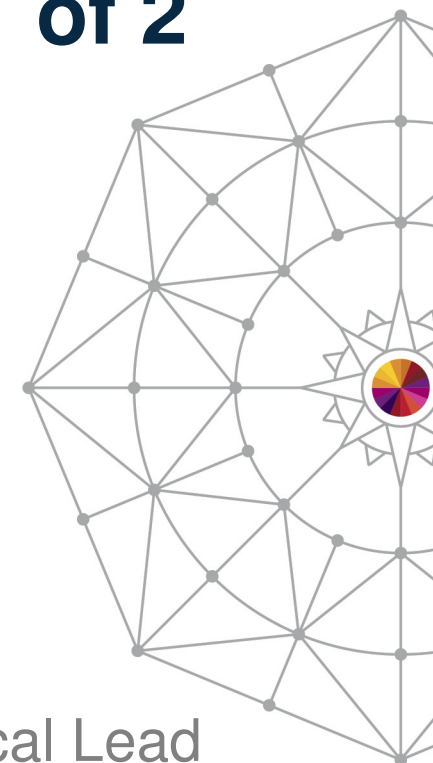


# z/OS 2.1 from 1.12 Migration Part 1 of 2



Shigeki Kimura  
IBM Japan  
zMigration Office Technical Lead  
Wednesday, August 6, 2014  
16186



#SHAREorg



# Introduction



Speaker: **Shigeki Kimura**

**zMigration Office Technical Lead, IBM Japan**

**IBM**

Biographical Sketch: Shigeki Kimura is the technical lead for z/OS migration at IBM Japan. He has expertise in and deep knowledge of z/OS release-to-release migration and has participated in key reviews of **z/OS Migration book** since 2006. Also, he has contributed his articles in **z/OS Hot Topics magazine** since 2010. Shigeki has been with IBM for 28 years.

As the first release of z/OS V2, z/OS V2R1 was generally available in September last year. Through the participation of Early Support Program, regression testing with z/OS V2R1, and technical support for Japanese customer's migration project, we have learned various "**Hints and Tips**" for successful migration and identified some important **considerations** to make the transition less traumatic. **I will share with you our experience to help prepare the migration to z/OS V2R1 from V1R12, especially in the area of BCP, JES2, DFSMS, SDSF, ISPF, TCP/IP, and HLASM.** It contains the changes of behavior introduced in z/OS V1R13 and incorporated into z/OS V2R1, and also the changes introduced by services (PTFs and SPEs) in z/OS V2R1. Now, it's time to start the migration to z/OS V2R1!



# z/OS Hot Topics Newsletter Issue 28, August 2014 (Page 31-33)



## Valuable hints and tips for migrating to z/OS V2R1

*Advice from Professor Kimura*

BY SHIGEKI KIMURA

**A**s a result of participation in the z/OS Version 2 Release 1 (V2R1) Early Support Program (ESP) and regression testing, some important tips surfaced. These findings can help ease preparation for your migration to z/OS V2R1 from V1R12.

### Start the migration to z/OS V2R1!

1. In V2R1, by default, when SDSF attempts to activate an extended console and the default console name (the TSO/E logon user ID) is already in use, SDSF activates a new console with a different name. The new name is derived by appending a single-character suffix to the default name. SDSF tries up to 32 different characters to create a unique console name. This new behavior also applies to the extended console names that are assigned by the SET CONSOLE commands. However, extended console names that have the maximum length of 8 characters are not modified.



# Session: Part 1 & Part 2



**16186: z/OS 2.1 from 1.12 Migration Part 1 of 2**  
Wednesday, August 6, 2014: 08:30 AM - 09:30 AM,  
DLLCC, Room 406

**BCP**  
6 items

**ISPF**  
6 items

**SDSF**  
2 items

**DFSMS**  
7 items

**JES2**  
4 items



**TCP/IP**  
1 items

**HLASM**  
1 items



**16187: z/OS 2.1 from 1.12 Migration Part 2 of 2**  
Friday, August 8, 2014: 08:30 AM - 09:30 AM,  
DLLCC, Room 310



Complete your session evaluations online at [www.SHARE.org/Pittsburgh-Eval](http://www.SHARE.org/Pittsburgh-Eval)

# Today's session: Part 1



16186: z/OS 2.1 from 1.12 Migration Part 1 of 2

Wednesday, August 6, 2014: 08:30 AM - 09:30 AM,  
DLLCC, Room 406

**BCP**

6 items

**ISPF**

6 items

**SDSF**

2 items



Complete your session evaluations online at [www.SHARE.org/Pittsburgh-Eval](http://www.SHARE.org/Pittsburgh-Eval)



## Summary of items

● Changed by BASE    **PTF** Changed by PTF

		V1R12	V1R13	V2R1	APAR
BCP	New DATA SET NOT FOUND message in Batch allocation			●	
BCP	Automatic start of IBM Health Checker for z/OS			●	
BCP	Auxiliary storage shortage message			●	
BCP	Default PPT for CICS		●		
BCP	Default PPT for System REXX			●	
BCP	Restoring CSVLLA suffix during LLA restart		●		
SDSF	Max-RC displays blank for TYPRUN=SCAN job			●	
SDSF	Activating a new console with a different name			●	
ISPF	PDSE Version 2 Member Generations			<b>PTF</b>	OA42247
ISPF	VSAM commands for Edit, View, and Browse			●	
ISPF	Dialogs using ZSCR variable			●	
ISPF	New popup panel ISRUBROW by OPT3.4 BROWSE			<b>PTF</b>	OA42248
ISPF	Pack option in panel ISRUMVC (OPT3.4)	<b>PTF</b>	<b>PTF</b>	<b>PTF</b>	OA43201
ISPF	OPT3.2 and OPT3.4 New Allocation		●		

## (BCP) New DATA SET NOT FOUND message in Batch allocation

### ⊕ Behavior in z/OS V1R12

- In a “DATA SET NOT FOUND” situation during Batch job
  - IEF453I BEANSZZ - JOB FAILED - JCL ERROR - TIME=hh.mm.ss
    - ✓ IEF212I BEANSZZ STEP1 DD1 - **DATA SET NOT FOUND**

```
      2 //STEP1   EXEC PGM=IEFBR14
      3 //DD1     DD DSN=BEANS.TEST.NOEXIST,DISP=SHR
ICH70001I BEANS      LAST ACCESS AT 12:51:47 ON THURSDAY, JUNE 26, 2014
IEF212I BEANSZZ STEP1 DD1 - DATA SET NOT FOUND
IEF272I BEANSZZ STEP1 - STEP WAS NOT EXECUTED.
```

