
                  /* (added in SP420)              */ 09098000
SEPCHARS=DEFAULT /* Default char. table (SEPEXIST) hwnc*/ 09100000
                  /* (modified SP420)              */ 09105000
                  /*                                 */ 09150000
/* -----*-----* 09150100
                  | FSS Printer statement - subset | 09150200
                  | of important parameters for   | 09150300
                  | mode=FSS devices          | 09150400
                  -----*-----* 09150500
                  /*                                 */ 09150600
                  /*                                 */ 09151000
PRT(NNNN) QUEUE=BC, /* Job class that can be chosen   ohwnc*/ 09151500
                  /* (Alias for CLASS is QUEUE)    */ 09152000
CKPTMODE=SEC,     /* Max seconds before a CKPT      ohwnc*/ 09152500
                  /* (Added in SP420)              */ 09152600
CKPTSEC=0,       /* No. of seconds before a CKPT   ohwnc*/ 09153000
COPYMARK=DATASET, /* Level of separation indicator  ohwnc*/ 09153200
                  /* markings                       */ 09153500
                  /* (Added IN SP410 and via APAR   */ 09153600
DEVFCB=cccc,     /* Specifies printer default FCB  ohwnc*/ 09154000
                  /* (added in SP313)              */ 09154200
FSS=cccccccc,   /* Name of FSS that supports prt  ohwnc*/ 09154500
FCB=cccc,       /* Forms control buffer image     ohwnc*/ 09156000
                  /* (Alias for FCB is C)          */ 09156500
MODE=FSS,        /* PRT is started in FSS mode     ohwnc*/ 09157000
NPRO=300,        /* Non process run out time (secs) ohwnc*/ 09280000
PLIM=0-*,       /* Page limits for output         ohwnc*/ 09320000
PRESELECT=YES,  /* 3800 won't preselect output    ohwnc*/ 09330000
                  /* (added SP420)                 */ 09340000
SETUP=HALT,     /* Specifies optional printer     ohwnc*/ 09350000
                  /* halt for setup                 */ 09355000
                  /* (added in SP313)              */ 09360000
TRANS=DEFAULT,  /* For 3800 default is no for     ohwnc*/ 09361000
                  /* translating line of print     */ 09362000
                  /* (added SP430)                 */ 09363000
UNIT=cccc      /* Unit address of device         ohwnc*/ 09366000
/*                                 */ 09370000
/****** 09380000
/* -----*-----* 09390000
                  | Punch Parameters          | 09400000
                  -----*-----* 09410000
                  /*                                 */ 09420000
PUNCHDEF CCNUM=cc, /* # CCWs / Punch Buffer          wnc*/ 09430000
          DBLBUFR=NO, /* Single Buffer Lcl Puns        wnc*/ 09450000
          RDLBUFR=NO /* Single Buffer Rmt Puns        wnc*/ 09470000

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/*                                                    */ 09490000
/*                                                    */ 09500000
/*****                                                    */ 09510000
/*                                                    *-----* 09520000
| Local Punches | 09530000
*-----* 09540000
/*                                                    */ 09550000
/* Alternate name for PUNnn: PUNCHnn */ 09560000
PUN(nn) CKPTLINE=100, /* No. of cards to punch per page ohwnc*/ 09570000
        CKPTPAGE=1, /* No. of pages pun'd before CKPT ohwnc*/ 09580000
        Queue=BK, /* Output class processed by PUN ohwnc*/ 09582000
        /* (alias for QUEUE is CLASS) */ 09584000
        /* (modified in SP420) */ 09586000
        CREATOR=, /* User to choose ohwnc*/ 09590000
        /* (added in SP420) */ 09600000
        FORMS=cccc, /* Forms identifier loaded in PUN ohwnc*/ 09620000
        JOBNAME=, /* Jobs selected by this PUN ohwnc*/ 09630000
        LIMIT=0-*, /* Range for output record no. ohwnc*/ 09640000
        PAUSE=NO, /* No pausing between DS groups ohwnc*/ 09670000
        PRMODE=(LINE), /* Process mode ohwnc*/ 09690000
        RANGE=J?cccc, /* Job id range to select from ohwnc*/ 09700000
        ROUTECDE=LOCAL, /* Route code(s) assigned to PUNn ohwnc*/ 09720000
        /* (modified SP410) */ 09725000
        SEP=YES, /* Separator cards for ds groups ohwnc*/ 09726000
        /* (modified in SP420) */ 09727000
        SEPDS=NO, /* No sep. for ds's within job ohwnc*/ 09730000
        SETUP=HALT, /* Specifies optional punch ohwnc*/ 09730500
        /* halt for setup */ 09731000
        /* (added in SP313) */ 09731500
        START=YES, /* PUN1 comes up started hwnc*/ 09732000
        /* (modified SP420) */ 09735000
        TRACE=YES, /* Allow tracing ohwnc*/ 09736000
        UNIT=cccc, /* Unit address of PUNnn ohwnc*/ 09740000
        VOLUME=(), /* VOLIDS of jobs to be punched ohwnc*/ 09750000
        WRITER=, /* Writer name assigned to PUNn ohwnc*/ 09770000
        WS=(W,R,Q,PRM,LIM/F) 09780000
/* Work selection criterion ohwnc*/ 09785000
/*                                                    */ 09810000
/*                                                    */ 09820000
/*****                                                    */ 09830000
/*                                                    *-----* 09840000
| Local Readers | 09850000
*-----* 09860000
/*                                                    */ 09870000
/* Alternate name for RDRnn: READERnn */ 09880000
RDR(NN) AUTH=(JOB=NO, /* Allow job cmds ownc*/ 09890000
        DEVICE=NO, /* Allow device cmds ownc*/ 09900000
        SYSTEM=NO), /* Allow system cmds ownc*/ 09902000
        /* (pre-SP420 AUTH=0 for all 3 */ 09904000
        /* subparameters) */ 09906000
        CLASS=A, /* Default job class ohwnc*/ 09910000
        HOLD=NO, /* Jobs not held after conv.(HOLD) ohwnc*/ 09920000
        MSGCLASS=A, /* Default message class ohwnc*/ 09930000
        PRIORINC=0, /* Increment to job's select prio. hwnc*/ 09960000
        PRIOLIM=15, /* Maximum selection priority hwnc*/ 09970000
        PRTDEST=LOCAL, /* Default print destination ohwnc*/ 09972000
        /* (added in SP420) */ 09975000
        PUNDEST=LOCAL, /* Default punch destination ohwnc*/ 09980000
        /* (added in SP420) */ 09990000
        START=NO, /* RDR doesn't come up started hwnc*/ 10020000
        TRACE=NO, /* No tracing on punch ohwnc*/ 10025000
        UNIT=cccc, /* Unit address of reader ohwnc*/ 10030000
        XEQDEST=cc /* Default execution node ohwnc*/ 10040000
/*                                                    */ 10050000
/*****                                                    */ 10060000
/*                                                    *-----* 10070000
| Recovery Options | 10080000

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*-----* 10090000
*/ 10100000
/* Error Type */ 10110000
/* (pre-SP311 RECVOPTS TYPE=) 10115000
RECVOPTS(*) COUNT=2, /* Recovery options for all ohwnc*/ 10130000
/* Number of occurrences to count */ 10400000
/* NOTE: For IMAGE and OFFLOAD, COUNT= */ 10410000
/* defaults to 1. */ 10420000
INTERVAL=24 /* Interval (in hours) in which ohwnc*/ 10440000
/* errors are counted */ 10450000
/* */ 10460200
/* */ 10460400
/*****/ 10460600
/* */ 10460800
| Console Display Command Routings | 10461000
| Definition | 10461200
*-----* 10461400
*/ 10461600
