



NEW IN z/OS V2R1



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A Brief Look at What's New in V2R1

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1 Forward

Chiyang Chin, we call him *Mr. Chin*, provides technical support services to all NewEra Software product Customers and Prospects Worldwide. He is expert in all areas of the z/OS operating system and its subsystems with a special interest and focus on the z/OS Communication Server.

In compiling this document and its future updates for you, *Mr. Chin* has and will use his best professional efforts to sort out changes and new things coming to you in V2R1 and beyond. His work is based on findings from generally available public documentation and presentations. His research, while extensive, is also ongoing, as he learns more expect updates. I suggest you stay tuned!

Paul R. Robichaux, Co-Founder

2 Source Documentation

The source documents used in creating this V2R1 Summary ,z/OS V2R1 Elements and Features, can be found at the following web address:

<http://www-03.ibm.com/systems/z/os/zos/bkserv/v2r1pdf/>

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4 The V1R13 (RSM) Web Deliverable:

Source: z/OS MVS Initialization and Tuning Reference, SA22-7592-25

4.1 V1R13 Web Deliverable - Parmlib Members

4.1.1 COUPLExx

Syntax format of COUPLExx /* APAR OA41661 for z/OS V1R10 and above*/

```
SYNCSYNC                                    /*V1R13 Web deliverable ADD*/
SIMPLEX(nnnnn|DEFAULT)
DUPLEX(nnnnn|DEFAULT)
LOCKSIMPLEX(nnnnn|DEFAULT)
LOCKDUPLEX(nnnnn|DEFAULT)
```

4.1.2 DIAGxx

Syntax format of DIAGxx /* APAR OA23395 for z/OS V1R12 and above*/

```
ALLOWUSERCSA(YES)
SYNCSYNC                                    /*V1R13 Web deliverable ADD*/
TRAPS NAME ([trapname1,{trapname2}...])
IOSZDACMSG
```

IOSZDACMSG turns on diagnostic messages that the system writes | to the SYSLOG when HCD or HCM discovery and autoconfiguration processing | is used. These messages are helpful if you need to contact the IBM | Support Center for issues related to discovery and autoconfiguration. | When you specify the IOSZDACMSG, the diagnostic messages IOS532I | are written in SYSLOG.

4.1.3 IEASYSxx

```
CATALOG={aa }
          {(aa,bb,...)}                    /*V1R13 Web deliverable ADD*/
```

```
IXGCNF={aa }                                /*V1R13 Web deliverable ADD*/
```

```
LFAREA= {xM | xG | xT | x%}
          {[ 1M=(a [,b]) | 1M=(a% [,b%])] [,2G=(a [,b]) | ,2G=(a% [,b%])]}
          [,prompt | ,noprompt]            /*V1R13 Web deliverable ADD*/
```

```
PAGESCM={xxxxxxM }
          {xxxxxxG }
          {xxT }
          {ALL }
          {NONE }
          {0 }                              /*V1R13 Web deliverable ADD*/
```

```
WARNUND                                    /*V1R13 Web deliverable ADD*/
For example, you might reply:
R 0,WARNUND,SYSP=01,NEWPARM=VALUE
```

4.1.4 IECIOSxx

Parameter in IEASYSxx
IOS=xx

The two alphanumeric characters (xx) are appended to IECIOS to identify the IECIOSxx parmlib member. If the IOS parameter is not specified, the system uses defaults for MIH processing, defaults for hot I/O, and defaults for IOS CTRACE processing.

Use the RECOVERY statement to enable or disable certain IOS recovery options on a system. The following recovery options are available:

- Limited recovery time
- Path recovery

Statements/parameters for RECOVERY /*V1R13 Web deliverable CHANGE*/

PATH_SCOPE={CU|DEVICE}

Specifies whether the scope of the path recovery is for all devices attached to the control unit (CU) or on a device-by-device basis (DEVICE).

Default: DEVICE

PATH_INTERVAL=nn

Specifies the length of time to monitor for channel path errors in minutes. This keyword can only be used when PATH_SCOPE=CU is specified or when PATH_SCOPE=CU is the current value for the scope of the path recovery.

Value Range: 1-10 (minutes)

PATH_THRESHOLD=nnn

Specifies the minimum number of channel path-related errors that must occur every minute for the specified period of time (PATH_INTERVAL) before IOS takes action. This keyword can only be used when PATH_SCOPE=CU is specified or when PATH_SCOPE=CU is the current value for the scope of the path recovery.

Value Range: 1-100 (errors)

4.1.5 IGGCAT

Parameter in IEASYSxx:
CATALOG=xx

You must specify the current IGGCATxx member or members in the CATALOG=xx parameter in IEASYSxx parameter. The xx suffix can be any 2 alphanumeric characters or national characters (@, #, \$). The default is 00 (zeros).

Syntax format of IGGCATxx;

VVDSSPACE(primary,secondary)

NOTIFYEXTENT(percent)

TASKMAX(nn)

DELFORCEWNG(YES|NO)

DSNCHECK(YES|NO)

SYMREC(YES|NO)

UPDTFAIL(YES|NO)

VVRCHECK(YES|NO)

DELRECOVWNG(YES|NO)

EXTENDEDALIAS(YES|NO)

4.1.6 IXGCNFxx

Parameter in IEASYSxx:

IXGCNF={aa }
 {(aa,bb...)} /*V1R13 Web deliverable ADD*/

Syntax format of IXGCNFxx:

```
[ CTRACE(parmlib_member_name) ]  
[ MONITOR [ OFFLOAD [ WARNALLOC(initial-delay-interval) ]  
[ ACTIONALLOC(secondary-delay-interval)]  
[ WARNRECALL(initial-delay-interval) ]  
[ ACTIONRECALL(secondary-delay-interval) ]]]  
[ ZAI ]  
[ SERVER(NONE | host_name | IP_addr) ]  
[ PORT(port_num) ]  
[ LOGBUFMAX(value) ]  
[ LOGBUFWARN(nn) ]  
[ LOGBUFFULL(MSG|QUIESCE) ]
```

4.1.7 MPFLSTxx

Controlling verbose message production /*V1R13 Web deliverable ADD*/

Syntax for controlling the production of verbose messages

To control the production of verbose messages, MPFLSTxx recognizes one statement type
.MSGOPTION.

.MSGOPTION allows you to specify whether verbose messages are to be produced by the components
of your system.

The syntax of the .MSGOPTION statement is:

```
.MSGOPTION VERBOSE[(Y)]  
                          [(N)]
```

4.2 V1R13 Web Deliverable - Comments in Parmlib Members

APAR OA38328 for z/OS V1R12 above /*V1R13 Web deliverable CHANGE*/

In order to facilitate migration to z/OS 2.1 from the currently supported releases, z/OS 1.12 and z/OS 1.13 are enhanced for the following Parmlib Members:

**COMMNDxx, GTFPARM, IEAABD00, IEACMD00, IEADMP00
IEADMR00, IEAPAKxx, IEASYSxx, LPALSTxx, VATLSTxx**

Any line that has an asterisk in column 1 is considered a comment and is ignored. If you have such a comment in one of those parmliib members, do not use that member on a release earlier than z/OS 1.12.

4.3 V1R13 Web Deliverable - Errors in Initialization and Tuning

APAR OA42684 for z/OS V1R13 above /*V1R13 Web deliverable CHANGE */

IEAFIXxx VOLUME PARM NOT DOCUMENTED SHOULD BE SAME AS IEALPAXx MASTER
CATALOGING NOT REQUIRED WHEN USED.

IEAFIXxx for FLPA additions and IEALPAXx for MLPA additions are processed by the same module which has a single entry point and is called by only one NIP RIM. As such, it handles the same statement format for both IEAFIXxx and IEALPAXx. MVS Initialization and Tuning currently has two errors:

1. The optional VOLUME parm is missing from the Syntax Format section of IEAFIXxx. It should appear just like it is in IEALPAXx, namely:

```
INCLUDE      LIBRARY(data-set-name) [VOLUME(volser)]  
             MODULES(module-name, module-name,...)
```

2. Both IEALPAXx and IEAFIXxx state in the introductory paragraph to their respective sections:

In Statements/Parameters for IEALPAXx it correctly states the conditions under which cataloging in the system master catalog is NOT required:

A corresponding statement needs to be added to IEAFIXxx. The following statement which appears in the Statements/Parameters section in IEALPAXx needs to be added to the corresponding section of IEAFIXxx: "VOLUME is optional".

4.4 V1R13 Web Deliverable - Commands

Source: z/OS MVS System Commands Version 1, Release 13 SA22-7627-28

4.4.1 MODIFY Command

Controlling the CIM Server :

```
F [jobname,]APPL=CONFIG,{property='value'}  
                                {PLANNED}          /* V1R13 Web Deliverable ADD*/
```

Displaying the CEA component TSO/E address space information:

```
F CEA,DIAG,SESSTABLE           /* V1R13 Web Deliverable ADD*/
```

Managing common event adapter (CEA) REXX exec tracing

```
F CEA,DIAG,REXXDEBUG={ON | OFF | nnnnnnnn}/*V1R13 Web Deliverable ADD*/
```

Displaying the common event adapter (CEA) environment:

```
F CEA,DISPLAY|D[, {SUMMARY|S} ]  
                                [{PARMS|P} ]          /* V1R13 Web Deliverable CHANGE*/
```

Communicating with the Device Manager Address Space:

```
F DEVMAN,  
    {ENABLE(feature) }  
    {DISABLE(feature)}          /* V1R13 Web Deliverable CHANGE*/  
The supported features are named as follows:  
    REFUCB  
    PPRCSUM  
    QUERYFC:NUM
```

4.4.2 SETLOGR Command

```
SETLOGR CTRACE(parmlib_member_name)          /*V1R13 Web Deliverable ADD*/  
  
SETLOGR FORCE, {ZAIQUIESCE | ZAIQUI | ZAICONNECT | ZAICONN}  
              ,{LSN | LSNNAME}=LogStreamName | ALL } } /*V1R13 Web Deliverable CHANGE*/  
  
SETLOGR MONITOR,{OFFLOAD } { [,WARNALLOC(initial-delay-interval)] }  
                { [,ACTIONALLOC(secondary-delay-interval)] }  
                { [,WARNRECALL(initial-delay-interval)] }  
                { [,ACTIONRECALL(secondary-delay-interval)] } /*V1R13 Web Deliverable ADD*/  
  
SETLOGR ZAI,{SERVER(NONE | host_name) | IP_addr) }  
            {,PORT(port_num) }  
            {,LOGBUFMAX(value) }  
            {,LOGBUFWARN(nn) }  
            {,LOGBUFFULL(MSG|QUIESCE) }          /*V1R13 Web Deliverable ADD*/
```

4.4.3 SETXCF Command

Use the SETXCF DUMPCF command to request a Cf dump. The Cf dump request is sent from the system on which the command was issued.

```
SETXCF DUMPCF CFNAME=cfname[,TYPE=NONDISRUPTIVE|DISRUPTIVE][,UNCOND=NO|YES] }  
              {STRNAME=strname}          /*V1R13 Web deliverable ADD*/
```

5 V2R1 - MVS SYSTEM COMMANDS:

- z/OS MVS System Commands Version 1, Release 13 SA22-7627-27
- z/OS MVS System Commands Version 1, Release 13 SA22-7627-28
- z/OS MVS System Commands Version 2, Release 1 SA38-0666-00(April, June, 2013)

5.1 CONFIG Command:

CONFIG ONLINE,FORCE /*V2R1 ADD*/

Indicates that if the resource being configured online is a channel path, the system attempts to bring the channel path online even if it is offline due to switch port decommissioning or HMC repair and verify reasons.