### ⊕ Change in z/OS V2R1

- The message IEF212I is replaced by a new message IEFA107I
  - **IEFA107I displays a name of data set which is not found**

```
      2 //STEP1   EXEC PGM=IEFBR14
      3 //DD1     DD DSN=BEANS.TEST.NOEXIST,DISP=SHR
ICH70001I BEANS      LAST ACCESS AT 19:21:26 ON SATURDAY, JULY 19, 2014
IEFA107I BEANSZZ STEP1 DD1 - DATA SET BEANS.TEST.NOEXIST NOT FOUND
IEF272I BEANSZZ STEP1 - STEP WAS NOT EXECUTED.
```



## (BCP) New DATA SET NOT FOUND message in Batch allocation

### ⊕ Behavior in z/OS V1R12

- When a “not found” data set is specified after the first concatenation
  - The number of relative position is shown as **+nnn (3 digits)** in message IEF212I

```
2 //STEP1 EXEC PGM=IEFBR14
3 //DD1 DD DSN=SYS1.SAMPLIB,DISP=SHR
4 // DD DSN=SYS1.PARMLIB,DISP=SHR
5 // DD DSN=BEANS.PARMLIB,DISP=SHR
ICH70001I BEANS LAST ACCESS AT 12:06:20 ON THURSDAY, JUNE 26, 2014
IEF212I BEANSZZ STEP1 DD1 +002 - DATA SET NOT FOUND
IEF272I BEANSZZ STEP1 - STEP WAS NOT EXECUTED.
```

### ⊕ Change in z/OS V2R1

- The number of digits is increased to 4 (**+nnnn**) in message IEFA107I

```
2 //STEP1 EXEC PGM=IEFBR14
3 //DD1 DD DSN=SYS1.SAMPLIB,DISP=SHR
4 // DD DSN=SYS1.PARMLIB,DISP=SHR
5 // DD DSN=BEANS.PARMLIB,DISP=SHR
ICH70001I BEANS LAST ACCESS AT 19:22:51 ON SATURDAY, MAY 31, 2014
IEFA107I BEANSZZ STEP1 DD1 +0002 - DATA SET BEANS.PARMLIB NOT FOUND
IEF272I BEANSZZ STEP1 - STEP WAS NOT EXECUTED.
```



## (BCP) New DATA SET NOT FOUND message in Batch allocation

### ⊕ Behavior in z/OS V1R12

- When a “not found” data set is specified in the first concatenation
  - The number of relative position would be +000, but **it is never shown in message IEF212I**
    - ✓ If you are not aware of this, you need to check all the data sets in concatenation

```

2 //STEP1 EXEC PGM=IEFBR14
3 //DD1 DD DSN=SYS9.SAMPLIB,DISP=SHR
4 // DD DSN=SYS1.PARMLIB,DISP=SHR
5 // DD DSN=BEANS.PARMLIB,DISP=SHR
ICH70001I BEANS LAST ACCESS AT 12:49:40 ON THURSDAY, JUNE 26, 2014
IEF212I BEANSZZ STEP1 DD1 - DATA SET NOT FOUND
IEF272I BEANSZZ STEP1 - STEP WAS NOT EXECUTED.
```

### ⊕ Change in z/OS V2R1

- The value +0000 is **never shown in message IEFA107I** as before
  - However, you can easily know the “not found” data set name by the message text

```

2 //STEP1 EXEC PGM=IEFBR14
3 //DD1 DD DSN=SYS9.PARMLIB,DISP=SHR
4 // DD DSN=SYS1.PARMLIB,DISP=SHR
5 // DD DSN=BEANS.PARMLIB,DISP=SHR
ICH70001I BEANS LAST ACCESS AT 19:24:00 ON SATURDAY, MAY 31, 2014
IEFA107I BEANSZZ STEP1 DD1 - DATA SET SYS9.PARMLIB NOT FOUND
IEF272I BEANSZZ STEP1 - STEP WAS NOT EXECUTED.
```

## (BCP) Automatic start of IBM Health Checker for z/OS

### ⊕ Change in z/OS V2R1

- IBM Health Checker of z/OS is **automatically started** during the system initialization
  - No need to start from the COMMNDxx parmlib member or by the manual operation
    - ✓ You can stop it by P HZSPROC command as before

```
HZS0100I IPL-TIME START OF IBM HEALTH CHECKER FOR Z/OS IS BEGINNING
HZS0115I IPL-TIME START OF HZSPROC IS COMPLETE
```

- New parameters in IEASYSxx parmlib member
  - **HZSPROC**=hzsprocname | HZSPROC
    - ✓ Specifies the name of the HZSPROC procedure you want the system to use to automatically start IBM Health Checker for z/OS
  - **HZS**={xx } | {(xx,yy...)}
    - ✓ Specifies one or more suffixes of the optional IBM Health Checker for z/OS parmlib member HZSPRMxx
- Where you can find the HZSPROC procedure
  - z/OS V1R12 & V1R13: **SYS1.SAMPLIB** (SMP/E entry type – SAMP)
  - z/OS V2R1: **SYS1.IBM.PROCLIB** (SMP/E entry type – PROC)

## (BCP) Automatic start of IBM Health Checker for z/OS

### ⊕ Considerations

- IBM Health Checker for z/OS is running under the primary subsystem
  - You need to stop it via **P HZSPROC** command before shutting down the JES
- During the Health Checker operation, the System REXX address spaces (AXRnn) are started under the primary subsystem
  - You need to terminate the AXRnn (**C AXRnn**) before shutting down the JES
    - ✓ Before z/OS V1R11, the AXRnn address spaces (TSO Server) were started under the MASTER subsystem
- For example, without these operations, **\$PJES2 command will not be accepted**

```

$PJES2
$HASP608 $PJES2 587
$HASP608 ACTIVE ADDRESS SPACES
$HASP608 ASID      JOBNAME  JOBID
$HASP608 -----
$HASP608 0010      HZSPROC  STC01451
$HASP608 001C      AXR04    STC01460
*$HASP623 MEMBER DRAINING
*$HASP607 JES2 NOT DORMANT -- MEMBER DRAINING, 588
          RC=10 ACTIVE ADDRESS SPACES
  
```

## (BCP) Automatic start of IBM Health Checker for z/OS

### ⊕ Considerations (continued)

- After these operation, **\$PJES2 command can be accepted**

#### P HZSPROC

```
*HXS0020E WAITING FOR CHECKS TO COMPLETE  
HXS0104I HZSPROC TERMINATION IS COMPLETE  
IEF404I HZSPROC - ENDED - TIME=11.23.56  
IEF352I ADDRESS SPACE UNAVAILABLE  
$HASP395 HZSPROC ENDED
```