REDIRECT(??? DA=??, /* Entry console of redirected aohwnc*/ 10461800
/* display commands */ 10462000
/* (added SP410) */ 10462200
/* The target console is identified in */ 10462400
/* the following operands: */ 10462600
/* DA - Display active jobs ohwnc*/ 10462800
DCONNECT=??, /* Disp JES2 network connections ohwnc*/ 10463000
DEF=??, /* Disp JES2 parameter definitions ohwnc*/ 10463100
DF=??, /* Display forms queue ohwnc*/ 10463200
DI=??, /* Display initiators ohwnc*/ 10463600
DJ=??, /* Display job,etc,tsu info ohwnc*/ 10464000
DN=??, /* Display queued jobs ohwnc*/ 10464400
DNODE=??, /* Display NJE nodes ohwnc*/ 10464600
DQ=??, /* Display number of queued jobs ohwnc*/ 10464800
DSPL=??, /* Display SPOOL columes ohwnc*/ 10465200
DU=??, /* Display units ohwnc*/ 10465400
LJ=??, /* Display job output info ohwnc*/ 10465500
LS=??, /* Display STC output info ohwnc*/ 10465600
LT=?? /* Display TSU output info ohwnc*/ 10466000
/* */ 10470000
/* */ 10480000
/*****/ 10481000
/* */ 10482000
| Request job ID job options | 10483000
*-----* 10484000
*/ 10485000
REQJOBID JESLOG=(NOSPIN) /* Don't spin JESLOG data sets ohwnc*/ 10486000
/* */ 10487000
/* */ 10488000
/*****/ 10490000
/* */ 10500000
| Remote Parameters | 10510000
*-----* 10520000
* 10530000
*-----* 10540000
| RMT1 defines a BSC remote terminal | 10550000
| A RMTnnnn statement with no operands | 10560000
| defaults to a BSC remote terminal. | 10570000
*-----* 10580000
*/ 10585000
/* BSC remote terminal */ 10590000
RMT(1) DEVTYPE=2770, /* Terminal type aohwnc*/ 10592000
/* (pre-SP311=2770) */ 10594000
BLOCK=YES, /* Data record format ohwnc*/ 10596000
/* (pre-SP311=BLOCKED/UNBLOCK) */ 10598000
BUFEXPAN=0, /* No additional buffer expansion ohwnc*/ 10600000
/* (pre-SP311=ABUFEX/NOABUFEX & */ 10610000
/* BUFEX/NOBUFEX) */ 10615000
BUFSIZE=????, /* Largest buffer sent/received ohwnc*/ 10620000

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COMPRESS=NO,          /* No compression/expansion      ohwnc*/ 10630000
                    /* (pre-SP311=COMP/NOCOMP)      */ 10635000
CONDEST=1,           /* command response route code   ohwnc*/ 10640000
                    /* default is this remote number */ 10641000
CONS=NO,             /* No operator console           ohwnc*/ 10642000
                    /* (pre-SP311=CONSOLE/NOCON)    */ 10645000
DISCINTV=0,         /* Idle time in secs before auto  ohwnc*/ 10650000
                    /* disconnect (No timeout if DISCINT=0) */ 10660000
HTABS=NO,           /* No horizontal format control   ohwnc*/ 10670000
                    /* (pre-SP311=NOTABS/TABS)      */ 10675000
LINE=cccc,          /* Line number dedicated to rmt   ohwnc*/ 10680000
SHARABLE=cc?       /* Line allowed to be shared by  ohwnc*/ 10681000
                    /* other remotes                */ 10682000
LOCAL190=ACTION,   /* Oper. setup messages are      ohwnc*/ 10683000
                    /* action                        */ 10686000
                    /* (pre-SP311=INFO/ACTION)      */ 10688000
LOGON=2,            /* LOGON DCT to be used by this  ohwnc*/ 10688400
                    /* remote (added OS240)         */ 10689000
MFORM=T,            /* Console msg. display info.    ohwnc*/ 10690000
MRF2780=NO,        /* No multi-record feature       ohwnc*/ 10700000
                    /* (pre-SP311=MRF/NOMRF)       */ 10710000
MSGPRT=YES,        /* Specifies remote console      ohwnc*/ 10712000
                    /* message print option         */ 10714000
                    /* (added in SP313)            */ 10716000
MULTILV=NO,        /* No multileaving               ohwnc*/ 10720000
                    /* (pre-SP311=MULTI/HARDWARE)   */ 10725000
NUMPRT=1,           /* No. of printers at remote     ohwnc*/ 10730000
NUMPUN=0,           /* No. of punches at remote      ohwnc*/ 10740000
NUMRDR=1,           /* No. of readers at remote      ohwnc*/ 10750000
PASSWORD=cccccccc, /* Security password             ohwnc*/ 10760000
RECFM=VARIABLE,    /* Type of data record (fixed)   ohwnc*/ 10765000
                    /* (pre-SP311=VARIABLE/FIXED)   */ 10766000
RMT150=NO,         /* Msg 150 sent to local operator ohwnc*/ 10767000
                    /* (pre-SP311=MSG150/NOMSG150) */ 10769000
ROUTECD=1,         /* ROUTECODE - the default is the ohwnc*/ 10770000
                    /* nnn value of RMTnnn         */ 10780000
TRANSPAR=NO,       /* No text transparency          ohwnc*/ 10810000
                    /* (pre-SP311=NOTRANS/TRANSP)  */ 10820000
WAITIME=cc         /* Time to wait after input      ohwnc*/ 10830000
                    /* output before allowing input  */ 10840000
                    /*                               */ 10850000
                    /*                               */ 10860000
                    /* -----*
                    | RMT2 defines a SNA remote terminal | 10870000
                    | LUTYPE1 must be specified to   | 10880000
                    | indicate a SNA remote terminal. | 10890000
                    /* -----*/ 10900000
                    /* SNA terminal                          */ 10910000
RMT(2) DEVTYPE=LUTYPE1, /* Terminal type (no SNA default) ohwnc*/ 10911000
                    /* (pre-SP311=LUTYPE1)         */ 10914000
AUTOLOG=YES,        /* Automatic logon               ohwnc*/ 10920000
BUFSIZE=256,       /* Largest buffer sent/received   ohwnc*/ 10930000
COMPACT=NO,        /* No compaction                 ohwnc*/ 10940000
                    /* (pre-SP311=NOCMPCT/CMPCT)   */ 10945000
COMPRESS=NO,       /* No compression/expansion      ohwnc*/ 10950000
                    /* (pre-SP311=NOCOMP/COMP)     */ 10955000
CONDEST=2,         /* Route code for cmd responses   ohwnc*/ 10960000
                    /* default is nnn of RMTnnn    */ 10970000
CONS=NO,           /* No operator consoles          ohwnc*/ 10980000
                    /* (pre-SP311=NOCON/CONSOLE)   */ 10985000
DISCINTV=0,        /* Idle time (in secs) before     ohwnc*/ 10990000
                    /* auto disconnect              */ 11000000
                    /* disconnect (No timeout if DISCINT=0) */ 11005000
LINE=cccc,         /* Line number dedicated to rmt   ohwnc*/ 11010000
LOCAL190=ACTION,   /* Operator setup messages are    ohwnc*/ 11013000
                    /* action (pre-SP311=SETUPACT/SETUPINF) */ 11016000
LUNAME=,           /* Logical unit name of rmt term  ohwnc*/ 11020000
MFORM=T,           /* Display time stamp, job name + 11022000

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MSGPR=YES,          /* job id for this remote      ohwnc*/ 11025000
                   /* Specifies remote console  ohwnc*/ 11028000
                   /* message print option      */ 11031000
                   /* (added in SP313)         */ 11034000
NUMPRT=1,          /* No. of printers at remote  ohwnc*/ 11040000
NUNPUN=0,         /* No. of punches at remote   ohwnc*/ 11050000
NUMRDR=1,         /* No. of readers at remote   ohwnc*/ 11060000
PASSWORD=cccccccc, /* Security password          ohwnc*/ 11070000
RMT150=NO,        /* Msg. 150 sent to local     ohwnc*/ 11075000
                   /* operator.                  */ 11076000
                   /* (pre-SP311=MSG150/NOMSG150) */ 11078000
ROUTECD=2,        /* Routecode - the default is the ohwnc*/ 11080000