CONFIG PFID /*V2R1 ADD*/

The system is to configure the specified list of PCIE function identifiers (PFID) online or offline.

5.2 CONTROL Command:

CONTROL V,DISPLAY CONSOLES /*V2R1 ADD*/
Characteristics of display consoles

CONTROL V,LOGON |LOGOFF /*V2R1 ADD*/
Console log on or log off

CONTROL V,RESET CN /*V2R1 ADD*/
Console reset

5.3 DISPLAY Command:

5.3.1 *Displaying console status information*

Use the DISPLAY CONSOLES command to display the status of all consoles or specified consoles in the sysplex, including HMCS and SMCS.

D CONSOLES,ACTIVE /*V2R1 CHANGE */
D CONSOLES,NACTIVE /*V2R1 CHANGE*/
D CONSOLES,SHAREMODE /*V2R1 CHANGE*/

CONSOLES *or* C

The system is to display console information in message CNZ4100I. Use LookAt or use the *MVS System Messages* books to see a description of the output.

ACTIVE *or* A *or* N

The system is to display the status of all active MCS, HMCS, SMCS and subsystem consoles. Consoles in standby mode are also displayed.

SHAREDMODE

Displays the status of all MCS, HMCS, SMCS and subsystem consoles that are available in console services shared mode. Use SHAREDMODE to display which consoles will continue to exist in console services shared mode.

5.3.2 *Displaying global resource serialization information*

D GRS,SYSTEM /*V2R1 CHANGE*/

SYSTEM *or* SYS = *sysname or **

The scope of the analysis, where *sysname* is a valid system name in the sysplex, 1-8 characters, following *sysname* rules. Use of an asterisk (*) for *SYSNAME* will be the equivalent of specifying the name of the system from which the display command is entered.

5.3.3 *Displaying Generic Tracker Information*

DISPLAY GTZ,STATUS Command /*V2R1 ADD*/

Use DISPLAY GTZ,STATUS to display an overview of the Generic Tracker's current status, currently recorded tracking data, and configuration settings.

{DISPLAY[D] GTZ[,STATUS][,L={*a|name|name-a*}]}

DISPLAY GTZ,TRACKDATA Command /*V2R1 ADD*/

Use DISPLAY GTZ,TRACKDATA to display details for all or a subset of currently recorded track data from previous GTZTRACK requests.

{DISPLAY[D] GTZ,TRACKDATA[,(*filter*)][,L={*a|name|name-a*}]}with *filter*:
[OWNER={*owner-filter-text**}]
{[,SOURCE{*source-filter-text**}]
|[,SOURCEPATH='sourcepat-filter-text']}
[,EVENTDESC={*event-description-filter-text**}]

```
[EVENTDATA={event-data-filter-value|*}]
[EVENTJOBNAME={event-jobname-filter-text|*}]
[EVENTASID={event-ASID-filter-value|*}]
{[,PROGRAM={program-filter-text|*}]
|[,PROGRAMPATH'programpath-filter-text']}
[,PROGRAMOFFSETprogram-offset-filter-value|*}]
[HOMEJOBNAME={home-jobname-filter-text|*}]
[HOMEASID={home-ASID-filter-value|*}]
```

DISPLAY GTZ,EXCLUDE Command /*V2R1 ADD*/

Use DISPLAY GTZ,EXCLUDE to display details for all currently active EXCLUDE statements that have been specified by the SETGTZ EXCLUDE Command or by corresponding GTZPRMxx parmlib member statements.

```
{[DISPLAY|D] GTZ,EXCLUDE[,L={a|name|name-a}]
```

DISPLAY GTZ,DEBUG Command /*V2R1 ADD*/

Use DISPLAY GTZ,DEBUG to display details for all currently active DEBUG statements that have been specified by the SETGTZ DEBUG Command or corresponding GTZPRMxx parmlib member statements.

```
{[DISPLAY|D] GTZ,DEBUG[,L={a|name|name-a}]
```

5.3.4 Displaying hardware event data collection status

D HIS[,L=a|name|name-a] /*V2R1 CHANGE*/

Use the DISPLAY HIS command to display the results of the latest HIS Profiler run initiated by an F *hisproc*,BEGIN command. Hardware event data collection is performed by hardware instrumentation services (HIS), which collects hardware event data for processors in SMF records type 113, subtypes 1 and 2, and some of the z/OS UNIX System Services output files. The DISPLAY HIS command is also used to display statistics on the exploiters of the HISSERV service. The HISSERV service allows authorized programs to collect hardware instrumentation data. The amount of time each exploiter takes to collect the data is recorded by the service, and displayed here to aid in problem determination should a performance degradation occur.

Note that the results displayed by the D HIS command in system message HIS015I message will only be as current as the last time you initiated a hardware event data collection run with the F *hisproc*,BEGIN command. The displaying of statistical information, as well as any service parameters, are displayed as long as the HISSERV service is active.

5.3.5 Displaying Basic HyperSwap Information

```
D HS,{STATUS}
{CONFIG[(DETAIL[,ALL])|EXCEPTION[,ALL]]}      /*V2R1 CHANGE */
```

5.3.6 Displaying system activity

```
D {TS}{[, {LIST|L}]  
[, {ALL|A}]  
[, {jobname[.identifier] | (jobname)}]  
[, L={a|name|name-a}]
```

/*V2R1 CHANGE */

5.3.7 Displaying z/OS UNIX System Services Status

```
D OMVS,PIPES|[,ALL]|[,RESET]|[, {UID|U}=uid]
```

/*V2R1 CHANGE*/

PIPES:

Displays summary information about the z/OS UNIX pipe usage. The default output is to list the two UIDs with the highest pipe create count. If ALL is specified, then all UIDs with a pipe create count are displayed. Use the RESET option to reset the user HIGHWATER USAGE and the HIGHWATER USER information and display the two UIDs with the highest pipe create count.

ALL:

Displays all UIDs with a pipe create count.

RESET:

Resets the HIGHWATER USER information and displays the two UIDs with the highest pipe create count.

UID=uid:

Displays the current pipe usage for the high-use processes for the specified UID. At most, the top 10 high-use processes are displayed.

```
D OMVS, STORAGE or ST
```

/*V2R1 CHANGE */

Displays storage usage information for the z/OS UNIX System Services kernel address space. The display includes a summary of system-wide kernel stack cell pool cell usage, a list of processes using 50 or more stack cells, and private below the bar storage usage.

5.3.8 Displaying PCIE information

```
D PCIE{[ ]} {[,DD ]} {[,PFID=pfid]}
```

/*V2R1 ADD*/

Use the DISPLAY PCIE Command to display:

- All registered device drivers (with assigned printable names).
- All available or in-use PCIe functions and their associated device types.
- Information on a specific PCIe device with a list of the client ADDRESS spaces using the device.

5.3.9 Displaying PPT information

```
D PPT                                     /* V2R1 ADD */
{DISPLAY} PPT [{,ALL }
{ D } {,PARMLIB | PARM } {,DEFAULT | DEF } {,NAME=pattern } [L={a|name|name-a}]
```

5.3.10 Displaying the status of the TRACKDIRLOAD option

```
D PROG,TRACKDIRLOAD [L={a|name|name-a}]]    /*V2R1 ADD*/
```

Use the DISPLAY PROG,TRACKDIRLOAD Command to display the status of the TRACKDIRLOAD option. In response, message CSV567I is displayed.

5.3.11 Displaying SLIP Trap information

```
D SLIP[=xxxx][L={a|name|name-a}][PER][ENIPT]    /*V2R1 CHANGE */
```

Use the DISPLAY SLIP Command to display information about SLIP traps.

5.3.12 Displaying Virtual Storage Information

```
D {VIRTSTOR|VS},{HVSHARE|HVCCOMMON|LFAREA}
  [L={a|name|name-a}]                        /*V2R1 CHANGE */
```

Use the DISPLAY VIRTSTOR Command to identify the virtual storage configuration.

IF DISPLAY VIRTSTOR,LFAREA is specified:

- Source of LFAREA parameter can be a parmlib member, operator-supplied or the default.
- The size of the LFAREA in megabytes, in decimal.
- The amount of LFAREA that is available in megabytes, in decimal.
- The amount of LFAREA that is allocated in megabytes, in decimal, on behalf of 1 MB-page requests.
- The amount of LFAREA that is allocated in megabytes, in decimal, on behalf of 4 KB-page requests.
- The amount of LFAREA that is allocated in megabytes, in decimal, on behalf of pageable 1 MB-page requests.
- The high water mark for the amount of LFAREA that is allocated in megabytes, in decimal, on behalf of 1 MB-page requests.
- The high water mark for the amount of LFAREA that is allocated in megabytes, in decimal, on behalf of 4 KB-page requests.
- The high water mark for the amount of LFAREA that is allocated in megabytes, in decimal, on behalf of pageable 1 MB-page requests.

5.3.13 Displaying XCF information

```
D XCF,
  [{STRUCTURE|STR}
  [,ALTER={DISABLED|ENABLED}] ]
  [{STRNAME|STRNM}={{(strname[,strname]...)|ALL}}]
  [{CONNNAME|CONNM}={{(conname[,conname]...)|ALL}}]
  [{STATUS|STAT}={([ALLOCATED] [,NOTALLOCATED]
  [,DUPMISMATCH] [,LOSSCONN]
  [,RBPROC] [,RBPEND]
  [,DUPENAB] [,DUPALLOW]
  [,DUPMISMATCH] [,LOSSCONN]
  [,RBPROC] [,RBPEND]
  [,POLICYCHANGE] [,DEALLOCPPENDING]
  [,LARGERCFRMDS] [,REBUILD] [,STRDUMP]
  [,ALTER] [,FPCONN] [,NOCONN] [,DUPREBUILD])}]
```

STATUS= *or* STAT=*state* (*s*)

Requests that the system display only structure information for coupling facility structures having at least one of the specified states. *state* specifies the status of a coupling facility structure for which information is requested and may be any of the following:

ALLOCATED *or* **ALLOC**

Coupling facility structure is allocated in a coupling facility.

DUPMISMATCH

A coupling facility structure with a duplexed state (duplex or simplex) that does not match the CFRM policy specification.

LOSSCONN /*V2R1 ADD*/

Use of a coupling facility structure by an active connection is inhibited due to a loss of connectivity between a system and a coupling facility. The "LOSSCONN RECOVERY IN PROGRESS." text in messages IXC359I and IXC360I appears only when there is a structure in this state. A structure in this state can cause CFRM to defer the following actions: policy-initiated start duplexing; policy-initiated stop duplexing; continue REALLOCATE process; and continue POPULATECF process.