#### C AXR04

```
IEE301I AXR04 CANCEL COMMAND ACCEPTED  
IEA631I OPERATOR *AXT0421 NOW INACTIVE, SYSTEM=ZR21 , LU=AXREMCS  
IEF450I AXR04 AXR04 - ABEND=S222 U0000 REASON=00000000 606  
TIME=11.24.04  
$HASP395 AXR04 ENDED  
$HASP099 ALL AVAILABLE FUNCTIONS COMPLETE
```

#### \$PJES2

```
$HASP608 $PJES2 COMMAND ACCEPTED  
$HASP314 INIT 1 DRAINED ***** C=A  
:  
:
```

## (BCP) Automatic start of IBM Health Checker for z/OS

### ⊕ Considerations (continued)

- You can prevent an automatic start of Health Checker at IPL time (**not a recommendation**)

- **HZSPROC=\*NONE** in IEASYSxx parmlib member

```
HZS0100I IPL-TIME START OF IBM HEALTH CHECKER FOR Z/OS IS BEGINNING
HZS0115I IPL-TIME START OF *NONE IS COMPLETE
```

- Reference

- ✓ z/OS IBM Health Checker for z/OS V2R1 User's Guide Version 2 Release 1 (SC23-6843-01)

- Use case of this special feature

- If you use an automation product to issue an explicit START HZSPROC command at a desired time to have better control on when Health Checker starts

- Also, you can write the exceptional messages **only to the hardcopy**

- This approach prevents the flooding of those messages on the console

- ✓ HZSPRMxx parmlib member

```
ADD,POLICY(POLTEST),UPDATE,CHECK(*,*),
ACTIVE,WTOTYPE=HARDCOPY,
REASON='N/A',DATE=20140519
ACTIVATE,POLICY=POLTEST
```

## (BCP) Auxiliary storage shortage message

### ⊕ Behavior in z/OS V1R12

- When an auxiliary storage shortage (**IRA200E** and **IRA201E**) is occurred
  - The address space with the largest increase in the amount of allocated central plus auxiliary storage is identified
- If the address space is SWAPPABLE, system makes it logically swapped and issues
  - IRA210E uuuuuuuu ASID aaaa SET NON DISPATCHABLE Frames+Slots  
vvvvvvvvvv RATE rrrrrr
- If the address space is Non-SWAPPABLE, and STORAGENSWDP=YES is in effect in the IEAOPTxx parmlib member
  - System makes it non-dispatchable (except for the SCL=SYSTEM address space) and issues
    - ✓ IRA210E uuuuuuuu ASID aaaa SET NON DISPATCHABLE Frames+Slots  
vvvvvvvvvv RATE rrrrrr
- When an auxiliary storage shortage is relieved (**IRA202I**), system issues
  - IRA211I uuuuuuuu ASID aaaa SET DISPATCHABLE

## (BCP) Auxiliary storage shortage message

### ⊕ Change in z/OS V2R1

- If the address space is SWAPPABLE, system makes it logically swapped and issues
  - IRA203E uuuuuuuu ASID aaaa SWAPPED OUT FRAMES+SLOTS vvvvvvvv RATE  
rrrrrr
    - ✓ **No longer issues IRA210E**
- When relieved, system issues
  - IRA501I USER uuuuuuuu NOW SWAPPED IN
    - ✓ **No longer issues IRA211I**
- Applies to both auxiliary storage shortage condition (**IRA200E and IRA201E**)



## (BCP) Auxiliary storage shortage message

### ⊕ Summary of message changes

Attribute	IEAOPTxx parmlib member	z/OS V1R12 & V1R13	z/OS V2R1
SWAPPABLE	N/A	*IRA210E uuuuuuuu ASID aaaa <b>SET NON DISPATCHABLE</b> FRAMES+SLOTS vvvvvvvvv RATE rrrrrr	*IRA203E uuuuuuuu ASID aaaa <b>SWAPPED OUT</b> FRAMES+SLOTS vvvvvvvvv RATE rrrrrr
		IRA211I uuuuuuuu ASID aaaa <b>SET DISPATCHABLE</b>	IRA501I USER uuuuuuuu <b>NOW SWAPPED IN</b>
Non-SWAPPABLE	STORAGENSWDP = <u>YES</u>	*IRA210E uuuuuuuu ASID aaaa <b>SET NON DISPATCHABLE</b> FRAMES+SLOTS vvvvvvvvv RATE rrrrrr	*IRA210E uuuuuuuu ASID aaaa <b>SET NON DISPATCHABLE</b> FRAMES+SLOTS vvvvvvvvv RATE rrrrrr
		IRA211I uuuuuuuu ASID aaaa <b>SET DISPATCHABLE</b>	IRA211I uuuuuuuu ASID aaaa <b>SET DISPATCHABLE</b>
	STORAGENSWDP =NO	No action, and above messages are not issued	No action, and above messages are not issued

- The new behavior is consistent with the Pageable Storage Shortage (**IRA400E and IRA401E**)
  - IRA403E uuu SWAPPED TO RECLAIM PROCESSOR STORAGE; xxxxx PAGES yyyy FIXED
  - IRA410E JOB uuuuuuuu ASID aaaa SET NON DISPATCHABLE

## (BCP) Auxiliary storage shortage message

### ⊕ Related topic

- In the **Storage Class Memory (SCM)** configuration
  - When calculating the number of free and used slots, the entire pool of auxiliary storage (SCM plus page data sets on DASD) is included
    - ✓ There is no separate monitoring of just local page data sets on DASD
  - In an environment with **large VIO jobs**, this may result in local page data sets filling up without any warning message being issued
- Resolution by SRM APAR OA42674 (In z/OS V2R1 GA code, and also for z/OS V1R13)
  - **Separate monitoring of the local page data sets on DASD is added**
  - If SCM is present, system calculates the number of aux slots on the local page data sets that are in use and if the percent in use exceeds 50%, system issues
    - ✓ IRA265I 50% OF LOCAL PAGE DATA SET SPACE IS ALLOCATED
  - If the allocation rises above 70%, system issues
    - ✓ IRA260E LOCAL PAGE DATA SET SHORTAGE
  - When relieved, system issues
    - ✓ IRA262I LOCAL PAGE DATA SET SHORTAGE IS NOW RELIEVED