                   /* nnn value of RMTnnn       */ 11090000
SETUP=MSG,        /* Setup requirements (PDIR)   ohwnc*/ 11100000
                   /* (pre-SP311=SETUPMSG/SETUPHDR) */ 11110000
START=NO,         /* Do not automatically start  hwnc*/ 11132000
WAITIME=1         /* Wait time for operator      ohwnc*/ 11134000
/*
/*
/*****
/*
|-----* 11170000
| Remote Printers | 11180000
|-----* 11190000
|-----* 11200000
R(n).PR(n) ASIS=NO, /* Suppress Extraneous Ejects ohwnc*/ 11205000
CCTL=YES,           /* Carriage cntl chars. (SNA only) ohwnc*/ 11210000
                   /* (added in SP420)         */ 11215000
CKPTLINE=0,        /* Max lines in a logical page ohwnc*/ 11220000
CKPTPAGE=1,        /* Max pages before a CKPT     ohwnc*/ 11230000
QUEUE=AJ,          /* Output classes processed    ohwnc*/ 11240000
                   /* Alias for QUEUE is CClass */ 11250000
CMPCT=NO,          /* Compaction capabilities(SNA) ohwnc*/ 11251000
COMPRESS=NO,       /* Compression/expansion       ohwnc*/ 11252000
COMPACT=0, @@@    /* Compaction table (SNA)      ohwnc*/ 11253000
CREATOR=,          /* Choose all users            ohwnc*/ 11255000
                   /* (added in SP420)         */ 11260000
DEVFCB=cccc,      /* Specifies printer default FCB ohwnc*/ 11261000
                   /* (added in SP313)         */ 11262000
EJECT=YES,         /* Eject after start           ohwnc*/ 11265000
                   /* (added in SP420)         */ 11270000
FCB=cccc,         /* Forms control buffer image  ohwnc*/ 11300000
                   /* (Alias for FCB is C)     */ 11310000
FCBLOAD=NO,       /* FCB support provided        ohwnc*/ 11320000
                   /* (modified in SP420)     */ 11325000
FORMS=cccc,       /* Form identifier             ohwnc*/ 11330000
JOBNAME=,         /* name of jobs to be selected ohwnc*/ 11340000
LIMIT=0-*,        /* Amount of output (in records) ohwnc*/ 11350000
LRECL=120,        /* For data transmitted to (SNA) ohwnc*/ 11390000
PLIM=0-*,         /* Amount of output (in pages) ohwnc*/ 11390500
PRMODE=LINE,      /* Process mode                ohwnc*/ 11391000
PRWIDTH=120,      /* Chars. printer per line    ohwnc*/ 11392000
RANGE=J?cccc,    /* Job range to choose from    ohwnc*/ 11393000
ROUTECD=Rn,      /* Route code assigned to prt  ohwnc*/ 11394000
SELECT=PRINTcc,  /* Device type and subaddress to ohwnc*/ 11395000
                   /* which output is queued.   */ 11396000
SEP=YES,          /* Separator pages printed (NOSEP) ohwnc*/ 11400000
                   /* (modified in SP420)     */ 11405000
SEPDS=NO,        /* No separator pages between  ohwnc*/ 11490000
                   /* output groups within same job */ 11500000
SETUP=HALT,      /* Specifies optional printer   ohwnc*/ 11500200
                   /* halt for setup           */ 11500400
                   /* (added in SP313)         */ 11500600
START=YES,        /* remote printer comes up started hwnc*/ 11500800
SUSPEND=YES,     /* Prt-interrupt feature allowed ohwnc*/ 11501000
TRACE=YES,       /* Enable Tracing              ohwnc*/ 11501200
TRANS=DEFAULT,   /* Use PRINTDEF default for    ohwnc*/ 11502000
                   /* translating line of print  */ 11504000

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UCS=cccc, /* (added SP430) */ 11506000
/* Print Train ohwnc*/ 11510000
/* For 3800, character arrangement table*/ 11520000
/* (Alias for UCS is T) */ 11530000
VOLUME=(), /* VOLS that jobs are chosen from ohwnc*/ 11540000
WRITER=, /* Writer name assigned to PRT ohwnc*/ 11560000
WS=(W,R,Q,PRM,LIM/F) 11570000
/* Work selection criteria ohwnc*/ 11580000
/* */ 11610000
/* */ 11620000
/*****/ 11630000
/* -----* 11640000
| Remote Punches | 11650000
*-----* 11660000
*/ 11670000
R(n).PU(n) CCTL=YES, /* Carriage cntrl chars.(SNA only) ohwnc*/ 11680000
/* (modified in SP420) */ 11685000
CKPTLINE=100, /* No. of cards to punch per page ohwnc*/ 11690000
CKPTPAGE=1, /* No. of pages pun'd before CKPT ohwnc*/ 11710000
QUEUE=BK, /* Output class processed by PUN ohwnc*/ 11720000
/* (alias for QUEUE is CLASS) */ 11730000
CMPCT=NO, /* Compaction capabilities(SNA) ohwnc*/ 11760000
COMPRESS=NO, /* Compression/expansion ohwnc*/ 11770000
COMPACT=0, @@ /* Compaction table (SNA) ohwnc*/ 11780000
CREATOR=, /* User to choose ohwnc*/ 11790000
/* (added in SP420) */ 11800000
FLUSH=YES, /* Blank card after each dataset ohwnc*/ 11810000
/* (added in SP420) */ 11820000
FORMS=cccc, /* Forms identifier loaded ohwnc*/ 11825000
JOBNAME=, /* Jobs selected by this PUN ohwnc*/ 11830000
LIMIT=0-*, /* Range for output record no. ohwnc*/ 11842000
LRECL=80, /* For data transmitted to (SNA) ohwnc*/ 11850000
PRMODE=(LINE), /* Process mode ohwnc*/ 11851000
RANGE=J?cccc, /* Job id range to select from ohwnc*/ 11852000
ROUTECD=cccc? /* Route code(s) assigned to PUNn ohwnc*/ 11853000
/* (modified SP410) */ 11854000
SELECT=PUNc, /* Device type and subaddress to ohwnc*/ 11855000
/* which output is queued. */ 11856000
SEP=YES, /* Separator cards for ds groups ohwnc*/ 11860000
/* (modified in SP420) */ 11865000
SEPDS=NO, /* No set. for DS's within job ohwnc*/ 11940000
/* (modified in SP420) */ 11942000
SETUP=HALT, /* Specifies optional punch ohwnc*/ 11942400
/* halt for setup */ 11943000
/* (added in SP313) */ 11944000
START=YES, /* Rn.PUn is initially started hwnc*/ 11944500
SUSPEND=YES, /* Punch interrupt allowed (BSC) ohwnc*/ 11945000
/* (modified in SP420) */ 11945500
TRACE=NO, /* No tracing on punch ohwnc*/ 11946000
VOLUME=(), /* VOLIDS of jobs to be punched ohwnc*/ 11950000
WRITER=, /* Writer name assigned to PUNn ohwnc*/ 11970000
WS=(W,R,Q,PRM,LIM/F) 11980000
/* Work selection criterion ohwnc*/ 11990000
/* */ 12020000
/* */ 12030000
/*****/ 12040000
/* -----* 12050000
| Remote Readers | 12060000
*-----* 12070000
*/ 12080000
R(n).RD(n) CLASS=A, /* Default job class ohwnc*/ 12090000
HOLD=NO, /* Jobs not held after conversion ohwnc*/ 12110000
MSGCLASS=A, /* Default message class ohwnc*/ 12120000
PRIORINC=0, /* Increment to get select prio. wnc*/ 12150000
PRIOLIM=15, /* Maximum selection priority wnc*/ 12160000
PRTDEST=LOCAL, /* Default print destination ohwnc*/ 12162000
/* (added in SP420) */ 12165000

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PUNDEST=LOCAL,      /* Default punch destination      ohwnc*/ 12170000
                    /* (added in SP420)              */ 12230000
START=NO,           /* RDR doesn't come up started    ohwnc*/ 12233000
TRACE=YES,         /* Enable tracing on punch        ohwnc*/ 12234000
XEQDEST=LOCAL     /* Default execution destination  ohwnc*/ 12236000
                    /* (modified SP420)              */ 12237000
/*                                                         */ 12237100
/*                                                         */ 12237200
/*****                                                    */ 12237300
/*      *-----*                                         */ 12237400
/*      | Network Socket definitions                       | 12237500
/*      *-----*                                         */ 12237600
                                                         12237700
SOCKET(#####) IPADDR=#####, /* IP address      ohwnc*/ 12237800