RBPEND

D XCF,RBPEND /*V2R1 ADD*/

There is a pending structure rebuild for a rebuild to populate a coupling facility (POPULATECF), or a REALLOCATE evaluation is pending for the structure. A structure in this state can cause CFRM to defer the following actions: policy-initiated start duplexing; policy-initiated stop duplexing. A

structure in this state can remain in this state until there are no structures with a state of LOSSCONN (see description above).

5.4 MODIFY Command:

F [jobname.]identifier,APPL=text /*V2R1 CHANGE*/

Passing Information to a z/OS UNIX System Services Application

```
F hisproc,{BEGIN | B} /*V2R1 CHANGE*/
  [{CTRSET | CTR}={COMPLETE |
    SOFTWARE |
    HARDWARE |
    (ctr1,ctr2,...ctrn)}]
  [{DDNAME | DD}=ddname]
  [{CTRONLY | MAPONLY}]
  [{MAPVERBOSE | MAPV}]
  [{BUFCNT | BUF}={bufcnt | PERSIST}]
  [{SAMPFREQ | SF}=freq | PERSIST]
  [{SAMPTYPE | ST}=samptype | PERSIST | NONE]
{END | E}
{SERVICE | S}
  [ [{DDNAME | DD}=ddname]
  [{BUFCNT | BUF}={bufcnt | PERSIST}]
  [{SAMPFREQ | SF}=freq | PERSIST]
  [{SAMPTYPE | ST}=samptype | PERSIST | NONE] ]
  [{REFRESH | REFR}]
```

MODIFY JES3, CHK | INT=n /*V2R1 ADD*/

5.5 SET Command:

SET [CON={{xx,[xx]...}}] /*V2R1 ADD*/

The two alphanumeric characters indicating the CONSOLxx parmlib member that defines the installation's console configuration. The supported values for xx are uppercase letters A-Z, numerals 0-9, and national characters including #,@ and \$.

SET GTZ={{xx,[xx]...}} /*V2R1 ADD*/

The two alphanumeric (A-Z,0-9) or national (@,#,\$) characters that specify one or more GTZPRMxx parmlib members.

5.5.1 SETALLOC Command

UNITAFF={name|SYSTEMDEFAULT} /*V2R1 CHANGE*/

SETALLOC SYSTEM, ,BATCH_RCLMIGDS=SERIAL|PARALLEL /*V2R1 ADD*/

SERIAL

Indicates the system will allow the CATALOG LOCATE function to recall data sets on its behalf, resulting in serial recall processing.

PARALLEL

Indicates the system will note which data sets are migrated and recall them in parallel, potentially reducing job execution time.

5.5.2 SETCON Command

SETCON {TRACKING|TR}={ON|OFF|ONWITHABEND} /*V2R1 REMOVED*/

TRACKING or TR

The system is to make changes to the tracking facility. The tracking facility records instances of the event being tracked.

SETCON {DELETE,CN=nnnnnnnn} /*V2R1 ADD*/

DELETE, CN=nnnnnnnn

Deletes the definition of the specified console from the system. The console name nnnnnnnn and all resources that are associated with it will be freed and removed from the system.

5.5.3 SETGTZ Command

SETGTZ TRACKING Command /*V2R1 ADD*/

Use the SETGTZ TRACKING Command to enable or disable tracking for the Generic Tracker. The Generic starts with TRACKING initially disabled (OFF).

SETGTZ TRACKING={ON | OFF}

SETGTZ CLEAR Command /*V2R1 ADD*/

Use the SETGTZ CLEAR Command to remove and reset assorted tracking facility data, settings, and statistics.

SETGTZ CLEAR={TRACKDATA | EXCLUDE | DEBUG | ALL}

SETGTZ EXCLUDE Command /*V2R1 ADD*/

A Brief Look at What's Coming in V2R1

Use the SETGTZ EXCLUDE to ADD an EXCLUDE statement to the facility. The EXCLUDE statement consists of a filter for tracked instances. Any future GTZTRACK request with data matching the filter will not be recorded and any matching recorded tracked instances will be cleared from the facility.

SETGTZ DEBUG Command

*/*V2R1 ADD*/*

Use the SETGTZ DEBUG Command to ADD a DEBUG statement to the facility. DEBUG statements are intended as diagnostic aid to further debug certain tracked instance occurrences.

SETGTZ DEBUG=(ACTION={ABEND | DUMP},REASON=*usrrsn*,{LIMIT=*actionlimit* | NOLIMIT},*filter*)

SETGTZ DIAGNOSE Command

*/*V2R1 ADD*/*

Use the SETGTZ DIAGNOSE Command only as directed and requested by IBM Service personnel to aid in collecting diagnostic information.

SETGTZ DIAGNOSE=*diagvalue*

SET GTZ Command

*/*V2R1 ADD*/*

Use the SET GTZ operator Command to ADD configuration settings to the Generic Tracker via the identified GTZPRMxx parmlib members.

{SET | T} GTZ={xx | (xx,...,zz)}

5.5.4 *SETHS Command*

SETHS UNFENCE

*/*V2R1 ADD*/*

Unconditionally remove the soft fence condition for all DASD devices.

5.5.5 *SETIOS Command*

RECOVERY,DCCF={MESSAGE *or* WAIT_STATE}

*/*V2R1 ADD*/*

MESSAGE

DCCF will be invoked to issue the IOS115A WTOR.

WAIT_STATE

Non-restartable wait state X'140' will be loaded.

5.5.6 *SETLOAD Command*

SETLOAD xx,{PARMLIB|IEASYM

*/*IEASYM V2R1 ADD*/*

Specifies that the system is to process the static system symbol definitions identified by the IEASYM statement of the LOADxx parmlib member located by the parmlib concatenation or by the optional dsname and volume specifications according to the filter parameters

(HNAME, LPARNAME, VMUSERID).

5.5.7 SETLOGR Command

SETLOGR MONITOR,LSPRIMARY /*V2R1 ADD*/

Specify the system options related to log stream primary storage alerts and monitoring.

SETLOGR MONITOR,CONSUMPTIONALERT(ALLOW|SUPPRESS) /*V2R1 ADD*/

Specifies whether log streams defined with WARNPRIMARY(YES) will issue log stream primary storage consumption alert messages on this system when the imminent threshold is exceeded or an entry threshold occurs, or for any log stream when a primary storage full consumption point is reached.

5.5.8 SETOMVS Command

AUTOCTV=ALL|ON|OFF /*V2R1 ADD*/

Enables Unicode Services conversion (ALL), Enhanced ASCII conversion (ON), or disables coded character set conversion for the z/OS UNIX environment (OFF).

MAXIOBUFUSER=maxiobufsize /*V2R1 ADD*/

Specifies the maximum amount in MB of persistent I/O virtual storage that z/OS UNIX obtains on behalf of a user when a process is performing I/O in a Unicode Services conversion environment is in effect; that is, when AUTOCTV(ALL) was specified.

5.5.9 SETPROG Command

SETPROG TRACKDIRLOAD|NOTRACKDIRLOAD /*V2R1 ADD*/

Use the SETPROG TRACKDIRLOAD Command to enable system-wide tracking of directed load modules.

5.5.10 SETSMS Command

PS_EXT_VERSION(1|2) /*V2R1 ADD*/

The SETSMS Command changes the value of this option in the IGDSSIVT but has no effect on the value in the IGDSMSxx member. Consequently any action that requires the IGDSMSxx member to be processed will cause this option to be reset to the value specified in IGDSMSxx.

5.5.11 SETUNI Command

```
ADD,BLDLOCALE|BLDLOC=locname[,CCSID(nnnnn)][,TECHNIQUE|TECH(zzzzzzzz)]  
[,PAGEFIX(YES|No)][,DSNAME|DSN(dsname)][,VOLSER|VOL(volser)]] /*V2R1 ADD*/
```

ADDs locales to the Unicode environment.

```
DELETE,BLDLOCALE|BLDLOC=locname[,CCSID(nnnnn)][,TECHNIQUE|TECH(zzzzzzzz)]
```

Deletes locales from the Unicode environment. /*V2R1 ADD*/

```
REPLACE,BLDLOCALE|BLDLOC=locname[,CCSID(nnnnn)][,TECHNIQUE|TECH(zzzzzzzz)]  
[,PAGEFIX(YES|No)][,DSNAME|DSN(dsname)][,VOLSER|VOL(volser)]] /*V2R1 ADD*/
```

Replaces locales in the Unicode environment.

5.6 SLIP Command:

```
SLIP SET,TXIGD | NOTXIGD /*V2R1 ADD*/
```

Transactional Execution Ignore Data. Specifies that if there is a DATA filter, the filter is not to be applied if the event occurred during transactional execution.

```
SLIP MOD{,ENABLE | ,DISABLE}{,ALL | ,ID=trapid}{,TXIGD | NOTXIGD} /*V2R1 ADD*/
```

Use the SLIP MOD command to modify an existing SLIP trap.

5.7 START Command:

```
START JOBACCT=acct_info /*V2R1 CHANGE*/
```

The length of acct_info cannot exceed 55 characters.

```
S hisproc /*V2R1 CHANGE*/
```

The name of the HIS catalogued startup procedure. You can use the HISmember in PROCLIB as your hisproc procedure.

```
S LLA[,SUB=MSTR][,REUSASID=YES][,LLA=xx] /*V2R1 CHANGE*/
```

Indicates which CSVLLAnn parmlib member LLA is to use. If you do not supply a CSVLLAxx member by the LLA=xx parameter of the LLA procedure on the first starting of LLA for this IPL, or if you specify

a parameter of LLA=NONE, LLA will, by default, manage only the libraries that are accessed through the LNKST concatenation.

5.8 VARY Command:

V CN, STANDBY,SUPSBY=Y|N /*V2R1 ADD*/

STANDBY

Deactivates an MCS or HMCS console and places the device in standby mode. VARY CN(...),STANDBY is sysplex-wide in scope, and does not have to be issued from the system where the console is active. If the MCS console is offline, STANDBY will attempt to bring the device online and place it in standby. If you specify STANDBY, no other operands are accepted. STANDBY is not accepted for SMCS consoles, the system console, EMCS consoles, printer consoles, subsystem consoles or consoles in status display (SD) or message stream (MS) mode.

SUPSBY Y|N

Specifies if the specified console can be placed in standby mode:

Y - The specified console can enter standby mode.

N - The specified console should not enter standby mode.

If the console is currently in standby mode, the command is rejected. SUPSBY is not accepted for SMCS consoles, the system console, EMCS consoles, printer consoles, subsystem consoles or consoles in status display (SD) or message stream (MS) mode.