## (BCP) Default PPT for CICS

### ⊕ Behavior in z/OS V1R12

- Default PPT (Program Properties Table)
  - Shipped as IEFSDPPT module in SYS1.LINKLIB
- The PPT entry for CICS (DFHSIP) is not contained in the IEFSDPPT
  - If required, you have to define the PPT statement in SCHEDxx parmlib member
    - ✓ This action is not needed for DB2, IMS, MQ, and WAS, as they are defined in the IEFSDPPT

### ⊕ Change in z/OS V1R13

- The default PPT contains the entry of PGMNAME(DFHSIP) with the following attributes

- NOSWAP
- NOPREF
- KEY(8)

Program Name	Program Description	NC	NS	PR	ST	ND	BP	Key	2P	1P	NP	NH	CP
DFHSIP	CICS driver		X					8				X	

- APAR OA36376 & DOC APAR OA37028

### ⊕ Considerations

- You no longer need to specify the PPT entry for CICS via SCHEDxx parmlib member
  - **Recommendation is to delete the entry if you define the default attributes**

## (BCP) Default PPT for CICS

### ⊕ Output from D PPT,NAME=DFHSIP command

```

D PPT,NAME=DFHSIP
IEF386I 23.25.10 DISPLAY PPT 058
No Parmlib Values
Default Values Matching: DFHSIP
PgmName  NC NS PR ST ND BP Key 2P 1P NP NH CP
DFHSIP    .  Y . . . . . 8 . . . Y . .

Reference
Synonym -----Meaning-----      ----SCHEDxx keyword-----
NC      Non-cancelable                NOCANCEL
NS      Non-swappable                    NOSWAP
PR      Privileged                      PRIV
ST      System task                    SYST
ND      No dataset integrity             NODSI
BP      Bypass password protection     NOPASS
Key     PSW key for this program          KEY(x)
2P     Second level preferred storage   SPREF
1P     First level preferred storage    LPREF
NP     No preferred storage              NOPREF
NH     No honor IEFUSI region settings   NOHONORIEFUSIREGION
CP     Critical paging                  CRITICALPAGING
    
```

z/OS V2R1

## (BCP) Default PPT for System REXX

### ⊕ Behavior in z/OS V1R12

- System REXX starts automatically during the Master Scheduler Initialization
  - Should run in the SYSSTC service class
- For this purpose, **PPT attribute of PRIV** should be specified in the SCHEDxx parmlib member
  - PGMNAME(AXRINIT)
  - PGMNAME(AXRRXTSS)
- DOC APAR OA40519

The System REXX address space and eight TSO Server address spaces should run in the SYSSTC service class and should not be explicitly classified to a different service class. To ensure that this occurs, the following should be added to the SCHEDxx member that you use at IPL or prior to a restart of System REXX.

```
PPT PGMNAME (AXRINIT)
PRIV
PPT PGMNAME (AXRRXTSS)
PRIV
```

The service class can be displayed by issuing DISPLAY JOBS,AXR\* from the operator console. If System REXX is improperly classified, the following steps should be performed:

- (1) Create a SCHEDxx parmlib member, containing the statements as described above
- (2) Issue SET SCH=xx to update the service classification
- (3) Terminate and restart System REXX

The System REXX address space, AXR is non-cancelable.

## (BCP) Default PPT for System REXX

### ⊕ Change in z/OS V2R1

- The default PPT contains the entry of PGMNAME(AXRINIT) and PGMNAME(AXRRXTSS) with PRIV attribute

### ⊕ Considerations

- You no longer need to specify the PPT entry for System REXX via SCHEDxx parmlib member
  - Recommendation is to delete both entries to avoid unintentional override

D PPT, NAME=AXR\*

IEF386I 20.41.38 DISPLAY PPT 613

No Parmlib Values

z/OS V2R1

Default Values Matching: AXR\*

PgmName	NC	NS	PR	ST	ND	BP	Key	2P	1P	NP	NH	CP
AXRINIT	Y	.	Y	.	.	.	8	.	.	.	.	.
AXRRXTSS	.	.	Y	.	.	.	8	.	.	.	.	.

Reference

Synonym	-----	Meaning	-----	----SCHEDxx keyword----
NC		Non-cancelable		NOCANCEL
NS		Non-swappable		NOSWAP
PR		Privileged		PRIV
ST		System task		SYST
ND		No dataset integrity		NODSI
BP		Bypass password protection		NOPASS
Key		PSW key for this program		KEY(x)
2P		Second level preferred storage		SPREF
1P		First level preferred storage		LPREF
NP		No preferred storage		NOPREF
NH		No honor IEFUSI region settings		NOHONORIEFUSIREGION
CP		Critical paging		CRITICALPAGING

## (BCP) Restoring CSVLLA suffix during LLA restart

### ⊕ Behavior in z/OS V1R12

- When you start the Library Lookaside (LLA) address space
  - LLA=xx indicates which CSVLLAxx parmlib member LLA is to use
    - ✓ **Without the LLA= option**, LLA will build its directory using only the LNKLST libraries

### ⊕ Change in z/OS V1R13

- If you have started LLA successfully with a CSVLLAxx parmlib member, and then stop LLA
  - A subsequent start of LLA will **use that CSVLLAxx member** unless you supply another member suffix
    - ✓ Specifying LLA=yy forces to use the CSVLLAyy parmlib member



## (BCP) Restoring CSVLLA suffix during LLA restart

### ⊕ Considerations

- To get back to the "no parmlib member" state, as was in z/OS V1R12
  - You have to specify **LLA=NONE** on the subsequent start of LLA
- The LLA update will not be honored on the subsequent start of LLA
  - When you start LLA omitting a CSVLLAxx parmlib member and issue the F LLA,UPDATE=99 command, then stop and restart LLA without specifying LLA= option
    - ✓ LLA does not use the CSVLLA99 parmlib member
  - In this scenario, you must specify LLA=99 explicitly on the LLA restart to use the CSVLLA99 parmlib member