                    PORT=nnnnn, /* Related Port   ohwnc*/ 12237900
                    LINE=nnnnn, /* Related line   ohwnc*/ 12238000
                    NODE=nnnnn /* Related node   ohwnc*/ 12238100
                    NETSRV=nnn, /* Server to use  ohwnc*/ 12238200
                    REST=nnnnn /* Resistance     ohwnc*/ 12238300
                                                         12238500
/*                                                         */ 12240000
/*****                                                    */ 12245000
/*      *-----*                                         */ 12250000
/*      | SMF Definitions                                   | 12260000
/*      *-----*                                         */ 12270000
                                                         12280000
SMFDEF  BUFNUM=5,      /* Number of SMF Buffers          wnc*/ 12290000
        BUFWARN=80    /* Warning Threshold %           ohwnc*/ 12310000
/*                                                         */ 12350000
/*                                                         */ 12360000
/*****                                                    */ 12370000
/*      *-----*                                         */ 12380000
/*      | Spool Definitions                               | 12390000
/*      *-----*                                         */ 12400000
                                                         12410000
SPOOLDEF BUFSIZE=3992, /* Maximum Buffer Size            c*/ 12420000
        DSNAME=SYS1.HASPACE, /* Spool Data Sets' Name        c*/ 12440000
        FENCE=(ACTIVE=NO), /* Don't Force to Minimum volume oc*/ 12460000
        SPOOLNUM=32, /* Max. number of SPOOL volumes oc*/ 12500000
        TGFSIZE=30, /* 30 Buffers/Track Group       wnc*/ 12580000
        TGSPACE=(MAX=16288, /* Fits TGMs into 4K page       oc*/ 12582000
                /* (TGNM prior to SP510)      */ 12588000
                WARN=80), /* Usage warning threshold %     onc*/ 12600000
                /* (TGWARN prior to SP510) */ 12610000
        TRKCELL=3, /* 3 Buffers/Track-cell         c*/ 12620000
        VOLUME=SPOOL /* Spool Volume Serial          oc*/ 12640000
/*                                                         */ 12660000
/*                                                         */ 12670000
/*****                                                    */ 12670400
/*      *-----*                                         */ 12671200
/*      | SSI Definitions                                 | 12672000
/*      *-----*                                         */ 12673600
                                                         12674400
SSI(nnn) TRACE=NO /* Tracing is not active for this ownc*/ 12675200
                    /* SSI function                  */ 12676800
/*                                                         */ 13050000
/*                                                         */ 13060000
/*****                                                    */ 13070000
/*      *-----*                                         */ 13070700
/*      | Subtask definition                             | 13071600
/*      | added in SP313                                | 13072500
/*      *-----*                                         */ 13073400
                                                         13074300
SUBTDEF GSUBNUM=10 /* Specify the number of general hwnc*/ 13075200
                    /* purpose subtask              */ 13076100
/*                                                         */ 13077000
/*                                                         */ 13077900

```

```

/*****/ 13078800
/*      *-----* 13080000
      |   TP (NJE/RJE) Characteristics   | 13090000
      *-----* 13100000
      */ 13110000
      /* TP buffer definition           hwnc*/ 13120000
      /* Characteristics for buffers below */ 13130000
      /* 16 meg line (added SP410)      */ 13140000
TPDEF  AUTOINTV=32, /* autologon timer interval   ohwnc*/ 13145000
      BSCBUF=(LIMIT=ccc, /* BELOWBUF= pre-OS270       */ 13146000
      /* NUMBER OF BUFFERS           ohwnc*/ 13150000
      /* (pre-SP311 BUFNUM=cc)      */ 13160000
      SIZE=520, /* Size of Buffers in bytes   hwnc*/ 13170000
      /* (pre-SP410 BUFSIZE=)       */ 13180000
      WARN=80), /* Warning Threshold %        ohwnc*/ 13190800
      /* (pre-SP311 BUFWARN)        */ 13191500
      /* Characteristics for extended buffers */ 13192200
      /* (added SP410)              */ 13192900
      /* EXTBUF= pre-OS270         ohwnc*/ 13193100
      SNABUF=(LIMIT=ccc, /* Number of buffers         ohwnc*/ 13193600
      /* (pre-SP311 BUFNUM=cc)      */ 13194300
      SIZE=400, /* Size of Buffers in bytes   hwnc*/ 13195000
      /* (pre-SP410 BUFSIZE=)       */ 13195700
      WARN=80), /* Warning Threshold %        ohwnc*/ 13197800
      /* (pre-SP311 BUFWARN)        */ 13198500
      MBUFSIZE=400, /* Multi-leaving buffer size  hwnc*/ 13200000
      RMTMSG=100, /* Max. # Msgs Queued to remote ohwnc*/ 13220000
      RMTNUM=ccc, /* Highest allowed RMT (for $ADD) hwnc*/ 13230000
      SESSIONS=(LIMIT=ccc, /* Max number of sessions     ohwnc*/ 13280000
      /* (pre-OS130 SESSION)         */ 13296000
      WARN=cc) /* Warning threshold          ohwnc*/ 13304000
      /* (added OS130)              */ 13312000
/*      */ 13320000
/*      */ 13330000
/*****/ 13340000
/*      *-----* 13350000
      |   Start/Stop Trace Identifiers   | 13360000
      *-----* 13370000
      */ 13380000
TRACE(n) START=NO /* Whether or not to collect trace hwnc*/ 13400000
      /* data for specified id(s)     */ 13405000
/*      */ 13470000
/*      */ 13480000
/*****/ 13480400
/*      *-----* 13480800
      |   $TRACE Facility                | 13481200
      *-----* 13481600
      */ 13482000
TRACEDEF ACTIVE=NO, /* Whether or not to start the   wnc*/ 13484800
      /* trace facility               */ 13485200
      LOG=(START=NO, /* Whether or not to format and  ownc*/ 13486000
      /* add data to trace log dataset */ 13486400
      SIZE=500, /* Max size of trace log dataset  ownc*/ 13487200
      CLASS=A), /* Trace log dataset output class ownc*/ 13488000
      PAGES=9, /* Number of 4K pages per table @R10P037*/ 13488200
      TABLES=3, /* Number of trace tables        ownc*/ 13488400
      TABWARN=80 /* Warning Threshold %          ownc*/ 13488600
/*****/ 13490000
/*      *-----* 13500000
      |   Delete a job from the system   | 13510000
      *-----* 13520000
      */ 13530000
ZAPJOB /* Console mode only. See JES2 */ 13540000
      /* initialization and tuning reference */ 13550000
/*      */ 13560000
/*      */ 13570000

```

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/*****/ 13870000
/*                                             */ 13880000
/*               *-----*                    */ 13890000
/*               | ADDED Initialization Parameters |          */ 13900000
/*               *-----*                    */ 13910000
/*                                             */ 13920000
/* The following initialization parameters have been added to JES2 */ 13930000
/* in the JES2 SP4.1.0 release. Review the general sections      */ 13940000
/* above for details on the parameters.                          */ 13941000