5.9 CONTROL Console Commands Compared with CONSOLxx Parms?

Comparison of System Commands and CONSOLE Parameters in CONSOLxx

MVS Commands	CONSOLE Parameters with DEFAULT	Characteristic that the Parameter Affects
CONTROL V,DISPLAY CONSOLES	DISPLAY CONSOLES	Characteristics of display consoles
CONTROL V,LOGON LOGOFF	LOGOFF LOGON	Console log on or log off
CONTROL V,RESET CN	RESET CN(console name)	Console reset

5.10 Authority is needed to utilize MVS System Commands

MVS Commands, RACF Access Authorities, and Resource Names

Command/Keyword	Authority	Resource-Name
CMD5 FORCE	CONTROL	MVS.CMD5.FORCE
DISPLAY GTZ	READ	MVS.DISPLAY.GTZ
DISPLAY OMVS	READ	MVS.DISPLAY.OMVS
DISPLAY PCIE	READ	MVS.DISPLAY.PCIE
DISPLAY PPT	READ	MVS.DISPLAY.PPT
FORCE device,TCB=tcbaddr	CONTROL	MVS.FORCETCB.DEV.device
FORCE jobname,TCB=tcbaddr	CONTROL	MVS.FORCETCB.JOB.jobname
FORCE [jobname.]identifier.TCB=tcbaddr	CONTROL	MVS.FORCETCB.STC.mbrname.id
F ORCE jobname,TCB=tcbaddr	CONTROL	MVS.FORCETCB.STC.mbrname.jobname
FORCE U=userid.TCB=tcbaddr	CONTROL	MVS.FORCETCB.STC.mbrname.jobname
SET CON	UPDATE	MVS.SET.CON
SET GTZ	UPDATE	MVS..GTZ
SETCON DELETE	UPDATE	MVS.SETCON.DELETE
SETGRS	UPDATE	MVS.SETGRS.AUTHQLVL
SETLOAD xx,IEASYM	UPDATE	MVS.SETLOAD.IEASYM
SETLOAD xx,PARMLIB	UPDATE	MVS.SETLOAD.LOAD
VARY CN(...),STANDBY	CONTROL	MVSVARYSTANDBY.CN

6 TCPIP PROFILE:

6.1 GATEWAY STATEMENT /*V2R1 REMOVED*/

Replace GATEWAY statements with BEGINROUTES statements

As of z/OS V2R1 support for the GATEWAY statement in the TCP/IP profile is eliminated.

The BEGINROUTES/ENDROUTES statement block was introduced in z/OS V1R1

Communications Server and replaces the GATEWAY profile statement for configuration of static routes.

IBM Health Checker for z/OS GATEWAY statement check

A new z/OS Health Checker for z/OS migration health check is provided to help determine whether you are using the GATEWAY configuration statement in your TCP/IP profile. Support for the GATEWAY statement will be removed in a future z/OS release. If the GATEWAY statement is processed, a warning message EZZ0717I is issued.

See z/OS Introduction and Release Guide *Version 2 Release 1* GA32-0887-00

6.2 GLOBALCONFIG STATEMENT /*V2R1 ADD*/

SMCR | NOSMCR

Specifies whether this stack uses Shared Memory Communications via Remote Direct Memory Access (RDMA), or SMC-R, for external data network communication. For more information about SMC-R, see Shared Memory Communications via Remote Direct Memory Access in z/OS Communications Server: IP Configuration Guide.

The SMCR parameter is defined to enable and configure Shared Memory Communications over Remote Direct Memory Access (SMC-R) function. The SMCR parameter includes the PFID, PORTNUM, MTU, FIXEDMEMORY, and TCPKEEPMININTERVAL sub-parameters. The NOSMCR parameter is defined to disable SMC-R function.

6.3 INTERFACE IPAQIDIO /*V2R1 ADD*/

Use the INTERFACE statement for IPAQIDIO to configure IPv4 HiperSockets connectivity. Use the CHPID parameter to specify the value of the desired IQD CHPID that was configured within HCD. HiperSockets interfaces do not require a corresponding TRLE definition. Instead, the TRLE is dynamically built when the interface is started.

6.4 INTERFACE VIRTUAL /*V2R1 ADD*/

Use the INTERFACE statement to specify a static virtual interface. You can define multiple virtual IPv4 ADDresses on one TCP/IP image by specifying multiple VIRTUAL INTERFACE statements.

6.5 INTERFACE IPAQENET /*V2R1 ADD*/

TEMPIP

Specifies that the interface starts with an IP address of 0.0.0.0. The interface can be used for broadcast traffic. This parameter applies only to interfaces that are defined with CHPIDTYPE OSD.

SMCR | NOSMCR

Specifies whether this interface can be used with Shared Memory Communications via Remote Direct Memory Access (SMC-R) for external data network communications.

6.6 INTERFACE IPAQENET6 /*V2R1 ADD*/

SMCR | NOSMCR

Specifies whether this interface can be used with Shared Memory Communications via Remote Direct Memory Access (SMC-R) for external data network communications.

NOSMCR

Specifies that this interface cannot be used with SMC-R for external data network communications.

SMCR

Specifies that this interface can be used with SMC-R for external data network communications. This is the default setting.

6.7 IPCONFIG DYNAMICXCF STATEMENT /*V2R1 ADD*/

SOURCEVIPAINTERFACE *vipa_name*

The SOURCEVIPAINTERFACE parameter is optional. This parameter specifies which static VIPA interface is to be used as the source IP address when IPCONFIG SOURCEVIPA is specified and outbound packets are sent over the dynamically generated XCF, Same Host, or HiperSockets interfaces. The *vipa_name* value is the interface name for a VIRTUAL interface.

6.8 NETACCESS STATEMENT /*V2R1 ADD*/

CACHEALL

Specifies that when a SAF call is made to check a user's access to a security zone, the result is cached regardless of whether access is permitted or denied. Subsequent checks of the user's access to the security zone are resolved using the cached results. This is the default value.

CACHEPERMIT

Specifies that when a SAF call is made to check a user's access to a security zone, the result is cached when access is permitted, but not when access is denied. Subsequent checks of the user's access to a permitted security zone are resolved using the cached results. Subsequent checks of the user's access to a denied security zone are resolved by another SAF call.

CACHESAME

Specifies that when a SAF call is made to check the access of a user to a security zone, the result is cached when access is permitted, but not when access is denied.

6.9 NETMONITOR STATEMENT /*V2R1 ADD*/

PROFILE | NOPROFILE

Controls the creation of the real-time TCP/IP stack and TN3270 Telnet server (Telnet) profile SMF records.

PROFILE

Specifies that the real-time TCP/IP stack profile SMF records (subtype 4) and TN3270 Telnet profile SMF records (subtype 24) must be created and provided on the real-time SMF NMI service.

NOPROFILE

Specifies that the real-time TCP/IP stack profile SMF records and TN3270 Telnet SMF records must not be created.

6.10 PORT STATEMENT /*V2R1 ADD*/

NOSMCR

Indicates that Shared Memory Communications via Remote Direct Memory Access (SMC-R) communications are not permitted for TCP connections by using this port.

6.11 PORTRANGE STATEMENT /*V2R1 ADD*/

NOSMCR

Indicates that Shared Memory Communications via Remote Direct Memory Access (SMC-R) communications are not permitted for TCP connections by using any port in this range.

6.12 SMFCONFIG STATEMENT /*V2R1 ADD*/

SMCRGROUPStatistics | NOSMCRGROUPStatistics

NOSMCRGROUPStatistics

Requests that SMF type 119 records of subtype 41 are not created. This operand is valid if the current record type setting is TYPE119. This is the default value.

SMCRGROUPStatistics

Requests that SMF type 119 records of subtype 41 containing statistics related to SMC-R link groups are created. These records are created periodically based on the SMF interval in effect. This operand is valid if the current record type setting is TYPE119.

SMCRLINKEvent | NOSMCRLINKEvent

NOSMCRLINKEvent

Requests that SMF type 119 records of subtype 42 and 43 are not created. This operand is valid if the current record type setting is TYPE119. This is the default value.

SMCRLINKEvent

Requests that SMF type 119 records of subtype 42 and 43 are created. The SMF records of subtype 42 are created when SMC-R links are started, and the SMF records of subtype 43 are created when SMC-R links are ended. This operand is valid if the current record type setting is TYPE119.

6.13 SOMAXCONN STATEMENT /*V2R1 CHANGE*/

`maximum_queue_depth`

The maximum number of pending connection requests queued for any listening socket. The minimum value is 1, the maximum value is 2147483647, and the default value is 1024, not 10.

6.14 TCPCONFIG -13 New Parameters /*V2R1 ADD*/

6.14.1 `CONNECTINITINTERVAL` *milliseconds*

The initial retransmission interval in milliseconds. The range is 100 - 3000. The default is 3000.

6.14.2 `CONNECTTIMEOUT` *seconds*

The total number of seconds before the initial connection times out. The range is 5 - 190. The default is 190.

6.14.3 `EPHEMERALPORTS` *low_port high_port*

Indicates the range of ephemeral ports that are to be assigned at bind time. The default ephemeral port range is 1024 - 65535.

6.14.4 `FRRTHRESHOLD` *acks*

The threshold of duplicate ACKs for FRR to engage. The range is 1 - 2048. The default is 3.

6.14.5 `KEEPALIVEPROBEINTERVAL` *seconds*

The interval in seconds between keepalive probes. The range is 1 - 75.

6.14.6 `KEEPALIVEPROBES` *number*

The number of keepalive probes before the connection is aborted. The range is 1 - 10. The default is 10.

6.14.7 `MAXIMUMRETRANSMITTIME` *seconds*

The maximum retransmit interval in seconds. The range is 0 - 999990. The default is 120.

6.14.8 `NAGLE` | `NONAGLE`

`NAGLE P` - Specifies that the Nagle algorithm is enabled. This is default.

`DONAGLE` - Specifies that the Nagle algorithm is disabled

6.14.9 `QUEUEDRTT` *milliseconds*

The threshold at which the outbound serialization is engaged. The range is 0 - 50 milliseconds. The default value is 20 milliseconds.

6.14.10 *RETRANSMITATTEMPTS times*

The number of times that a segment is retransmitted before the connection is aborted. The range is 0 - 15. The default value is 15.

6.14.11 *SELECTIVEACK | NOSELECTIVEACK*

SELECTIVEACK - Enables the exchange of selective acknowledgements with partners that support the Selective Acknowledgement (SACK) option as defined by RFC 2018.

NOSELECTIVEACK - Disables the exchange of selective acknowledgements during connection setup and also during the entire life of the connection.

6.14.12 *TCPMAXSENDBUFRSIZE tcp_max_send_buffer_size*

The maximum send buffer size. The range is tcp_send_buffer_size - 2 MB, where tcp_send_buffer_size is the value specified on the TCPSENDBUFRSIZE parameter. The default value is 256K (262144).

6.14.13 *TIMEWAITINTERVAL seconds*

The number of seconds that a connection will remain in the TIMEWAIT state. The range is 0 - 120. The default is 60.

6.15 *UDPCONFIG STATEMENT /*V2R1 ADD*/*

EPHEMERALPORTS low_port high_port

Indicates the range of ephemeral ports that are to be assigned at bind time. The default ephemeral port range is 1024 - 65535.

low_port

The starting port for the range of ports. The *low_port* value is in the range 1024 - 65535.

high_port

The ending port for the range of ports. The *high_port* value is in the range 1024 - 65535, and must be greater than or equal to the *low_port* value.

7 TN3270E TELNET:

7.1 MAXTCPSSENDQ parameter /*V2R1 Add*/

MAXTCPSSENDQ statement

Use the MAXTCPSSENDQ parameter statement to limit the number of bytes that are queued to be sent to a Telnet client. If the queue size exceeds the limit, the connection is dropped. This parameter prevents large amounts of storage from being held for data that is destined for an unresponsive Telnet client.