## (BCP) Restoring CSVLLA suffix during LLA restart

**SYS0.PARMLIB(CSVLLA88)  
LIBRARIES(BEANS.LINKLIB)**

z/OS V1R12

**S LLA, SUB=MSTR, LLA=88**

IEE252I MEMBER CSVLLA88 FOUND IN SYS0.PARMLIB  
CSV210I LIBRARY LOOKASIDE INITIALIZED

**D LLA**

CSV600I 22.37.35 LLA DISPLAY 327

<snipped>

52 LIBRARY ENTRIES FOLLOW

ENTRY	L	F	R	P	LIBRARY NAME
<snipped>					
24					<u>BEANS.LINKLIB</u>
<snipped>					

<snipped>

24

BEANS.LINKLIB

<snipped>

**P LLA**

CSV210I LIBRARY LOOKASIDE ENDED

**S LLA, SUB=MSTR**

CSV210I LIBRARY LOOKASIDE INITIALIZED

**D LLA**

CSV600I 22.38.28 LLA DISPLAY 518

<snipped>

51 LIBRARY ENTRIES FOLLOW

ENTRY	L	F	R	P	LIBRARY NAME
<snipped>					

<snipped>

**SYS0.PARMLIB(CSVLLA88)  
LIBRARIES(BEANS.LINKLIB)**

z/OS V2R1

**S LLA, SUB=MSTR, LLA=88**

IEE252I MEMBER CSVLLA88 FOUND IN SYS0.PARMLIB  
CSV210I LIBRARY LOOKASIDE INITIALIZED

**D LLA**

CSV600I 20.44.14 LLA DISPLAY 350

<snipped>

65 LIBRARY ENTRIES FOLLOW

ENTRY	L	F	R	P	LIBRARY NAME
<snipped>					
6					<u>BEANS.LINKLIB</u>
<snipped>					

<snipped>

6

BEANS.LINKLIB

<snipped>

**P LLA**

CSV210I LIBRARY LOOKASIDE ENDED

**S LLA, SUB=MSTR**

IEE252I MEMBER CSVLLA88 FOUND IN SYS0.PARMLIB

**D LLA**

CSV600I 20.45.23 LLA DISPLAY 595

<snipped>

65 LIBRARY ENTRIES FOLLOW

ENTRY	L	F	R	P	LIBRARY NAME
<snipped>					
6					<u>BEANS.LINKLIB</u>
<snipped>					

<snipped>

6

BEANS.LINKLIB

<snipped>

## (BCP) Restoring CSVLLA suffix during LLA restart

**SYS0.PARMLIB(CSVLLA88)  
LIBRARIES(BEANS.LINKLIB)**

z/OS V1R12

**S LLA, SUB=MSTR, LLA=88**

IEE252I MEMBER CSVLLA88 FOUND IN SYS0.PARMLIB  
CSV210I LIBRARY LOOKASIDE INITIALIZED

**D LLA**

CSV600I 22.37.35 LLA DISPLAY 327  
<snipped>

52 LIBRARY ENTRIES FOLLOW

ENTRY	L	F	R	P	LIBRARY NAME
<snipped>					
24					<u>BEANS.LINKLIB</u>
<snipped>					

**P LLA**

CSV210I LIBRARY LOOKASIDE ENDED

**S LLA, SUB=MSTR**

CSV210I LIBRARY LOOKASIDE INITIALIZED

**D LLA**

CSV600I 22.38.28 LLA DISPLAY 518  
<snipped>

51 LIBRARY ENTRIES FOLLOW

ENTRY	L	F	R	P	LIBRARY NAME
<snipped>					

**SYS0.PARMLIB(CSVLLA88)  
LIBRARIES(BEANS.LINKLIB)**

z/OS V2R1

**S LLA, SUB=MSTR, LLA=88**

IEE252I MEMBER CSVLLA88 FOUND IN SYS0.PARMLIB  
CSV210I LIBRARY LOOKASIDE INITIALIZED

**D LLA**

CSV600I 20.44.14 LLA DISPLAY 350  
<snipped>

65 LIBRARY ENTRIES FOLLOW

ENTRY	L	F	R	P	LIBRARY NAME
<snipped>					
6					<u>BEANS.LINKLIB</u>
<snipped>					

**P LLA**

CSV210I LIBRARY LOOKASIDE ENDED

**S LLA, SUB=MSTR, LLA=NONE**

CSV210I LIBRARY LOOKASIDE INITIALIZED

**D LLA**

CSV600I 20.46.07 LLA DISPLAY 830  
<snipped>

64 LIBRARY ENTRIES FOLLOW

ENTRY	L	F	R	P	LIBRARY NAME
<snipped>					

## (SDSF) Max-RC displays blank for TYPRUN=SCAN job

### ⊕ Behavior in z/OS V1R12

- **TYPRUN=SCAN** in the JCL JOB statement
  - Requests that the system scan this job's JCL for syntax errors
    - ✓ Without executing the job or allocating devices
- After the normal completion of TYPRUN=SCAN job
  - **SDSF Max-RC column displays CC 0000**
    - ✓ Unable to distinguish jobs that did not run from jobs that ended with CC 0000

SDSF HELD OUTPUT DISPLAY ALL CLASSES LINES 178				LINE 1-5 (5)		
NP	JOBNAME	Device	SysID	Offs	Max-RC	Type
	BEANSZZ				CC 0000	JOB
	BEANSZZ				CC 0008	JOB
	BEANSZZ				JCL ERROR	JOB
	BEANSZZ				CC 0004	JOB
	BEANSZZ				CC 0000	JOB

- This behavior has been existed since z/OS V1R9 SDSF
  - ✓ Because of the Extended status function call (SSI function code 80) interface to obtain JES2 spool information

## (SDSF) Max-RC displays blank for TYPRUN=SCAN job

### ⊕ Change in z/OS V2R1

- **SDSF Max-RC column displays blank** rather than CC 0000
  - This change satisfies the following requirement
    - ✓ SDFS should not display a return code (MAX-RC) if the job has skipped the execution phase

```

SDSF HELD OUTPUT DISPLAY ALL CLASSES LINES 414          LINE 1-2 (2)
NP   JOBNAME           SysID Offs Max-RC           Type JobCorrelator
    BEANSZZ                [red box]             JOB
    BEANS                   ABEND S522 TSU
  
```

- No change in the response message of \$DJ command
  - It displays CC=(COMPLETED) without the completion code

```

$DJ1213, LONG
$HASP890 JOB (BEANSZZ) 615
$HASP890 JOB (BEANSZZ) STATUS=(AWAITING HARDCOPY), CLASS=A,
$HASP890 PRIORITY=1, SYSAFF=(ANY), HOLD=(NONE),
$HASP890 CMDAUTH=(LOCAL), OFFS=( ), SECLABEL=,
$HASP890 USERID=BEANS, SPOOL=(VOLUMES=(G321C1),
$HASP890 TGS=2, PERCENT=0.0125), ARM_ELEMENT=NO,
$HASP890 CARDS=2, REBUILD=NO, CC=(COMPLETED),
$HASP890 DELAY=( ), CRTIME=(2014.024, 10:19:21)
$DJ1213, CC
$HASP890 JOB (BEANSZZ) CC=(COMPLETED)
  