/*                                             */ 13944000
/*      APPL      LOGMODE,LINE                    */ 13950000
/*      BUFDEF    BELOWBUF,EXTBUF                */ 13953000
/*      CKPTDEF   VERSIONS,CKPTDCON             */ 13956000
/*      CONDEF    SCOPE,RDIRAREA                 */ 13957000
/*      CONNECT  PATHMGR,STATUS,STATIC,CES,TIME  */ 13960000
/*      JOBCLASS  OUTDISP                        */ 13970000
/*      LOADMOD   RMODE                          */ 13972000
/*      NJEDEF    TIMETOL,OWNNAME                */ 13985000
/*      NODE(nnn) LINE,LOGMODE,PATHMGR,PRIVATE,SUBNET,TRACE    */ 13990000
/*      OFFn.SR   OUTDISP                        */ 14000000
/*      OFFn.ST   OUTDISP                        */ 14010000
/*      OUTCLASS  OUTDISP                        */ 14020000
/*      OUTDEF    SEGLIM,OUTTIME                 */ 14020900
/*      PRINTDEF  SEPPAGE                        */ 14021800
/*      STCCCLASS OUTDISP                        */ 14022700
/*      TPDEF     BELOWBUF,EXTBUF                */ 14023600
/*      TSUCLASS  OUTDISP                        */ 14024500
/*                                             */ 14025400
/* The following initialization parameters have been added to JES2 */ 14026300
/* in the JES2 SP4.2.0 release. Review the general sections      */ 14027200
/* above for details on the parameters.                          */ 14028100
/*                                             */ 14029000
/*      INTRDR    BATCH                          */ 14029900
/*      NJEDEF    MAXHOP                          */ 14030800
/*      OFFn.JR   CREATOR                         */ 14031700
/*      OFFn.JT   CREATOR                         */ 14032600
/*      OFFn.SR   CREATOR                         */ 14033500
/*      OFFn.ST   CREATOR                         */ 14034400
/*      OUTDEF    PRYORATE                        */ 14035300
/*      PCEDEF    SPINNUM                         */ 14036200
/*      PRTn     CREATOR                         */ 14037100
/*      PUNn     CREATOR                         */ 14038000
/*      RnPRnn   CREATOR,EJECT                   */ 14038900
/*      RnPUnn   CREATOR,FLUSH                   */ 14039800
/*      RnRDnn   PRTDEST,PUNDEST,XEQDEST,SYSAFF  */ 14040700
/*      RnRDnn   PRTDEST,PUNDEST,XEQDEST,SYSAFF  */ 14041600
/*      RDRn     PRTDEST,PUNDEST,XEQDEST,SYSAFF  */ 14042500
/*                                             */ 14043400
/* The following initialization parameters have been added to JES2 */ 14044300
/* in the JES2 SP4.3.0 release. Review the general sections      */ 14045200
/* above for details on the parameters.                          */ 14046100
/*                                             */ 14047000
/*      DESTDEF   LOCALNUM,NDEST,RDEST,RMDEST,RMTDEST,UDEST,  */ 14047900
/*                SHOWUSER                          */ 14048800
/*      DESTID    PRIMARY                          */ 14049700
/*      LINEenn   JRNUM,JTNUM,SRNUM,STNUM          */ 14050600
/*      Ln.STn    WS,LIMIT,PLIM                   */ 14051500
/*      NODEn     ENDNODE,SENTREST                */ 14052400
/*      NJEDEF    MAILMSG                          */ 14053300
/*      PRTn     TRANS                             */ 14054200
/*      Rn.PRnn   TRANS                             */ 14055100
/*                                             */ 14056000
/* The following initialization parameters have been added to JES2 */ 14056900
/* in the JES2 SP5.1.0 release. Review the general sections      */ 14057800
/* above for details on the parameters.                          */ 14058700
/*                                             */ 14059600
/*      CKPTDEF   CKPT1=(STRNAME=),CKPT2=(STRNAME=),OPVERIFY,  */ 14060500

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/*          NEWCKPT1=(STRNAME=),NEWCKPT2=(STRNAME=),          */ 14061400
/*          VOLATILE                                          */ 14062300
/*      CONDEF      CMDNUM                                    */ 14063200
/*      MASDEF      OWNMEMB,XCFGRPNM                        */ 14064100
/*      MEMBER                                            */ 14065000
/*      NJEDEF      HDRBUF                                  */ 14065900
/*      OPTSDEF     SPOOL                                   */ 14066800
/*      SPOOLDEF    TGLOST,TGSPACE                         */ 14067700
/*                                                    */ 14067900
/* The following initialization parameters have been added to JES2 */ 14068100
/* in the JES2 SP5.2.0 release. Review the general sections      */ 14068300
/* above for details on the parameters.                          */ 14068500
/*                                                    */ 14068700
/*      DEBUG      CKPT,MISC,STORAGE,VERSION              */ 14068900
/*      JOBCLASS   QHELD                                  */ 14069100
/*      RMTnnnn    SHARABLE                               */ 14069300
/*      TPDEF      RMTNUM                                 */ 14069800
/*                                                    */ 14070300
/* The following initialization parameters have been added to JES2 */ 14070800
/* in the JES2 OS1.1.0 release. Review the general sections      */ 14071300
/* above for details on the parameters.                          */ 14071800
/*                                                    */ 14072300
/*      DEBUG      SYMREC                                  */ 14072800
/*      OFFLOAD    ARCHIVE,VALIDATE                      */ 14073300
/*                                                    */ 14073600
/* The following initialization parameters have been added to JES2 */ 14073900
/* in the JES2 OS1.3.0 release. Review the general sections      */ 14074200
/* above for details on the parameters.                          */ 14074500
/*                                                    */ 14074800
/*      JOBDEF     DUPL_JOB                                */ 14075100
/*      Ln.STn     OUTDISP                                */ 14075400
/*      TPDEF      SESSIONS=(LIMIT=,WARN=)                */ 14075700
/*                                                    */ 14076000
/* The following initialization parameters have been added to JES2 */ 14076300
/* in the JES2 OS2.4.0 release. Review the general sections      */ 14076600
/* above for details on the parameters.                          */ 14076900
/*                                                    */ 14077200
/*      JOBCLASS   MODE,MSGCLASS,CONDPURG,XEQCOUNT       */ 14077500
/*      Ln.JTn     WS,LIMIT                                */ 14077800
/*      CKPTSPACE  BERTNUM,BERTWARN                      */ 14078100
/*      NODE       LOGON                                  */ 14078400
/*      APPL       LOGON                                  */ 14078700
/*      RMTnnnn    LOGON                                  */ 14079000
/*                                                    */ 14079300
/* The following initialization parameters have been added to JES2 */ 14079600
/* in the JES2 OS2.7.0 release. Review the general sections      */ 14079900
/* above for details on the parameters.                          */ 14080200