8 TCPIP DATA and Resolver:

8.1 GLOBALTCPIPDATA /*V2R1 removed*/

Resolver initialization resiliency

The system resolver starts regardless of the following conditions:

- A. The resolver detects one or more errors with the statements in the resolver setup file.
- B. The resolver setup file does not exist or cannot be accessed by the resolver.
- C. One or more files that are specified as values on the resolver setup statements, such as GLOBALTCPIPDATA, do not exist or cannot be accessed by the resolver.

9 FTP:

9.1 CLIENTEXIT (FTP client) statement /*V2R1 ADD*/

Use the CLIENTEXIT statement to specify whether the FTP client exits with a nonzero MVS return code for certain FTP errors. Parameters:

- FALSE - FTP client does not exit with a nonzero MVS return code when certain errors occur. Result: Starting the FTP client with the EXIT parameter can override CLIENTEXIT FALSE.
- TRUE - FTP client exits with a nonzero MVS return code when certain errors occur.

9.2 DSWAITTIMEREPLY (FTP server) statement /*V2R1 ADD*/

Use the DSWAITTIMEREPLY statement to specify how often to send the following reply message to the client while the FTP server is waiting for access to an MVS data set.

Parameters:

The number of seconds between reply messages that the server sends to the client while it is waiting for access to an MVS data set. The valid range is 15 - 60. The default value is 60.

9.3 LISTLEVEL (FTP server) statement /*V2R1 ADD*/

Use the LISTLEVEL statement to specify the format of the LIST reply.

Parameters:

0 - Specifies that PDS, PDSE and HFS data sets are displayed with a DSORG value of PO.

1 - Specifies that PDS data sets are displayed with a DSORG value of PO, PDSE data sets are displayed with a DSORG value of PO-E, and HFS data sets are displayed with a DSORG value of HFS.

9.4 TAPEREADSTREAM (FTP server) statement /*V2R1 ADD*/

Use the TAPEREADSTREAM statement to specify whether to use a more efficient read path (read as stream) to retrieve tape data sets from the server.

Parameters:

FALSE - Use a common read path for tape data sets. This is the default value.

TRUE - Use a more efficient read path for tape data sets.

10 VTAM:

10.1 DYNADJCP start option /*V2R1 ADD*/

DYNADJCP=NO
DYNADJCP=YES

Restriction: If an HPR pipe is to be brought up, the DYNADJCP option will be ignored.

10.2 MULTIPATH start option /*V2R1 ADD*/

MULTIPATH=NO

Disables multipath routing support for EE connections regardless of the TCP/IP profile IPCONFIG MULTIPATH or IPCONFIG6 MULTIPATH setting in a TCP/IP stack.

MULTIPATH=TCPVALUE

Indicates that VTAM accepts the TCP/IP stack (the stack that is associated with EE) setting to control multipath routing for EE connections. The multipath routing control in a TCP/IP stack is determined by the TCP/IP profile IPCONFIG MULTIPATH or the IPCONFIG6 MULTIPATH setting.

10.3 NACPROBE start option /*V2R1 ADD*/

MNACPROBE=NODUMP/DUMP/*Number_of_minutes*

Specifies whether VTAM takes a FEST probe dump when VTAM does not complete the CLOSE ACB processing for an application in a timely manner.

10.4 PSRETRY start option /*V2R1 ADD*/

Changed to accept a new IMMED operand value to trigger immediate path switch attempts when a TG is activated or changes status.

If you have the PSRETRY start option specified, the following Commands will cause all RTP pipes to path switch, regardless of the PSWEIGHT.

Start option value:

The MODIFY

procname,TGP,TGPNAME=tg_profile,ID=adjacent_node,TGN=tgn Command that changes the TG characteristics for a TG.

A MODIFY

procname,TOPO,FUNCTION=quiesce_normal,ORIG=origin_node,DEST=dest_node,TGN=tg Command that changes a TG from QUIESCE to NORMAL or from NORMAL to QUIESCE.

10.5 PSWEIGHT start option /*V2R1 ADD*/

PSWEIGHT=EQUAL

PSWEIGHT=LESSTHAN

PSWEIGHT=SAMEROUT

If you have the PSRETRY start option specified, the following Commands will cause all RTP pipes to path switch, regardless of the PSWEIGHT.

Start option value:

The MODIFY

procname,TGP,TGPNAME=tg_profile,ID=adjacent_node,TGN=tgn Command that changes the TG characteristics for a TG.

A MODIFY

procname,TOPO,FUNCTION=quiesce_normal,ORIG=origin_node,DEST=dest_node,TGN=tg Command that changes a TG from QUIESCE to NORMAL or from NORMAL to QUIESCE.

10.6 CSDUMP start option /*V2R1 ADD*/

Changed to accept a new value RNICTRLE as part of a message trigger.

RNICTRLE=RNIC_TRLEName

Specifies that a diagnostic dump of the Remote Direct Memory Access (RDMA) Network Interface Card (RNIC) adapter that is associated with *RNIC_TRLEName* is taken. The RNICTRLE operand can be used only with the MESSAGE operand.

10.7 IPADDR start option /*V2R1 CHANGE*/

Changed to accept an IPv6 address or an IPv4 address.

10.8 GROUP definition statements /*V2R1 CHANGE*/

In an Enterprise Extender (EE) XCA major node (MEDIUM=HPRIP), the IPADDR parameter is changed to accept an IPv6 address or an IPv4 address.

11 JES2:

11.1 CKPTDEF STATEMENT

`INUSE=Yes|No /*V2R1 CHANGE*/`

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

11.2 INTRDR STATEMENT

`Class=class /*V2R1 CHANGE*/`

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. 1-8 character job

11.3 CKPTSPACE STATEMENT

`CKPTSPACE - Checkpoint space definition /*V2R1 CHANGE*/`

`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.

11.4 DEUG STATEMENT

`MEMBER_STATUS=Yes|No /*V2R1 ADD*/`

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

11.5 INIT STATEMENT

`Class=classlist|class,class /*V2R1 CHANGE*/`

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).

11.6 JOBCLASS STATEMENT

`JOBCLASS(class) /*V2R1 CHANGE*/`

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

`ACTIVE=[Yes|No] Parameter /*V2R1 New*/`

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.

`DSENQSHR{=ALLOW|AUTO|DISALLOW} Parameter /*V2R1 New*/`

Indicates how the system will treat changes in data set disposition between job steps.

`SYSSYM[=ALLOW|DISALLOW] /*V2R1 New*/`

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.

`GROUP=name Parameter /*V2R1 New*/`

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.

11.7 JOBDEF STATEMENT

CISUB_PER_AS=nn | 5 /*V2R1 New*/

Specifies the *nn* number of converter/interpreter subtasks (1-25) that are run in each of the *jesxC1xx* 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).

CNVT_SCHENV=HONOR | IGNORE /*V2R1 New*/

Specifies whether the availability of a scheduling environment that is associated with a job controls which member a job converts on.

INTERPRET=INIT | JES

Specifies when JES2 calls the MVS interpreter to process a job.

11.8 NETSERV STATEMENT

STACK=xxxxxxxx /*V2R1 CHANGE*/

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

11.9 NJEDEF STATEMENT

OWNNODE=nnnnn | 1 /*V2R1 CHANGE*/

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=.

11.10 OUTDEF STATEMENT

BROADCAST /*V2R1 DELETE/OBSOLETE */

Note: The BROADCAST parameter is obsolete. JES2 OUTDEF processing always processes as if BROADCAST=YES is in effect.

DSLIMIT=10M|4B /*V2R1 CHANGE*/

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.

11.11 L(nnnnn).JT(n) STATEMENT

LIMit=m|m-n|m-* /*V2R1 CHANGE*/

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.

11.12 L(nnnnn).ST(n) STATEMENT

LIMit={m|m-n|m-*} /*V2R1 CHANGE*/

Default: If you omit this parameter, JES2 uses the defaults *m*=0 and *n*=4294967295.

PLIM={m|m-n|m-*} /*V2R1 CHANGE*/

Default: If you omit this parameter, JES2 uses the defaults *m*=0 and *n*=4294967295.

11.13 OFF(n).JR STATEMENT

Class=class,class,... | classlist /*V2R1 CHANGE*/

A *class,class,...* sequence specifies a list of job class or job class groups (each 1-8 characters in length), in priority sequence, for the device.

11.14 OFF(n).JT STATEMENT

`Class=class,class,... | classlist /*V2R1 CHANGE*/`

A *class,class,...* sequence specifies a list of job class or job class groups (each 1-8 characters in length), in priority sequence, for the device.

`LIMit={m|m-n|m-*} /*V2R1 CHANGE*/`

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.

11.15 PROCLIB(xxxxxxxx) STATEMENT

`PROCLIB /*V2R1 NEW*/`

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.

11.16 SPOOL STATEMENT

`SPOOL /*V2R1 NEW*/`

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.

11.17 SPOOLDEF STATEMENT

DSNMASK=jxx...x|SYS1.HASPACE /*V2R1 CHANGE*/

Displays the 1-44 character data set mask name, including generic characters. If **SPOOLDEF** the **DSNAME** parameter is specified with the **SPOOL** initialization statement or the **\$\$ SPOOL** Command, the **DSNAME** value must match either the **\$D SPOOLDEF DSNAME** value or the **\$D SPOOLDEF DSNMASK** value. If the **\$D SPOOLDEF DSNMASK** value is null, the **DSNAME** value must match the **\$D SPOOL DSNAME** value.

11.18 TRACE STATEMENT

START=Yes|No /*V2R1 CHANGE*/

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.

12 JES3:

12.1 CLASS STATEMENT

SYSSYM=ALLOW/DISALLOW /*V2R1 NEW */

Indicates whether batch jobs of this class are allowed to use system symbols in JCL.

ALLOW

Batch JCL is allowed to use system symbols. System symbols in batch JCL are replaced with values from a system where the job is eligible to execute.

DISALLOW

Batch JCL is not allowed to use system symbols. System symbols will not be replaced with values when the JCL is processed.

12.2 NETSERV STATEMENT

STACK= /*V2R1 CHANGE */

Specifies the name of the stack that TCP/IP uses to get its definitions when the Common INET (CINET) configuration is being used. If the STACK=name parameter is omitted, TCP/IP will use all stacks. The stack must contain only A-Z, @, \$, #, or 0-9 and cannot start with a digit. When only an INET configuration is being used, any specification of a stack name is ignored.

12.3 OPTIONS STATEMENT

DUMP= /*V2R1 CHANGE */

The default for the DUMP parameter has been changed to PRDMP. The JES and MVS values for DUMP have been deleted.

PRDMP

Specifies that a dump of main storage is to be written to the MVS SYS1.DUMPxx data set. To print this dump, use the MVS interactive problem control system (IPCS).

SDI= /*V2R1 DELETE */

The SDI parameter has been deleted.

DUPLOGON=YES/NO /*V2R1 NEW */

Indicates whether duplicate TSO/E logons across multiple systems in the JES3 complex are allowed.

12.4 JOBTRACK=SYSPLEX/JGLOBAL/OFF /*V2R1 NEW*/

SYSPLEX

Specifies that ENF 70 events are signaled to listeners across all systems in the SYSPLEX. This is the default.