```

## (SDSF) Activating a new console with a different name

### ⊕ Behavior in z/OS V1R12

- When SDSF attempts to activate an extended MCS console
  - If the default extended console name (the TSO/E logon user ID) is already in use
    - ✓ **SDSF shares that console**
- This behavior also applies to the extended console name that is assigned by the SET CONSOLE command
- Example of SYSLOG display: TSO/E logon user ID = BEANS
  1. Displays SDSF LOG panel and issues D T command
  2. Starts a new session, displays SDSF LOG panel and issues D T command
  3. Starts a new session, displays SDSF ULOG panel and issues D T command

```

1  TSU02012 00000290 IEA630I OPERATOR BEANS NOW ACTIVE, SYSTEM=CCOC , LU=EXL421
   BEANS 00000290 D T
   TSU02012 00000090 IEE136I LOCAL: TIME=23.57.34 DATE=2014.180 UTC: TIME=14.57.34
   DATE=2014.180
2  BEANS 00000290 D T
   TSU02012 00000090 IEE136I LOCAL: TIME=23.57.46 DATE=2014.180 UTC: TIME=14.57.46
   DATE=2014.180
3  BEANS 00000290 D T
   TSU02012 00000090 IEE136I LOCAL: TIME=23.58.00 DATE=2014.180 UTC: TIME=14.58.00
   DATE=2014.180

```

## (SDSF) Activating a new console with a different name

### ⊕ Change in z/OS V2R1

- In the same scenario, by default, SDSF activates a new console with a different name
  - The new name is derived by appending a single-character suffix to the default name
    - ✓ SDSF tries up to 32 different characters to create a unique console name
    - ✓ Depends on the custom property **NAME(Console.EMCS.ConModChars)**
- This new behavior also applies to the extended console name that is assigned by the SET CONSOLE command
  - Extended console name that has the maximum length of 8 characters is not modified
- Example of SYSLOG display: TSO/E logon user ID = BEANS
  - The scenario is the same as z/OS V1R12

```

1  TSU01645 00000290 IEA630I OPERATOR BEANS    NOW ACTIVE,    SYSTEM=MCOC    , LU=EXL423G
   BEANS    00000290 D T
   TSU01645 00000090 IEE136I LOCAL: TIME=19.05.56 DATE=2013.272  UTC: TIME=10.05.56
   DATE=2013.272
2  TSU01645 00000290 IEA630I OPERATOR BEANS$  NOW ACTIVE,    SYSTEM=MCOC    , LU=EXL423G
   BEANS$   00000290 D T
   TSU01645 00000090 IEE136I LOCAL: TIME=19.06.13 DATE=2013.272  UTC: TIME=10.06.13
   DATE=2013.272
3  TSU01645 00000290 IEA630I OPERATOR BEANS#  NOW ACTIVE,    SYSTEM=MCOC    , LU=EXL423G
   BEANS#   00000290 D T
   TSU01645 00000090 IEE136I LOCAL: TIME=19.06.30 DATE=2013.272  UTC: TIME=10.06.30
   DATE=2013.272

```



## (SDSF) Activating a new console with a different name

### ⊕ Considerations

- The extended console name is logged in the hardcopy when you issue a system command
  - That name is not likely to be the TSO/E logon user ID (BEANS) by default in z/OS V2R1

```
BEANS$ 00000290 D T
TSU03392 00000090 IEE136I LOCAL: TIME=02.25.27 DATE=2014.041 UTC: TIME=17.25.27
DATE=2014.040
```

- That name is not likely to be the extended console name (AAAA) assigned by the SET CONSOLE command by default in z/OS V2R1

```
AAAA$ 00000290 D T
TSU02860 00000090 IEE136I LOCAL: TIME=00.22.42 DATE=2014.181 UTC: TIME=15.22.42
DATE=2014.180
```

- Specifying that name in other system command might not work

```
C U=BEANS$
IEE324I BEANS$ NOT LOGGED ON
```

```
D TS,IBMUSER$
IEE115I 18.39.12 2014.038 ACTIVITY 853
JOBS M/S TS USERS SYSAS INITS ACTIVE/MAX VTAM OAS
00001 00013 00003 00029 00005 00003/00010 00008
IBMUSER$ NOT FOUND
```

```
D NET,TSOUSER,ID=BEANS$
IST453I ID PARAMETER VALUE BEANS$ NOT VALID
```

## (SDSF) Activating a new console with a different name

### ⊕ Considerations (continued)

- You can restore the previous behavior even in z/OS V2R1
  - Set the custom property **Console.EMCS.NoConMod** to TRUE
    - ✓ ISFPRMxx parmlib member

```
PROPLIST NAME(SPRGPROP)          /* Group ISFSPROG properties */  
PROPERTY NAME(Console.EMCS.NoConMod), VALUE(TRUE)
```

- SDSF server needs to be started to activate this definition
- Another way to restore the previous behavior
  - SDSF Exit ISFUSER might be used (UPROFLG2.UPRO2NMD)
- If you deactivate this new feature
  - SET CONMOD ON command in SDSF session will not be accepted
    - ✓ OPTION LOCALLY DISABLED message is issued

## (ISPF) PDSE Version 2 Member Generations

### ⊕ **NEW FUNCTION - PDSE V2 MEMBER GENERATIONS SPE**

- z/OS V2R1 DFSMS APAR OA42358 (PTF UA71462)
  - PDSE is enhanced to allow a user to save a fixed number of previous generations of each member
    - ✓ The number of generations for each member is specified when the data set is created
  - A new generation of each member will be saved whenever a member is replaced or deleted
    - ✓ ISPF/PDF will provide services to view saved generations of members
- z/OS V2R1 ISPF APAR OA42247 : **PDSE Member Generation SPE**
  - Introduces new function to support DFSMS PDSE V2 member generations
    - ✓ <ftp://public.dhe.ibm.com/software/websphere/awdtools/ispf/OA42247.pdf>

## (ISPF) PDSE Version 2 Member Generations

### ⊕ Problem-1: “Num of generations” must be specified

- When allocating PDSE V2 data set via ISPF OPT3.2, **you have to specify a value, such as 0**, in a new "Num of generations" field
  - Without specifying the value in the field, a new allocation cannot be proceeded

```

ISRUAASE                      Allocate New Data Set                      Value out of range
Command ==>                                                              More:  - +

Management class . . .         (Blank for default management class)
Storage class . . . .         (Blank for default storage class)
Volume serial . . . . SYSWKA   (Blank for system default volume) **
Device type . . . . .         (Generic unit or device address) **
Data class . . . . .         (Blank for default data class)
Space units . . . . . TRACK   (BLKS, TRKS, CYLS, KB, MB, BYTES
                               or RECORDS)
Average record unit           (M, K, or U)
Primary quantity . . 1       (In above units)
Secondary quantity . . 1     (In above units)
Directory blocks . . 1       (Zero for sequential data set) *
Record format . . . . FB
Record length . . . . 80
Block size . . . . . 32000
Data set name type LIBRARY   (LIBRARY, HFS, PDS, LARGE, BASIC, *
Data set version . . : 2
Num of generations :
EsaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaN
e Number of generations value must range from 0 to the e
e current system defined maximum of 0 e
DsaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaM
    
```