/*                                                    */ 14080500
/*      JOBDEF     CNVT_ENQ                                */ 14080800
/*                                                    */ 14081100
/* The following initialization parameters have been added to JES2 */ 14081400
/* in the JES2 OS2.10 release. Review the general sections       */ 14081700
/* above for details on the parameters.                          */ 14082000
/*                                                    */ 14082300
/*      JOBCLASS   SCHENV                                  */ 14082600
/*      ZAPJOB     all                                     */ 14082900
/*                                                    */ 14083200
/* The following initialization parameters have been added to JES2 */ 14083500
/* in the JES2 z/OS 1.2 release. Review the general sections     */ 14083800
/* above for details on the parameters.                          */ 14084100
/*                                                    */ 14084400
/*      INCLUDE    DSNAME,VOLSER,UNIT                    */ 14084700
/*      JOBCLASS   JESLOG                                  */ 14085000
/*      PROCLIB    DD,DSNAME,VOLSER,UNIT,UNCONDITIONAL    */ 14085300
/*      REQJOBID   JESLOG                                  */ 14085600
/*                                                    */ 14086200
/* The following initialization parameters have been added to JES2 */ 14086500

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/* in the JES2 z/OS 1.7 release. Review the general sections */ 14086800
/* above for details on the parameters. */ 14087100
/* */ 14087400
/* NETSRV */ 14087700
/* SOCKET */ 14088000
/* LINE UNIT=TCP */ 14088300
/* NODE NETSRV,SIGNON,DIRECT */ 14088600
/* OFFLOAD CRTIME */ 14088700
/* */ 14088900
/*****/ 14089200
/* */ 14089500
/* */ 14090000
/*****/ 14100000
/* */ 14110000
/* *-----* */ 14120000
/* | CHANGED Initialization Parameters | */ 14130000
/* *-----* */ 14140000
/* */ 14150000
/* The following initialization parameters have been changed in */ 14160000
/* the JES2 SP4.1.0 release. Review the general sections above */ 14170000
/* for details on the parameters, and for changes that were made */ 14180000
/* by releases previous to JES2 SP4.1.0. */ 14190000
/* */ 14200000
/* CONNECT NODEA -now may specify symbolic name */ 14201000
/* CONNECT NODEB -now may specify symbolic name */ 14202000
/* JOBCLASS REGION,TIME - new defaults */ 14203000
/* NODE PASSWORD - now includes SEND= and VERIFY= */ 14204000
/* NODE REST - Maximum changed */ 14205000
/* OFFn.JT ROUTECDE - now accepts destid or userid value */ 14206000
/* OFFn.JR ROUTECDE - now accepts destid or userid value */ 14207000
/* OFFn.ST ROUTECDE - now accepts destid or userid value */ 14208000
/* OFFn.ST WS - now includes OUTDISP specification */ 14209000
/* OFFn.SR ROUTECDE - now accepts destid or userid value */ 14210000
/* OFFn.SR WS - now includes OUTDISP specification */ 14211000
/* OFFn.SR MOD - now includes OUTDISP specification */ 14212000
/* PRTnnnn ROUTECDE - now accepts destid or userid value */ 14213000
/* PUNnnnn ROUTECDE - now accepts destid or userid value */ 14214000
/* Rn.PRnn ROUTECDE - now accepts destid or userid value */ 14215000
/* Rn.PUnn ROUTECDE - now accepts destid or userid value */ 14216000
/* OUTDEF JOENUM - maximum value specified increased */ 14217000
/* STCCCLASS REGION,TIME - increased defaults */ 14218000
/* TSUCLASS REGION,TIME - increased defaults */ 14218900
/* */ 14219200
/* The following initialization parameters have been changed in */ 14219800
/* the JES2 SP4.2.0 release. Review the general sections above */ 14220700
/* for details on the parameters, and for changes that were made */ 14221600
/* by releases previous to JES2 SP4.2.0. */ 14222500
/* */ 14222700
/* ESTLNCT NUM - Maximum changed */ 14222900
/* ESTPAGE NUM,INT - Maximum changed */ 14223100
/* ESTPUN NUM,INT - Maximum changed */ 14223300
/* INTRDR AUTH - No longer a numeric value */ 14223500
/* LINEn UNIT - Unit can be dynamically added */ 14223700
/* PRTn UNIT - Unit can be dynamically added */ 14223900
/* PRTn FORMS - Up to 8 forms can be specified */ 14224100
/* PUNn UNIT - Unit can be dynamically added */ 14224300
/* RDRn AUTH - No longer a numeric value */ 14224500
/* RDRn UNIT - Unit can be dynamically added */ 14224700
/* */ 14224900
/* The following initialization parameters have been changed in */ 14225100
/* the JES2 SP4.3.0 release. Review the general sections above */ 14225300
/* for details on the parameters, and for changes that were made */ 14225500
/* by releases previous to JES2 SP4.3.0. */ 14225700
/* */ 14225900
/* LOADMOD RMODE - Is now display only, set function */ 14226100
/* replaced by using linkage editor */ 14226300
/* options. */ 14226500

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/* 14226700
/* The following initialization parameters have been changed in */ 14226900
/* the JES2 SP5.2.0 release. Review the general sections above */ 14227100
/* for details on the parameters, and for changes that were made */ 14227300
/* by releases previous to JES2 SP5.2.0. */ 14227500
/* */ 14227700
/* JOBDEF JOBWARN - cannot be changed on a */ 14228100
/* JOBDEF JNUMWARN single member warm start */ 14228500
/* JOBDEF PRYHIGH or a quick start */ 14228900
/* JOBDEF PRYLOW */ 14229300
/* JOBDEF PRYRATE */ 14229600
/* */ 14230000
/* OPTSDEF SPOOL - default changed to NOVALIDATE */ 14232000
/* */ 14234000
/* OUTDEF JOEWARN - cannot be changed on a */ 14236000
/* OUTDEF PRYHIGH single member warm start */ 14238000
/* OUTDEF PRYLOW or a quick start */ 14240000
/* OUTDEF PRYRATE */ 14242000
/* */ 14244000
/* SPOOLDEF - cannot be changed on a */ 14246000
/* TGSPACE=(TGWARN) single member warm start */ 14248000
/* or a quick start */ 14250000
/* */ 14252000
/* TPDEF BELOWBUF=(SIZE) - minimum and default changed */ 14254000
/* */ 14254100
/* The following initialization parameters have been changed in */ 14254200
/* the JES2 OS1.3.0 release. Review the general sections above */ 14254300
/* for details on the parameters, and for changes that were made */ 14254400
/* by releases previous to JES2 OS1.3.0. */ 14254500
/* */ 14254600
/* PUNn FORMS - Up to 8 forms can be specified */ 14254700
/* Rn.PRn FORMS - Up to 8 forms can be specified */ 14254800
/* Rn.PUn FORMS - Up to 8 forms can be specified */ 14254900
/* OFFn.ST FORMS - Up to 8 forms can be specified */ 14255000
/* OFFn.SR FORMS - Up to 8 forms can be specified */ 14255100
/* */ 14256000
/* The following initialization parameters have been changed in */ 14256200
/* the JES2 OS2.4.0 release. Review the general sections above */ 14256400
/* for details on the parameters, and for changes that were made */ 14256600
/* by releases previous to JES2 OS2.4.0. */ 14256800
/* */ 14257000
/* JOBCLASS all - Can only be changed on a cold */ 14257200
/* start or by operator command */ 14257400
/* */ 14257420
/* The following initialization parameters have been changed in */ 14257440
/* the JES2 z/OS 1.7 release. Review the general sections above */ 14257460
/* for details on the parameters, and for changes that were made */ 14257480
/* by releases previous to JES2 z/OS 1.7 */ 14257500
/* */ 14257520