JGLOBAL

Specifies that ENF 70 events are signaled only to listeners on the JES3 Global.

OFF

Disables signaling of ENF 70 events.

12.5 OUTSERV STATEMENT

CARRIAGE= /*V2R1 CHANGE */

Indicates the specific name (1-to-8 characters) of the 1403 printer carriage tape or the FCB module that is to be the installation standard. FCB modules are in the SYS1.IMAGELIB data set. For 3211 printers, the FCB module is named FCB2, plus the first four characters of the carriage tape name. For 3800 printers, the FCB module is named FCB3, plus the first four characters of the carriage tape name.

For more information about SYS1.IMAGELIB, see *z/OS DFSMSdfp Advanced Services*.

12.6 SYSOUT STATEMENT

CARR= /*V2R1 CHANGE */

Specifies the name (1 to 8 characters) of the carriage tape or FCB required to print this SYSOUT class. This parameter overrides the CARRIAGE parameter specified as an installation default on the OUTSERV statement and the CARRIAGE parameter on the DEVICE statement indicating the carriage tape or FCB initially mounted. If

STANDARD is specified, the carriage tape name is taken from that specified on the OUTSERV initialization statement.

13 IBM Health Checker for z/OS:

13.1 CATALOG_RNLS /* V2R1 ADD*/

This Check verifies that your data sets reside on different volumes as other shared catalogs.

Reason for check - All Catalog RESERVES should be converted to SYSTEMS ENQUEUEs unless catalogs are shared outside the sysplex.

13.2 OCE_XTIOT_CHECK /* V2R1 ADD*/

This check looks to see whether XTIOTs are enabled for non-VSAM data sets. You can enable XTIOTs for non-VSAM dataset by specifying NON_VSAM_XTIOT=YES in the DEVSUPxx parmlib member.

Reason for check - Enabling XTIOTs for non-VSAM data sets decreases the chances of running out of virtual storage when allocating and concurrently opening many sequential and partitioned data sets.

13.3 IOS_FABRIC_MONITOR /* V2R1 ADD*/

Reports if any switches which support CUP diagnostics capabilities have indicated unusual health conditions on connected channel paths.

Reason for check - While z/OS has historically provided sophisticated I/O monitoring and recovery, this report will expose newly available diagnostic data provided directly from the switch. This health check may be able to provide insight into their fabric problems such as hardware errors, I/O misonfigurations, or congestion.

13.4 IOS_IORATE_MONITOR /* V2R1 ADD*/

Detects if any control units in the system are reporting inconsistent I/O rates for their attached channel paths.

Reason for check - I/O rate measures the number of I/Os started down the channel path per second. A lower than average I/O rate can be a symptom of potential problems in the

fabric. By monitoring this measurement alone and comparing it among the paths to a control unit, fabric problems like hardware errors, misconfiguration and congestion may be more easily detected.

13.5 RACF_AIM_STAGE /* V2R1 ADD*/

The RACF_AIM_STAGE check examines the RACF database application identity mapping (AIM) to see whether it is at AIM stage 3, which is recommended. Your system programmer can convert your RACF database to AIM stage 3 using the IRRIRA00 conversion utility.

Reason for check - AIM stage 3 allows RACF to more efficiently handle authentication and authorization requests from applications such as z/OS UNIX and is required to use some RACF function. You should assign a unique UNIX UID for each user and a unique GID for each group that needs access to z/OS UNIX functions and resources.

13.6 RACF_CERTIFICATE_EXPIRATION /* V2R1 ADD*/

The RACF_CERTIFICATE_EXPIRATION check:

- Extracts each certificate from the RACF database.
- Examines the ending date of the certificate and lists the certificate in the check output if the ending date is equal to or less than the warning date.
- If the certificate is either a TRUST or HIGHTRUST then the certificate is marked as an exception.

Reason for check - RACF_CERTIFICATE_EXPIRATION allows RACF to identify all certificates which have expired, identify all certificates which are going to expire within the next few days, and ensures that the user has defined a proper baseline set of protections within the z/OS environment.

13.7 RACF_UNIX_ID /* V2R1 ADD*/

The RACF_UNIX_ID check detects whether RACF is enabled to perform the best practice of automatically assigning unique UNIX identities when users without OMVS segments access the system to use UNIX services.

Reason for check - IBM recommends that a unique UNIX UID be assigned to each user and that a unique GID be assigned to each group that needs access to z/OS UNIX functions and resources. Assigning unique identities, rather than shared identities, improves overall security and increases user accountability.

13.8 IBMSLIP, SLIP_PER /* V2R1 ADD*/

Checks to see whether a PER trap has been continuously active for longer than the threshold.

Reason for check - An active, but not needed, SLIP PER trap can cause degraded system performance.

13.9 SUP_SYSTEM_SYMBOL_TABLE_SIZE /* V2R1 ADD*/

Checks to see whether the size of the static system symbol table has exceeded the threshold. The check is initially run once and is also run when the SETLOAD xx,IEASYM Command is successfully processed.

Reason for check - Monitor the size of the system symbol table.

13.10 SYSTRACE_BRANCH /* V2R1 ADD*/

Checks to see whether system trace is using the BR=ON parameter of the TRACE Command and has been active for a longer time than the defined duration.

Reason for check - A branch trace runs continuously so an active unneeded BRANCH=ON option can cause degraded system performance. Use branch tracing only for short periods of time to solve a specific problem and do not use branch tracing as the default for system tracing on your system. BR=ON is intended for use in system software problem determination and diagnosis situations only.

13.11 SYSTRACE_MODE /* V2R1 ADD*/

Checks to see whether system trace is using the MODE=ON parameter of the TRACE Command and has been active for a longer time than the defined duration.

Reason for check - A mode trace runs continuously, so an active unneeded MODE=ON option can cause degraded system performance. Use mode tracing only for short periods of time to solve a specific problem and do not use branch tracing as the default for system tracing on your system. MODE=ON is intended for use in system software problem determination and diagnosis situations only.

13.12 VLF_MAXVIRT /* V2R1 ADD*/

Checks to see whether the virtual lookaside facility (VLF) is trimming recently ADDED objects to make room for new objects. If so, the MAXVIRT setting for at least one VLF class may be too small for VLF to provide a good performance benefit. This check runs once an hour.

Reason for check - Optimize VLF data space usage.

13.13 VLF_MAXVIRT /* V2R1 ADD*/

Checks to see whether the virtual lookaside facility (VLF) is trimming recently ADDED objects to make room for new objects. If so, the MAXVIRT setting for at least one VLF class may be too small for VLF to provide a good performance benefit. This check runs once an hour.

Reason for check - Optimize VLF data space usage.

13.14 VSM_ALLOWUSERKEYCSA /* V2R1 ADD*/

This check examines the setting of the ALLOWUSERKEYCSA(YES|NO) DIAGxx option and compares it to the IBM recommended setting of ALLOWUSERKEYCSA(NO). A warning is issued if the setting is YES.

13.15 VSM_CSA_LARGEST_FREE /* V2R1 ADD*/

Monitor the current size of the largest contiguous free block of CSA/ECSA against the installation-specified or default minimum value.

13.16 CEE_USING_LE_PARMLIB /* V2R1 REMOVED*/

Verifies use of Language Environment parmlib CEEPRMxx.

Reason for check - Default Language Environment run time options should be set within a CEEPRMxx parmlib member. If USERMODs are in use, they should be converted to use parmlib.

13.17 PFA_FRAMES_AND_SLOTS_USAGE /* V2R1 REMOVED*/

The PFA_FRAMES_AND_SLOTS_USAGE check no longer exists.
Remove any policies you have in place for the PFA_FRAMES_AND_SLOTS_USAGE check.

13.18 Migration Health Checks /* V2R1 ADD*/

z/OS Migration from z/OS V1R13 and z/OS V1R12 to z/OS V2R1 *Version 2* GA32-0889-00

These checks that are new in z/OS V2R1:

- ICSF_COPROCESSOR_STATE_NEGCHANGE
- ICSF_MASTER_KEY_CONSISTENCY
- ICSFMIG_DEPRECATED_SERV_WARNINGS
- USS_KERNEL_PVTSTG_THRESHOLD
- USS_KERNEL_STACKS_THRESHOLD
- ZOSMIGV2R1_CS_GATEWAY
- ZOSMIGV2R1_DEFAULT_UNIX_ID

13.19 ZOSMIGV2R1_CS_GATEWAY /* V2R1 ADD*/

Checks whether the GATEWAY statement is in use in a TCP/IP profile on this system.
Support for the GATEWAY statement will be removed in a future release of IBM z/OS Communications Server.

Reason for check - Since the GATEWAY configuration statement will no longer be supported in the TCP/IP profile in a future release of z/OS Communications Server, IBM suggests that customers who currently use the GATEWAY statement migrate to the EGINROUTES/ENDROUTES configuration block.

14 CICS V5R1:

14.1 RACFSYNC /*V5R1 ADD*/

The RACFSYNC system initialization parameter specifies whether CICS listens for type 71 Events.

RACFSYNC={YES|NO}

RACF sends a type 71 ENF signal to listeners when a CONNECT, REMOVE, or REVOKE Command changes a user's resource authorization. When CICS receives a type 71 ENF event for a user ID, all cached user tokens for the user ID are invalidated, irrespective of the setting of the USRDELAY parameter. Subsequent requests from that user ID force a full RACF RACROUTE VERIFY request, which results in a refresh of the user's authorization level. User tokens for tasks that are currently running are not affected.

Note: Use the RACFSYNC parameter only under direction from IBM Service.

YES - CICS listens for type 71 ENF events.

NO - CICS does not listen for type 71 ENF events.

Restrictions: You can specify the RACFSYNC parameter only in the system initialization table (SIT), the PARM parameter of the EXEC PGM=DFHSP statement, or the SYSIN data set.

14.2 SECVFYFREQ /*V5R1 ADD*/

The SECVFYFREQ system initialization parameter specifies whether or not CICS makes a full verification request at least once a day for each user ID that is used to log on to the CICS region.

SECVFYFREQ={NEVER|USRDELAY}

NEVER - When the login process uses password verification, CICS makes a full verification request only if an attempt at password verification fails. User IDs that are used only with login processes involving password verification can appear to be unused.

USRDELAY - CICS makes a full verification request at least once a day for each user ID that is used to log on to the CICS region. The USRDELAY system initialization parameter for the CICS region controls the interval between full verification requests for the user IDs.

14.3 EJBROLEPRFX /* V5R1 REMOVED*/

The EJBROLEPRFX system initialization parameter specifies a prefix that is used to qualify the security role defined in an enterprise bean's deployment descriptor.

EJBROLEPRFX=ejbrole-prefix

14.4 IIOPLISTENER /* V5R1 REMOVED*/

The IIOPLISTENER system initialization parameter specifies whether the CICS region is to function as an IIOP listener region.

IIOPLISTENER={YES|NO}

14.5 JVMCCSIZE /* V5R1 REMOVED*/

The JVMCCSIZE system initialization parameter specifies the size of the shared class cache for pooled JVMs on an initial or cold start of CICS.