## (ISPF) PDSE Version 2 Member Generations

### ⊕ Problem-1: “Num of generations” must be specified (continued)

- This is strange, because JCL allocation normally completes even by omitting the MAXGENS new parameter

```
//BEANSZZ JOB MSGCLASS=H,MSGLEVEL=(1,1),CLASS=A,NOTIFY=&SYSUID
//STEP1 EXEC PGM=IEFBR14
//DD1 DD DSN=BEANS.TEST.D0506.DS1,DISP=(NEW,CATLG),UNIT=3390,
// VOL=SER=SYSWKA,SPACE=(TRK,(1,1,1)),LRECL=80,RECFM=FB,
// BLKSIZE=32000,DSNTYPE=(LIBRARY,2) *without MAXGENS specified
.
IEF142I BEANSZZ STEP1 - STEP WAS EXECUTED - COND CODE 0000
```

- Even when you allocate a normal PDSE V2 data set (MAXGENS=0), this new behavior in ISPF OPT3.2 enforces to specify the value
- **Opened ISPF APAR OA45426 for z/OS V2R1**

## (ISPF) PDSE Version 2 Member Generations

### ⊕ **Problem-2: “Num of generations” field length is short**

- The JCL Reference manual describes
  - Maximum number of generation supported is **2,000,000,000**
- However, the ISPF OPT3.2 New Allocation panel (ISRUAASE) displays the field "Num of generations" as 8 digits only rather than 10 digits

```

ISRUAASE                      Allocate New Data Set
Command ===>

Primary quantity . . 1          (In above units)
Secondary quantity 1          (In above units)
Directory blocks . . 0          (Zero for sequential data set) *
Record format . . . . FB
Record length . . . . 80
Block size . . . . . 32000
Data set name type          (LIBRARY, HFS, PDS, LARGE, BASIC, *
Data set version . . . . . EXTREQ, EXTIPREF or blank)
Num of generations : 12345678
Extended Attributes         (NO, OPT or blank)
Expiration date . . . . . (YY/MM/DD, YYYY/MM/DD
Enter "/" to select option  YY.DDD, YYYY.DDD in Julian form
Allocate Multiple Volumes  DDDD for retention period in days
                           or blank)
  
```

- **Opened ISPF FIN APAR OA45491 for z/OS V2R1**

## (ISPF) PDSE Version 2 Member Generations

### ⊕ Related topic: **MAXGES=0 or MAXGENS(0) is not accepted**

- According to z/OS MVS JCL Reference Version 2 Release 1 (SA23-1385-01)
  - Chapter 12. DD statement : **MAXGENS=maximum-generations**
    - ✓ Specifies the maximum number of generations for members in a Version 2 PDSE
    - ✓ The value is 0 to 2,000,000,000. The default is 0.
- However, **MAXGENS=0 or MAXGENS(0) specification is not accepted**

```
//BEANSZZ JOB MSGCLASS=H,MSGLEVEL=(1,1),CLASS=A,NOTIFY=&SYSUID
//STEP1 EXEC PGM=IEFBR14
//DD1 DD DSN=BEANS.TEST.D0506.DS1,DISP=(NEW,CATLG),UNIT=3390,
// VOL=SER=SYSWKA,SPACE=(TRK,(1,1,1)),LRECL=80,RECFM=FB,
// BLKSIZE=8000,DSNTYPE=(LIBRARY,2),MAXGENS=0
.
```

```
IEF452I BEANSZZ - JOB NOT RUN - JCL ERROR
IEF820I SPECIFIED NUMERIC LESS THAN MINIMUM ALLOWED IN THE MAXGENS FIELD
```

```
ALLOC DA('BEANS.TEST.D0528') NEW CATALOG UNIT(3390) VOLUME(SYSWKA) SPACE(1,1)
TRACKS LRECL(80) RECFM(F,B) BLKSIZE(8000) DIR(1) DSNTYPE(LIBRARY,2) MAXGENS(0)
```

```
IKJ56702I INVALID PDSE Max Generations value, 0
IKJ56718A REENTER THIS OPERAND+ -
MAXGENS:
```

- Also, even when specifying the MAXGENS with a sequential data set which does not support the PDSE V2 Member Generation, it is not rejected as error
- **Opened BCP APAR OA45256 for z/OS V2R1**



## (ISPF) VSAM commands for Edit, View, and Browse

### ⊕ Change in z/OS V2R1

- When a VSAM data set is specified to ISPF EDIT, VIEW, and BROWSE
  - The **invoked command by default** is changed
- Example: ISPVCALL output
  - z/OS V1R12

```

VSAM Support:
  Enable VSAM Edit.. NO           Limit VSAM Edit...
  Enable VSAM View.. NO           Limit VSAM View...
  Enable VSAM Browse NO           Limit VSAM Browse.

VSAM commands:
  Edit:    FMNMAIN DSE /
  View:    FMNMAIN DSB /
  Browse:  FMNMAIN DSB /

VSAM restricted data sets:  None
  
```

### ➤ z/OS V2R1

```

VSAM Support:
  Enable VSAM Edit.. NO           Limit VSAM Edit...
  Enable VSAM View.. NO           Limit VSAM View...
  Enable VSAM Browse NO           Limit VSAM Browse.

VSAM commands:
  Edit:    FMNINV DSE /
  View:    FMNINV DSV /
  Browse:  FMNINV DSB /

VSAM restricted data sets:  None
  
```

## (ISPF) VSAM commands for Edit, View, and Browse

### ⊕ Considerations

- The default in ISPF Configuration Tables keywords is changed in z/OS V2R1
  - DOC APAR OA43596

	z/OS V1R12 & V1R13	z/OS V2R1
VSAM_EDIT_COMMAND	FMNMAIN DSE /	FMNINV DSE /
VSAM_VIEW_COMMAND	FMNMAIN DSB /	FMNINV DSV /
VSAM_BROWSE_COMMAND	FMNMAIN DSB /	FMNINV DSB /