/* NODE NAME - Can be modified when the node */ 14257540
/* is actively attached, or for the */ 14257560
/* local node. */ 14257580
/* */ 14257600
/******/ 14258000
/* */ 14260000
/* */ 14262000
/******/ 14264000
/* */ 14270000
/* *-----* */ 14280000
/* | DELETED Initialization Parameters | */ 14290000
/* *-----* */ 14300000
/* */ 14310000
/* The following initialization parameters have been deleted. */ 14320000
/* */ 14340000
/* parameter release reason/new action */ 14350000
/* ----- */ 14355000
/* INTRDR RDINUM z/OS 1.7 No longer supported */ 14355200

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/* CKPTDEF APPLCOPY    z/OS 1.2    No longer supported                */ 14355300
/* SPOOLDEF TGBPERVL   OS2.10     No longer required                 */ 14355500
/* TPDEF BELOWBUF     OS2.7.0     Replaced by BSCBUF                */ 14355600
/* TPDEF EXTBUF       OS2.7.0     Replaced by SNABUF                */ 14355700
/* STCCCLASS          OS2.4.0     Replaced by JOBCLASS(STC)         */ 14356000
/* TSUCLASS           OS2.4.0     Replaced by JOBCLASS(TSU)         */ 14357000
/* TPDEF SESSION      OS1.3.0     Replaced by SESSIONS=(LIMIT=)    */ 14358000
/* SPOOLDEF TGLOST    SP5.2.0     No longer required                 */ 14360000
/* CKPTDEF CKPTDCON   SP5.1.0     No longer required                 */ 14361000
/* MASDEF OWNSID      SP5.1.0     Replaced by OWNMEMB                */ 14361200
/* MASDEF SID         SP5.1.0     Replaced by MEMBER statement     */ 14361400
/* SPOOLDEF TGWARN    SP5.1.0     Replaced by TGSPACE=(WARN=)      */ 14361600
/* SPOOLDEF TGNUM     SP5.1.0     Replaced by TGSPACE=(MAX=)      */ 14361800
/* LOADMOD RMODE     SP4.3.0     Now displayable only             */ 14362000
/* BUFDEF BUFNUM     SP4.1.0     Replaced by LIMIT                 */ 14362500
/* BUFDEF BUFWARN    SP4.1.0     Replaced by WARN                  */ 14363000
/* BUFDEF BUFFREE    SP4.1.0     Replaced by FREE                  */ 14364000
/* CONDEF BSPACE     SP4.1.0     No longer supported                 */ 14365000
/* JOBCLASS CONDPURG SP4.1.0     Replaced by JOBCLASS OUTDISP=    */ 14365600
/* NJEDEF NATNUM     SP4.1.0     No longer required                 */ 14366200
/* OFFn.SR DS=ANY    SP4.1.0     Replaced by OUTDISP=            */ 14366800
/* OFFn.SR DSHOLD=   SP4.1.0     Replaced by MOD=OUTDISP=       */ 14367400
/* OFFn.ST DS=      SP4.1.0     Replaced by OUTDISP=            */ 14368000
/* OUTCLASS CONDPURG SP4.1.0     Replaced by OUTCLASS OUTDISP=   */ 14368600
/* OUTCLASS HOLD     SP4.1.0     Replaced by OUTCLASS OUTDISP=   */ 14369200
/* OUTCLASS MSGHOLD  SP4.1.0     Replaced by OUTCLASS OUTDISP=   */ 14369800
/* PRINTDEF RSEPLINE SP4.1.0     Replaced by PRINTDEF SEPPAGE=    */ 14370400
/* PRINTDEF SEPLINE  SP4.1.0     Replaced by PRINTDEF SEPPAGE=    */ 14370600
/* TPDEF BUFNUM     SP4.1.0     Replaced by LIMIT                 */ 14370800
/* TPDEF BUFWARN    SP4.1.0     Replaced by WARN                  */ 14371000
/* TPDEF BUFSIZE     SP4.1.0     Replaced by SIZE                  */ 14371200
/* TPDEF BUFFREE    SP4.1.0     Replaced by FREE                  */ 14371400
/* JOBCLASS XBATCHE  SP3.1.3     No longer needed for XBM         */ 14371600
/* JOBDEF XBATCHE    SP3.1.3     No longer needed for XBM         */ 14372100
/* CONDEF MSGID     SP3.1.1     JES2 Assumes YES                 */ 14372400
/* HASPSSM          SP3.1.1     Use STEPLIB                       */ 14373000
/* NODE BSC/SNA     SP3.1.1     No longer differentiate          */ 14373500
/* PRINTRnn         SP3.1.1     Form of PRInn no longer supported */ 14374000
/* SPOOLDEF RECINCR  SP3.1.1     No longer needed                 */ 14375000
/* TPDEF WAIT       SP3.1.1     use RMT(*) WAITIME=             */ 14375500
/* TRACE           SP3.1.1     Replaced by TRACEDEF and TRACE(n) */ 14376000
/* CKPTDEF DSNAME   SP2.2.0     Replaced by CKPTDEF CKPTn=(DSN=) */ 14380000
/* CKPTDEF DUPLEX   SP2.2.0     Replaced by CKPTDEF MODE=,DUPLEX= */ 14390000
/* CKPTDEF PRIMARY  SP2.2.0     Replaced by CKPTDEF CKPT1=(VOL=) */ 14400000
/* CKPTDEF RECONFIG SP2.2.0     Cannot be specified in initdeck  */ 14405000
/* SPOOLDEF TGBENUM SP2.2.0     Replaced by SPOOLDEF TGBPERVL    */ 14410000
/* TPDEF RMTNUM     SP2.2.0     Determined from highest RMTn Stmt */ 14420000
/*                                     (RMTNUM added back in SP5.2.0) */ 14430000
/*                                     */ 14580000
/*                                     */ 14590000
/*                                     */ 14600000
/*                                     */ 14610000
/*                                     */ 14620000
/*                                     */ 14630000
/* NOTE: Changing ANY of the following parameters will prevent a */ 14640000
/*       JES2 Warmstart; they can ONLY be changed on a COLDSTART */ 14650000
/*                                     */ 14660000
/*                                     */ 14670000
/*                                     */ 14680000
/* NJEDEF OWNNODE= */ 14700000
/* SPOOLDEF BUFSIZE=, DSNAME=, TRKCELL=, VOLUME= */ 14720000
/*                                     */ 14740000
/* NOTE: If VOLUME= is a 5 character prefix, it can be changed */ 14750000
/*       to a 4 character prefix using an operator command (for */ 14760000
/*       example it can be changed from SPOOL to SPOO). Any other */ 14770000
/*       changes require a COLDSTART. */ 14780000
/*                                     */ 99999999

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## Appendix B. Obsolete keywords

Some obsolete keywords on initialization statements continue to be recognized by JES2, but are ignored or replaced during processing. The following commands and initialization statement keywords are obsolete. If applicable, a replacement option is specified:

Obsolete command and initialization statement keywords:

STCCCLASS - use JOBCLASS(STC)  
TSUCLASS - use JOBCLASS(TSU)  
CKPTDEF APPLCOPY - Obsolete  
INIT(nnnn) DRAIN - use START=NO  
INTRDR RDINUM - Obsolete  
JOBDEF JCLERR - Obsolete  
MASDEF SID - use MEMBER statement  
MASDEF OWNSID - use OWNMEMB  
MASDEF AUTOESYS use AUTOEMEM  
NODE(nnn) SNA - Obsolete  
NODE(nnn) BSC - Obsolete  
NODE(nnn) TCPIP - Obsolete  
OUTDEF BRODCAST - Obsolete  
OUTDEF LOCALNUM - use DESTDEF LOCALNUM  
PRT(nnn) DRAIN - use START=NO  
PRT(nnn) NOMARK - use MARK=NO  
PRT(nnn) NOPAUSE - use PAUSE=NO  
PRT(nnn) NOSEP - use SEP=NO  
PRT(nnn) NOSEPDS - use SEPDS=NO  
PRT(nnn) SEPDEFLT - use SEPCHARS=DEFAULT  
PRT(nnn) SEPEXIST - use SEPCHARS=CURRENT  
PUN(nnn) DRAIN - use START=NO  
PUN(nnn) NOPAUSE - use PAUSE=NO  
PUN(nnn) NOSEP - use SEP=NO  
PUN(nnn) NOSEPDS - use SEPDS=NO  
SPOOLDEF RELADDR - Obsolete  
SPOOLDEF TGBPERVL - Obsolete  
SPOOLDEF TGNUM - use TGSPACE=(MAX=)  
SPOOLDEF TGWARN - use TGSPACE=(WARN=)  
TPDEF BELOWBUF - use BSCBUF  
TPDEF EXTBUF - use SNABUF

Obsolete command only keywords:

Output list commands (\$TO, \$DO, for example) NDISP and ODISP - use OUTDISP and /OUTDISP



---

## Appendix C. Accessibility

Accessible publications for this product are offered through the z/OS Information Center, which is available at [www.ibm.com/systems/z/os/zos/bkserv/](http://www.ibm.com/systems/z/os/zos/bkserv/).