JVMCCSIZE={24M|number}

14.6 JVMCCSTART /* V5R1 REMOVED*/

The JVMCCSTART system initialization parameter determines the startup behavior for the shared class cache that is used by pooled JVMs.

JVMCCSTART={AUTO|YES|NO}

14.7 JVMxxxxTRACE /* V5R1 REMOVED*/

The JVMxxxxTRACE system initialization parameters specify the default options for pooled JVM tracing.

JVMxxxxTRACE (JVMLEVEL0TRACE=option, JVMLEVEL1TRACE=option,
JVMLEVEL2TRACE=option, JVMUSERTRACE=option)

14.8 JVMLEVEL0TRACE /* V5R1 REMOVED*/

The JVMLEVEL0TRACE system initialization parameter specifies the default option for pooled JVM Level 0 trace, corresponding to trace level 29 of the SJ component.

JVMLEVEL0TRACE={'ALL(EXCEPTION)'}|'user override string'}

14.9 JVMLEVEL1TRACE /* V5R1 REMOVED*/

The JVMLEVEL1TRACE system initialization parameter specifies the default option for pooled JVM Level 1 trace, corresponding to trace level 30 of the SJ component.

JVMLEVEL1TRACE={'ALL(ENTRY,EXIT)'}|'user override string'}

14.10 JVMLEVEL2TRACE /* V5R1 REMOVED*/

The JVMLEVEL2TRACE system initialization parameter specifies the default option for pooled JVM Level 2 trace, corresponding to trace level 31 of the SJ component.

JVMLEVEL2TRACE={'ALL'}|'user override string'}

14.11 JVMUSERTRACE /* V5R1 REMOVED*/

The JVMUSERTRACE system initialization parameter specifies the default option for JVM user trace, corresponding to trace level 32 of the SJ component.

JVMUSERTRACE={'NONE'}|'user override string'}

14.12 MAXJVMTCBS /* V5R1 REMOVED*/

The MAXJVMTCBS system initialization parameter specifies the maximum number of open TCBs CICS can create in the pool of J8 and J9 mode TCBs for use by Java programs that run in a JVM (the JVM pool).

MAXJVMTCBS={5|number}

14.13 MAXOPENTCBS /* V5R1 REMOVED*/

The MAXOPENTCBS system initialization parameter specifies the maximum number, in the range 1 through 2000, of open task control blocks (open TCBs) CICS can create in the pool of L8 and L9 mode TCBs.

MAXOPENTCBS={12|number}

14.14 MAXXPTCBS/* V5R1 REMOVED*/

The MAXXPTCBS system initialization parameter specifies the maximum number, in the range 1 through 999, of open X8 and X9 TCBs that can exist concurrently in the CICS region.

MAXXPTCBS={5|number}

14.15 SSLTCBS /* V5R1 REMOVED*/

The SSLTCBS system initialization parameter is obsolete and is only kept for compatibility.

SSLTCBS={8|number}

14.16 TCAM /* V5R1 REMOVED*/

The TCAM system initialization parameter is obsolete and is only kept for compatibility.

TCAM={NO|YES}

14.17 TDSUBTASK /* V5R1 REMOVED*/

The TDSUBTASK system initialization parameter specifies whether CICS should use the FO TCB to write to an extrapartition transient data queue, where the record format is FIXED and the block format is UNBLOCKED.

TDSUBTASK={OFF|ON}

14.18 XEJB /* V5R1 REMOVED*/

The XEJB system initialization parameter specifies whether support of security roles is enabled.

XEJB={YES|NO}

14.19 XPPT /* V5R1 REMOVED*/

The XPPT system initialization parameter specifies that CICS is to perform application program resource security checks and optionally specifies the RACF resource class name in which you have defined the program resource security profiles.

XPPT={YES|name|NO}

14.20 XRFSOFF /* V5R1 REMOVED*/

The XRFSOFF system initialization parameter is obsolete and is only kept for compatibility.

XRFSOFF={NOFORCE|FORCE}

14.21 XRFSTME /* V5R1 REMOVED*/

The XRFSTME system initialization parameter is obsolete and is only kept for compatibility.

XRFSTME={5|decimal-value}

15 Parmlib Members:

15.1 IQPPRMxx /*V2R1 ADD*/

IQPPRMxx (PCIE related parameters)

ZEDC

Use the ZEDC statement to specify parameters for managing application requests that use

zEnterprise Data Compression (zEDC) features.

Statements/parameters for ZEDC:

MAXSEGMENTS=*nnn*

Specifies the maximum number of 16 MB storage areas (segments) to allow for problem state compression (deflation) and decompression (inflation) requests.

Value Range: 0, 4-64 (64 MB to 1 GB)

DEFMINREQSIZE=*nnnn*

Specifies the minimum size in kilobytes of the data to be compressed in order for the request to be eligible for zEDC compression.

Value Range: 4-9999 (4K to 9999K)

INFMINREQSIZE=*nnnn*

Specifies the minimum size in kilobytes of the data to be decompressed in order for the request to be eligible for zEDC decompression.

Value Range: 4-9999 (4K to 9999K)

15.2 GTZPRMxx /*V2R1 ADD*/

GTZPRMxx (Generic Tracker parameters)

The GTZPRMxx parmliib member replaces the CNIDTRxx parmliib member. Like CNIDTRxx, GTZPRMxx members can be used to list programs which the tracking facility should exclude from reporting. GTZPRMxx also allows ADDitional Generic Tracker configuration parameters and Commands to be specified:

- EXCLUDE - ADD an EXCLUDE statement.
- TRACKING - enable/disable tracking.
- CLEAR - reset/clear settings, statistics, and data.

- DEBUG - ADD a DEBUG statement.
- DIAGNOSE - for debug/service.

Existing CNIDTRxx parmlib members can be converted to GTZPRMxx parmlib members by using the conversion tool, GTZCNIDT.

To specify which list of GTZPRMxx members the tracker should consider, use one of the following:

- The system parameter GTZ on the reply to message IEA101A at IPL time, via GTZ={xx|(xx,...,zz)}.
- The system parameter GTZ in IEASYSxx, via GTZ=={xx|(xx,...,zz)}.
- The operator Command SET GTZ=={xx|(xx,...,zz)}.

15.3 CNIDTRxx /*V2R1 REMOVED*/

CNIDTRxx (tracking facility exclusion list)

The GTZPRMxx parmlib member replaces the CNIDTRxx parmlib member.

16 Parmlib Keywords:

16.1 ALLOCxx

16.1.1 BATCH_RCLMIGDS /*V2R1 ADD*/

Specifies how migrated data sets will be recalled.

SERIAL

The system allows the CATALOG LOCATE function to recall data sets on its behalf, resulting in serial recall processing.

PARALLEL

The system notes which data sets are migrated and recalls them in parallel; this may reduce job execution time.

16.2 AUTOR00

16.2.1 RATELIMIT(*nnn*) /*V2R1 ADD */

nnn is the rate limit value that can be set to indicate (for a specific message ID) the number of replies that can be issued per second. After 1 second has passed, the message count is reset. Only three digits are supported, which gives a limit of 999 replies per second for the specified message ID. The rate value of 001 is the lowest value supported. The default value for rate limit has been set to 020. RATELIMIT is only valid when DELAY is set to 0; otherwise it will be rejected.

16.3 BPXPRMxx

16.3.1 AUTOCVT(ALL|ON|OFF) /*V2R1 ADD*/

Activates and deactivates automatic conversion of I/O data using coded character sets for the program and its associated files.

16.3.2 PWT(SMF|SMFENV|ENV) /*V2R1 ADD*/

Allows installations to time out z/OS UNIX processes that are waiting on terminal activity.

16.3.3 MAXPIPEUSER(*nnnnn*) /*V2R1 ADD*/

Specifies the maximum number of z/OS UNIX named or unnamed pipes that a real UID can open concurrently.

16.3.4 MAXIOBUFUSER(*nnnnn*) /*V2R1 ADD*/

Specifies that maximum amount of persistent I/O virtual storage that z/OS UNIX obtains on

behalf of a user when a process performs I/O in a Unicode Services conversion environment.

*16.3.5 MAXUSERMOUNTUSER(nnnn) /*V2R1 CHANGE*/*

Use the SETOMVS or SET OMVS Command to dynamically increase or decrease the value of MAXUSERMOUNTUSER.

*16.3.6 MAXPIPES /*V2R1 ADD*/*

MAXPIPES refers to the maximum limit of named or unnamed pipes that can be open in the system. The limit is not configurable.

*16.3.7 PARM /*V2R1 ADD*/*

The PARM parameter has various options for the temporary file system (TFS). PARM in the FILESYSTYPE, ROOT, MOUNT, SUBFILESYSTYPE, and ALTROOT statements

16.4 CEAPRMxx

*16.4.1 HLQLONG(CEA) /*V2R1 ADD*/*

Specifies the high-level qualifier for all log snapshot data sets that are created when SNAPSHOT(Y) is specified.

16.5 CLOCKxx

*16.5.1 ACCURACY mmmmm /*V2R1 ADD*/*

Specifies an acceptable time deviation for the TOD clock from an external time source in milliseconds, with valid values between 0 and 60000 milliseconds (60 seconds).

16.6 CNGRPxx

GROUP NAME(group name) MEMBERS(console name[,console name,...]/*V2R1 ADD */
HMCS, MCS, and SMCS console groups are added.

16.7 COFVLFxx

*16.7.1 ALERTAGE(alert_age) /*V2R1 ADD*/*

ALERTAGE specifies the age, in seconds, for objects in the specified class.

16.8 COMMNDxx

16.8.1 *CMD= {aa } {(aa,bb...)}/*V2R1 ADD */*

Lines that begin with an asterisk in column 1 are comments.

16.9 CONFIGxx

16.9.1 *CPU or CPUAD /* V2R1 CHANGE*/*

Specifies the configuration for the processors. The statement can be specified as CPU or CPUAD. The syntax is as follows:

```
{CPU }{(x) } [,ONLINE [, {STANDARD | ZAAP | ZIIP | ANY}]] ]  
{CPUAD}{(x,x[,x]...)} [,OFFLINE [, {STANDARD | ZAAP | ZIIP | ANY}]] ]
```

16.9.2 *PFID /*V2R1 ADD*/*

Specifies the configuration of the PCIe function identifiers (PFIDs). The syntax is as follows:

```
PFID {(xx) } [,ONLINE|ON ]  
{(aa-bb)} [, {OFFLINE|OFF} [,FORCE]]  
{(list) }
```

16.10 CONSOLxx

16.10.1 *DEVNUM {(HMCS) }/*V2R1 ADD*/*

DEVNUM added HMCS to support the consoles.

16.10.2 *SUPSBY SUPSBY{(Y)|(N)} /*V2R1 ADD*/*

SUPSBY indicates if the console supports standby mode or not. It is valid only with DEVNUM.

16.11 CUNUNIxx

16.11.1 *ADD|DELETE|REPLACE BLDLOCALE*

```
ADD BLDLOCALE|BLDLOC=locname[,CCSID(nnnnn)][,TECHNIQUE|TECH(zzzzzzzzz)]  
[,PAGEFIX(YES|No)][,DSNAME|DSN(dsname)][,VOLSER|VOL(volser)]
```

ADDs locales to the Unicode environment.

```
DELETE BLDLOCALE|BLDLOC=locname[,CCSID(nnnnn)][,TECHNIQUE|TECH(zzzzzzzzz)]
```

Deletes locales from the Unicode environment.

