

IBM Education Assistance for z/OS V2R2

Item: JES3 JECL

Element/Component: JES2



Agenda

- Trademarks
- Presentation Objectives
- Overview
- Usage & Invocation
- Presentation Summary
- Appendix



Trademarks

- See url <http://www.ibm.com/legal/copytrade.shtml> for a list of trademarks.



Presentation Objectives

- In this presentation, new JES2 functions will be introduced that are related to:
 - Support for JES3 Job Entry Control Language (JECL) statements in JES2
 - Control what JECL is supported in a customer environment
 - Provide options to eliminate subtle JCL differences



Overview

- Problem Statement / Need Addressed
 - More customer are finding themselves running both JES2 and JES3
 - While migrating to a single JES may be beneficial, it may not be practical
 - Application (JCL) developers desire a consistent processing of JCL/JECL regardless of the JES being used
- Solution
 - Unify to the extent possible the JCL/JECL language to be independent of the JES
 - Provide the ability to turn off JECL statements to provide away to prevent JECL from creeping back in to an installation that has undergone a effort to remove JECL
- Benefit / Value
 - Simplified management of JCL/JECL
 - Support installations running/supporting both JES2 and JES3



Usage & Invocation – JES3 JECL processing

- JES3JECL on INPUTDEF controls how JES2 treats JES3 JECL
 - \$T INPUTDEF, JES3JECL=PROCESS | IGNORE
 - This setting has a member scope and is only active until this member is restarted.
 - JES3JECL=IGNORE ignores JES3 JECL statements
 - This is the default
 - JES3JECL=PROCESS enables the processing of JES3 JECL
 - Syntactically, JES3 JECL is not treated as a comment
 - Impacts what is passed to exits 4 and 54
- Note: Processing of individual JES3 JECL statements is controlled via JECLDEF (on the next chart)



Usage & Invocation – JES3 JECL statement level control

- New parameters to control JES3 JECL processing

```
JECLDEF  JES3= (  
    MAIN          =      PROCESS | IGNORE | WARN | FAIL  
    FORMAT        =      IGNORE | WARN | FAIL  
    ROUTE         =      IGNORE | WARN | FAIL  
    OPERATOR      =      IGNORE | WARN | FAIL  
    DATASET       =      IGNORE | WARN | FAIL  
    ENDDATASET    =      IGNORE | WARN | FAIL  
    PROCESS       =      IGNORE | WARN | FAIL  
    ENDPROCESS    =      IGNORE | WARN | FAIL  
    NET           =      IGNORE | WARN | FAIL  
    NETACCT       =      IGNORE | WARN | FAIL  
    PAUSE         =      IGNORE | WARN | FAIL  
    )
```



Usage & Invocation – JES2 JECL statement level control

- Similar new parameters to control JES2 JECL processing

```
JECLDEF  JES2= (  
    JOBPARM      =      PROCESS | IGNORE | WARN | FAIL  
    MESSAGE      =      PROCESS | IGNORE | WARN | FAIL  
    NETACCT      =      PROCESS | IGNORE | WARN | FAIL  
    NOTIFY       =      PROCESS | IGNORE | WARN | FAIL  
    OUTPUT       =      PROCESS | IGNORE | WARN | FAIL  
    PRIORITY     =      PROCESS | IGNORE | WARN | FAIL  
    ROUTE        =      PROCESS | IGNORE | WARN | FAIL  
    SETUP        =      PROCESS | IGNORE | WARN | FAIL  
    XEQ          =      PROCESS | IGNORE | WARN | FAIL  
    XMIT         =      PROCESS | IGNORE | WARN | FAIL  
    )
```



Usage & Invocation – JECL statement level options

- Options for how JECL statements are handled
 - PROCESS - statement is processed
 - IGNORE - statement is ignored (treated as a comment)
 - WARN - statement is processed. However, a warning message is issued to record the occurrence of a JECL statement.
 - FAIL - an error message is issued and job is failed with a JCL error
- Currently only supports processing keywords on JES3 MAIN JECL
 - Intend to add other statements over time
- IGNORE tells JES2 to treat statement as a comment
 - Does not affect what is passed to exits 4 and 54
 - Easier to develop exits to react to ignored JECL
- FAIL prevents JECL from creeping back into jobs after it has been eliminated