If you experience difficulty with the accessibility of any z/OS information, please send a detailed message to [mhvrcfs@us.ibm.com](mailto:mhvrcfs@us.ibm.com) or to the following mailing address:

IBM Corporation  
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---

### Accessibility features

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use software products successfully. The major accessibility features in z/OS enable users to:

- Use assistive technologies such as screen readers and screen magnifier software
- Operate specific or equivalent features using only the keyboard
- Customize display attributes such as color, contrast, and font size.

---

### Using assistive technologies

Assistive technology products, such as screen readers, function with the user interfaces found in z/OS. Consult the assistive technology documentation for specific information when using such products to access z/OS interfaces.

---

### Keyboard navigation of the user interface

Users can access z/OS user interfaces using TSO/E or ISPF. Refer to *z/OS TSO/E Primer*, *z/OS TSO/E User's Guide*, and *z/OS ISPF User's Guide Vol I* for information about accessing TSO/E and ISPF interfaces. These guides describe how to use TSO/E and ISPF, including the use of keyboard shortcuts or function keys (PF keys). Each guide includes the default settings for the PF keys and explains how to modify their functions.

---

### Dotted decimal syntax diagrams

Syntax diagrams are provided in dotted decimal format for users accessing the z/OS Information Center using a screen reader. In dotted decimal format, each syntax element is written on a separate line. If two or more syntax elements are always present together (or always absent together), they can appear on the same line, because they can be considered as a single compound syntax element.

Each line starts with a dotted decimal number; for example, 3 or 3.1 or 3.1.1. To hear these numbers correctly, make sure that your screen reader is set to read out punctuation. All the syntax elements that have the same dotted decimal number (for example, all the syntax elements that have the number 3.1) are mutually

exclusive alternatives. If you hear the lines 3.1 USERID and 3.1 SYSTEMID, you know that your syntax can include either USERID or SYSTEMID, but not both.

The dotted decimal numbering level denotes the level of nesting. For example, if a syntax element with dotted decimal number 3 is followed by a series of syntax elements with dotted decimal number 3.1, all the syntax elements numbered 3.1 are subordinate to the syntax element numbered 3.

Certain words and symbols are used next to the dotted decimal numbers to add information about the syntax elements. Occasionally, these words and symbols might occur at the beginning of the element itself. For ease of identification, if the word or symbol is a part of the syntax element, it is preceded by the backslash (\) character. The \* symbol can be used next to a dotted decimal number to indicate that the syntax element repeats. For example, syntax element \*FILE with dotted decimal number 3 is given the format 3 \\* FILE. Format 3\* FILE indicates that syntax element FILE repeats. Format 3\* \\* FILE indicates that syntax element \* FILE repeats.

Characters such as commas, which are used to separate a string of syntax elements, are shown in the syntax just before the items they separate. These characters can appear on the same line as each item, or on a separate line with the same dotted decimal number as the relevant items. The line can also show another symbol giving information about the syntax elements. For example, the lines 5.1\*, 5.1 LASTRUN, and 5.1 DELETE mean that if you use more than one of the LASTRUN and DELETE syntax elements, the elements must be separated by a comma. If no separator is given, assume that you use a blank to separate each syntax element.

If a syntax element is preceded by the % symbol, this indicates a reference that is defined elsewhere. The string following the % symbol is the name of a syntax fragment rather than a literal. For example, the line 2.1 %OP1 means that you should refer to separate syntax fragment OP1.

The following words and symbols are used next to the dotted decimal numbers:

- ? means an optional syntax element. A dotted decimal number followed by the ? symbol indicates that all the syntax elements with a corresponding dotted decimal number, and any subordinate syntax elements, are optional. If there is only one syntax element with a dotted decimal number, the ? symbol is displayed on the same line as the syntax element, (for example 5? NOTIFY). If there is more than one syntax element with a dotted decimal number, the ? symbol is displayed on a line by itself, followed by the syntax elements that are optional. For example, if you hear the lines 5 ?, 5 NOTIFY, and 5 UPDATE, you know that syntax elements NOTIFY and UPDATE are optional; that is, you can choose one or none of them. The ? symbol is equivalent to a bypass line in a railroad diagram.
- ! means a default syntax element. A dotted decimal number followed by the ! symbol and a syntax element indicates that the syntax element is the default option for all syntax elements that share the same dotted decimal number. Only one of the syntax elements that share the same dotted decimal number can specify a ! symbol. For example, if you hear the lines 2? FILE, 2.1! (KEEP), and 2.1 (DELETE), you know that (KEEP) is the default option for the FILE keyword. In this example, if you include the FILE keyword but do not specify an option, default option KEEP will be applied. A default option also applies to the next higher dotted decimal number. In this example, if the FILE keyword is omitted, default FILE(KEEP) is used. However, if you hear the lines 2? FILE, 2.1, 2.1.1!

(KEEP), and 2.1.1 (DELETE), the default option KEEP only applies to the next higher dotted decimal number, 2.1 (which does not have an associated keyword), and does not apply to 2? FILE. Nothing is used if the keyword FILE is omitted.

- \* means a syntax element that can be repeated 0 or more times. A dotted decimal number followed by the \* symbol indicates that this syntax element can be used zero or more times; that is, it is optional and can be repeated. For example, if you hear the line 5.1\* data area, you know that you can include one data area, more than one data area, or no data area. If you hear the lines 3\*, 3 HOST, and 3 STATE, you know that you can include HOST, STATE, both together, or nothing.

**Note:**

1. If a dotted decimal number has an asterisk (\*) next to it and there is only one item with that dotted decimal number, you can repeat that same item more than once.
  2. If a dotted decimal number has an asterisk next to it and several items have that dotted decimal number, you can use more than one item from the list, but you cannot use the items more than once each. In the previous example, you could write HOST STATE, but you could not write HOST HOST.
  3. The \* symbol is equivalent to a loop-back line in a railroad syntax diagram.
- + means a syntax element that must be included one or more times. A dotted decimal number followed by the + symbol indicates that this syntax element must be included one or more times; that is, it must be included at least once and can be repeated. For example, if you hear the line 6.1+ data area, you must include at least one data area. If you hear the lines 2+, 2 HOST, and 2 STATE, you know that you must include HOST, STATE, or both. Similar to the \* symbol, the + symbol can only repeat a particular item if it is the only item with that dotted decimal number. The + symbol, like the \* symbol, is equivalent to a loop-back line in a railroad syntax diagram.



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---

## Minimum supported hardware

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- 

## Programming Interface Information

This publication documents information that is NOT intended to be used as programming Interfaces of JES2.

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