REPLACE BLDLOCALE|BLDLOC=locname[,CCSID(nnnnn)][,TECHNIQUE|TECH(zzzzzzzzzz)]
[,PAGEFIX(YES|No)][,DSNAME|DSN(dsname)][,VOLSER|VOL(volser)]
Replaces locales in the Unicode environment.

16.11.2 *UNI600 /*V2R1 ADD*/*

CUNUNIxx (unicode conversion environment) has been enhanced to include the new Unicode standard version 6.0 (UNI600).

16.12 DEVSUPxx

16.12.1 *JES3_ALLOC_ASSIST=YES/NO /*V2R1 ADD*/*

Specifies that the allocation assist support (available with the TS7700 Virtualization Engine) being or not being enabled for usage with JES3.

16.13 DIAGxx

16.13.1 *DIAG=(xx[,yy...]) /*V2R1 ADD*/*

CBLOC [VIRTUAL24(structure1, structure2, ...)]
[VIRTUAL31(structure1, structure2, ...)]

Structure names:

IHAASVT

When the system is IPLed, the location of its ASVT is determined by which list includes IHAASVT. If neither of the lists includes IHAASVT, the ASVT is in 24-bit virtual storage. If both lists include IHAASVT, the resulting location is undocumented.

16.14 GRSCNFxx

MONITOR{(YES)|(NO)} / V2R1 ADD */*

Indicates whether the system defined in the GRSCNFxx MATCHSYS parameter is to have GRS SMF 87 monitoring activated.

16.15 GTFPARMxx

Lines that begin with an asterisk in column 1 are comments. ...) /*V2R1 ADD */

16.16 HZSPRMxx

Added for the automatic start of Health Checker for z/OS. /*V2R1 ADD */

16.17 IEAABDxx

Lines that begin with an asterisk in column 1 are comments. /*V2R1 ADD */

16.18 IEAAPP00

Now allows comments, indicated by an asterisk in the first column or a combination of /* and between columns 1 and 71. Comments are allowed at the start of the member or interspersed throughout the member. /*V2R1 ADD */

16.19 IEACMD00

Lines that begin with an asterisk in column 1 are comments. /*V2R1 ADD */

16.20 IEADMP00

Lines that begin with an asterisk in column 1 are comments. /*V2R1 ADD */

16.21 IEADMR00

Lines that begin with an asterisk in column 1 are comments. /*V2R1 ADD */

16.22 IEAPAKxx

Lines that begin with an asterisk in column 1 are comments. /*V2R1 ADD */

16.23 IEASYSxx

16.23.1 GTZ GTZ={xx|(xx,...,zz)}. /*V2R1 ADD*/

Specifies one or more suffixes of the IBM Generic Tracker for z/OS parmlib member, GTZPRMxx, to be used by the system.

16.23.2 HZS HZS={aa } {{aa,bb...}} /*V2R1 ADD*/

This parameter specifies one or more suffixes of the optional IBM Health Checker for z/OS

parmlib member, HZSPRMxx to be used by the system.

*16.23.3 HZSPROC HZSPROC=hzsprocname /*V2R1 ADD*/*

This parameter specifies the name of the HZSPROC procedure you want the system to use to automatically start IBM Health Checker for z/OS at IPL-time.

Specify this parameter if you want to use a name other than the default, HZSPROC.

*16.23.4 IQP IQP={aa }(aa,bb...)} /*V2R1 ADD*/*

This parameter specifies the IQPPRMxx members of parmlib. The two alphanumeric characters, represented by aa (or bb, and so forth) are appended to IQPPRM to form the names of the IQPPRMxx members. The Mxx parmlib members specify parameters that are used for managing PCIE related devices.

16.23.5 RTLS / V2R1 REMOVED*/*

Specifies the parmlib member (CSVRTLxx) from which the Runtime Library Service is configured.

16.24 IGDSMSxx

*16.24.1 PDSE_VERSION({1|2}) /*V2R1 ADD*/*

Specifies the version number to be used as a default for data sets that are allocated with a DSNTYPE of LIBRARY.

*16.24.2 PS_EXT_FORMAT(1|2) /*V2R1 ADD*/*

This parameter indicates the format in which the system should create extended format data sets.

*16.24.3 HONOR_DSNTYPE_PDSE /*V2R1 ADD, syntax needs*/*

HONOR_DSNTYPE_PDSE can specify that a partitioned data set be created regardless of the values for other data set attributes, such as data set organization or directory blocks.

*16.24.4 SUPPRESS_SMSMSG /*V2R1 ADD, syntax needs*/*

SUPPRESS_SMSMSG specifies an option to suppress certain messages. The messages that may be suppressed are IGD17054I,IGD17227I and IGD17395I.

16.25 IGGCATxx

ALIASLEVEL(*n*)

Specifies the MLA search level. ALIASLEVEL has a default value of 1, with a minimum of 1 and a maximum of 4.

AUTOADD(ON|OFF)

Specifies whether the autoADD function is enabled when the first connection is made to the coupling facility by the catalog ADDRESS space. The default is OFF.

DUMP(ON|OFF)

Specifies whether or not dynamic dumps are available. The default is OFF.

DUMPON(*rc,rsn,mod[,cnt]*)

Specifies the return (*rc*) and reason codes (*rsn*) to take a dump on if a match is found in a valid catalog module (*mod*). The optional *cnt* value specifies how

GDGFIFOENABLE(YES|NO)

Specifies whether the GDG allocation order feature is enabled. The default is NO.

SYS%(ON|OFF)

Specifies whether SYS% to SYS1% conversion is enabled. The default is OFF.

TAPEHLQ(*name*)

Specifies the high level qualifier of a tape volume catalog. Valid characters are alphanumeric (A-Z and 0-9) and national (@,#,\$) characters. The default is SYS1.

TASKMAX(*tasks*)

Specifies the Catalog ADDRESS space (CAS) user service task upper limit, which is the maximum number of non-CAS concurrent service requests that can run at any given time.

TASKMIN(*mintasks*)

Specifies the lower limit on the number of catalog service tasks that can concurrently run.

TASKTABLESIZE(*maxtasks*)

Specifies the maximum possible tasks running at a particular time.

16.26 IKJTSOxx

FTP is added to the AUTHCMD and AUTHPGM NAMES sections of IKJTSOxx to enable the z/OS FTP client to determine whether the user has installed the optional FTP client user exits EZAFCMD and EZAFCREP.. /*V2R1 ADD */

16.27 IOEPRMxx

16.27.1 *New parameters: /*V2R1 ADD */*

- `FORMAT_AGGRVERSION` specifies the version of the aggregate that will be formatted when you use the `zfsadm format` command or the Format Aggregate API.
- `CHANGE_AGGRVERSION_ON_MOUNT` specifies whether a version 1.4 aggregate should be changed to a version 1.5 aggregate on a primary read-write mount.
- `CONVERTTOV5` specifies whether a version 1.4 aggregate should be changed to a version 1.5 aggregate on a primary read-write mount and each v4 directory is converted to an extended (v5) directory as it is referenced.

The existing `CONVERT_AUDITFID` default is changed from off to on.

16.28 `IXGCNFxx`

`LSPRIMARY` and `CONSUMPTIONALERT` statements are added. */*V2R1 ADD */*

16.29 `LOADxx`

Column Contents

10-16 `DYNCPADD {nnnn | ENABLE | DISABLE} /* V2R1 ADD*/`

nnnn specifies if dynamic CPU ADDition functionality should be enabled such that *nnnn* CPUs can be dynamically ADDED to the image for the life of the IPL. *nnnn* must be a left-justified value without any leading zeros. Specifying 8 or 16 is acceptable syntax for *nnnn*; 16 is the default.

16.30 `LPALSTxx`

Lines that begin with an asterisk in column 1 are comments. */*V2R1 ADD */*

16.31 `PROGxx`

16.31.1 *TRACKDIRLOAD /*V2R1 ADD*/*

Use the `SETPROG TRACKDIRLOAD` statement to enable system-wide tracking of directed load modules. A directed load module is a module that is directly loaded to a specified storage ADDRESS.

16.31.2 *NOTRACKDIRLOAD /*V2R1 ADD*/*

Use the SETPROG NOTRACKDIRLOAD statement to disable system-wide tracking of directed load modules.

16.32 SCHED

16.32.1 *DSI is added and specifies data set integrity /*V2R1 ADD */*

DSI | NODSI

The program specified on PGMNAME requires data set integrity (DSI) or does not require data set integrity (NODSI). Data set integrity means that the job holds an ENQ for the data sets it allocates. The DSI/NODSI option applies to batch allocation only.

16.33 SMFPRMxx

16.33.1 *COMPRESS(PERMFIX(nnnnM)) /* V2R1 ADD*/*

COMPRESS is an optional parameter. When specified with a zEDC Express available, SMF compresses SMF records before writing to the log stream.

PERMFIX(*nnnnM*)

PERMFIX is an optional parameter when COMPRESS is specified.

DEFAULTLSNAME(*logstreamname*,NOBUFS({HALT}|{MSG}),BUFUSEWARN(*nn*),
DSPSIZMAX(*nnnnM* | *nG*),COMPRESS(PERMFIX(*nnnnM*))) /* V2R1 CHANGE*/

LSNAME(*logstreamname*,TYPE({*aa,bb*}|{*aa,bb:zz*}|{*aa,bb:zz,...*}), NOBUFS({HALT}|{MSG}),
BUFUSEWARN(*nn*), DSPSIZMAX(*nnnnM* | *nG*),COMPRESS(PERMFIX(*nnnnM*))) /* V2R1 CHANGE*/

16.33.2 *PERMFIX(nnnnM) /* V2R1 ADD*/*

PERMFIX is an optional parameter when COMPRESS is specified. PERMFIX specifies the default amount of storage that SMF can keep permanently fixed for purposes of communicating with the zEDC Express.

16.33.3 *SMF30COUNT is added to enable counter sets. /* V2R1 ADD*/*

SMF30COUNT | NOSMF30COUNT

Specifies whether the SMF30CDS section should be produced in any SMF Type 30 records. The SMF30CDS section contains data derived from the z/Architecture CPU Counter Facility. In order for data to be produced in the

section, the Hardware Instrumentation Services (HIS) component must have enabled the appropriate counter set.

SWT (*hhmm*)

Specifies the maximum amount of time that a started task is address space is allowed to wait continuously, where *hh* is the amount of real time in hours and *mm* is in minutes.

TWT (*hhmm*)

Specifies the maximum amount of time that a TSO/E user address space is allowed to wait continuously, where *hh* is the amount of real time in hours and *mm* is in minutes.

16.34 **VATLSTxx**

Lines that begin with an asterisk in column 1 are comments. /*V2R1 ADD */

17 Static system symbols

17.1 &SYSOSLVL /*V2R1 ADD*/

New system symbol &SYSOSLVL is provided containing the operating system product version, release, and modification level.



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