Usage & Invocation – Example

- Simple program with a `//*MAIN` card

```
//WASIKDG    JOB 'ACCT','IBM USER',MSGLEVEL=(1,1),NOTIFY=&SYSUID,CLASS=A
//*MAIN  SYSTEM=SY1,LINES=(5,C),FAILURE=RESTART,DEADLINE=(0800,A,3)
//STEP1      EXEC  PGM=IEFBR14
```

- Output for job

```
12.27.11 JOB00019 ---- THURSDAY, 12 MAR 2015 ----
12.27.11 JOB00019 IRR010I  USERID IBMUSER  IS ASSIGNED TO THIS JOB.
      1 //WASIKDG    JOB 'ACCT','IBM USER',MSGLEVEL=(1,1),CLASS=A
      2 //*MAIN  SYSTEM=SY1,LINES=(5,C),CLASS=TEST,DEADLINE=(0800,A,3)
      3 //STEP1      EXEC  PGM=IEFBR14
STMT NO. MESSAGE
      2 HASP1133 Unsupported keyword DEADLINE used
```

- Display of the job

```
$HASP890 JOB(WASIKDG)      STATUS=(AWAITING EXECUTION),CLASS=TEST,
$HASP890                   PRIORITY=9,SYSAFF=(IBM1),HOLD=(NONE)
```



Usage & Invocation – JES2 exits

- Installation can also exercise a job level control of the JECL processing via JES2 exits
- Override default processing of JECL syntax in \$XPL for
 - JOB JCL statement scan exit (exits 2 and 52)
 - JOB statement accounting field scan exit (exits 3 and 53)
- Exits can indicate whether JES2 or JES3 JECL statements is syntactically recognized (or both or neither, in any combination)
 - Similar to affect of INPUTDEF JES3JECL but for both JES2 and JES3 JECL
- Exits overrides syntax parsing of statements
 - Control on a JECL statement level is still determined by the options on the JECLDEF initialization statement.



Usage & Invocation – null JCL treatment

- JES3 ignores any records following a null JCL statement
 - “//” followed by all blanks
- JES2 ignores null JCL statement
 - Processing ends with /*EOF, //JOB, etc
 - Converter stops at “//” but JES2 JECL statements after “//” honored
- NULLJCL on INPUTDEF controls how JES2 treats a null JCL statement:
`$TINPUTDEF, NULLJCL=IGNORE | EOF`
 - This setting has a member scope and is only active until this member is restarted.
 - NULLJCL=IGNORE maintains traditional JES2 behavior
 - Default value
 - NULLJCL=EOF treats null JCL statement as a logical end of file
 - This matches what JES3 does.



PROCLIB SSI

- Also as part of this line item, a new option was added to JES property SSI
 - Get PROCLIB information (SSJPPROD, SSJPPRRS)
 - New mapping macro IAZJPROC
- Gets data set concatenations for JES2 PROCLIBs
- Options on what PROCLIBs to get
- Returns data set names, unit info, VOLSERS
- Similar to data returned via \$D PROCLIB command



Presentation Summary

- In this presentation, new JES2 functions were introduced that are related to:
 - Support for JES3 Job Entry Control Language (JECL) statements in JES2
 - Control what JECL is supported in a customer environment
 - Provide options to eliminate subtle JCL differences



Appendix

▪ Publications

- *z/OS V2R2.0 JES Application Programming* – SA32-0987
- *z/OS V2R2.0 JES2 Commands* – SA32-0990
- *z/OS V2R2.0 JES2 Initialization and Tuning Guide* – SA32-0991
- *z/OS V2R2.0 JES2 Initialization and Tuning Reference* – SA32-0992
- *z/OS V2R2.0 JES2 Installation Exits* – SA32-0995
- *z/OS V2R2.0 JES2 Macros* – SA32-0996
- *z/OS V2R2.0 JES2 Messages* – SA32-0989
- *z/OS V2R2.0 MVS JCL Reference* - SA23-1385
- *z/OS V2R2.0 MVS Using the Subsystem Interface* – SA38-0679