- If you specified old default values in ISPF Configuration Table
  - **The new defaults need to be used**
    - ✓ By deleting the old default values
    - ✓ By specifying the new defaults in z/OS V2R1

## (ISPF) VSAM commands for Edit, View, and Browse

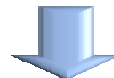
### ⊕ Tips

- In z/OS V2R1, ISPF Configuration utility provides new function
  - You can convert the active configuration load module, or one residing in a data set, to keyword file format
    - ✓ z/OS V2R1 ISPF APAR OA42680 (included in the GA code)
- **ISPF Configuration Utility (panel: ISPPCONF)**
  - Option 7 Convert Configuration Table Loadmod to Keyword File

```

ISPPCONF                                ISPF Configuration Utility
Option ==> _____

1 Create/Modify Settings and Regenerate Keyword File
2 Edit Keyword File Configuration Table
3 Verify Keyword Table Contents
4 Build Configuration Table Load Module
5 Convert Assembler Configuration Table to Keyword File
6 Build SMP/E USERMOD
7 Convert Configuration Table Loadmod to Keyword File
    
```



```

VSAM_BROWSE_COMMAND = FMNINV DSB /
VSAM_EDIT_COMMAND   = FMNINV DSE /
VSAM_VIEW_COMMAND   = FMNINV DSV /
    
```

## (ISPF) Dialogs using ZSCR variable

### ⊕ Change in z/OS V2R1

- To control the ability to **scroll the title field** (for long file names)
  - Several services (such as BROWSE, EDIT, or VIEW) is enhanced to use the ZSCR variable
- Dialogs that use this name for their scroll amount field will receive error messages when a panel using that is displayed
  - For example, the **dialog variable ZSCR is changed** after invoking the BROWSE service
    - ✓ When running the ISPF application on z/OS V2R1, the variable ZSCR resets itself to a value of OFF after the CLIST runs the ISPEXEC BROWSE, and then returns

### ⊕ Considerations

- The application needs to be reviewed and you might have to change your dialog (exec and panel) to **use another variable name** before upgrading to z/OS 2.1
- Reported problem:
  - Customer uses own panel which includes the variable ZSCR to specify a panel scroll amount. It displays the ISPF BROWSE panel (ISRBROBA) and returns to the custom panel. However, at that time, the variable ZSCR in custom panel displays OFF. Then, customer gets the "Invalid scroll amount" error condition because of the invalid amount of OFF.
    - ✓ ISRBROBA panel supports "Scrollable Title Field" new functionality in z/OS V2R1

## (ISPF) Dialogs using ZSCR variable

### ⊕ Technote

- Reference #: 1673038 (Modified date: 2014-06-16)

## Dialogs using the ZSCR variable report errors after upgrade to z/OS 2.1

<http://www.ibm.com/support/docview.wss?uid=swg21673038>

---

### Flash (Alert)

### Abstract

A local dialog application that invokes ISPF services (such as BROWSE) fails after a system upgrade to z/OS 2.1 if that application uses variable ZSCR.

### Content

Variable names that start with a Z are reserved for use by ISPF itself and should not be used by other dialog applications except as documented in the ISPF manuals (see the [ISPF Dialog Developer's Guide and Reference](#)). The list of Z variable names defined as interfaces between ISPF and the dialog are listed in the Appendixes in that manual ([Dialog Variables](#) and [System Variables](#)). Use of all other names is subject to change without notice.

In z/OS 2.1, use of the ZSCR variable by several services (such as BROWSE, EDIT, or VIEW) was added to control the ability to scroll the title line (for long file names). Dialogs that used this name for their scroll amount field will receive error messages when a panel using that is displayed. These dialogs need to be updated before upgrading to z/OS 2.1. If this is a product dialog, contact the vendor to obtain an update.

---

## (ISPF) Dialogs using ZSCR variable

### ⊕ Example: ISPEXEC BROWSE service

- In the following examples, **ZSCR is set to OFF** after return in all the scenarios

	z/OS V1R12		z/OS V2R1	
	Panel	Result	Panel	Result
PROC 0 SET &DSN = &STR(BEANS.TEST.D0617.PS) ISPEXEC BROWSE DATASET('&DSN') WRITE ZSCR_AFTER = &ZSCR END	ISRBROBA	ZSCR_AFTER = ***	ISRBROBA	ZSCR_AFTER = OFF ***
PROC 0 SET &DSN = &STR(BEANS.TEST.D0617.PDS(AAAA)) ISPEXEC BROWSE DATASET('&DSN') WRITE ZSCR_AFTER = &ZSCR END	ISRBROBA	ZSCR_AFTER = ***	ISRBROBA	ZSCR_AFTER = OFF ***
PROC 0 SET &DSN = &STR(BEANS.TEST.D0617.PDS(B*)) ISPEXEC BROWSE DATASET('&DSN') WRITE ZSCR_AFTER = &ZSCR END	ISRBROM	ZSCR_AFTER = ***	ISRBROM	ZSCR_AFTER = OFF ***
	----- ISRBROM⇒ ISRBROBA⇒ ISRBROM	----- ZSCR_AFTER = ***	----- ISRBROM⇒ ISRBROBA⇒ ISRBROM	----- ZSCR_AFTER = OFF ***

## (ISPF) Dialogs using ZSCR variable

### ⊕ Example: ISPEXEC EDIT service

- In the following examples, **ZSCR is set to OFF after return only in the last scenario**

	z/OS V1R12		z/OS V2R1	
	Panel	Result	Panel	Result
PROC 0 SET &DSN = &STR(BEANS.TEST.D0617.PS) ISPEXEC EDIT DATASET('&DSN') WRITE ZSCR_AFTER = &ZSCR END	ISREDDE2	ZSCR_AFTER = ***	ISREDDE2	ZSCR_AFTER = ***
PROC 0 SET &DSN = &STR(BEANS.TEST.D0617.PDS(AAAA)) ISPEXEC EDIT DATASET('&DSN') WRITE ZSCR_AFTER = &ZSCR END	ISREDDE2	ZSCR_AFTER = ***	ISREDDE2	ZSCR_AFTER = ***
PROC 0 SET &DSN = &STR(BEANS.TEST.D0617.PDS(B*)) ISPEXEC EDIT DATASET('&DSN') WRITE ZSCR_AFTER = &ZSCR END	ISREPO01	ZSCR_AFTER = ***	ISREPO01	ZSCR_AFTER = OFF ***
	----- ISREPO01⇒ ISREDDE2⇒ ISREPO01	----- ZSCR_AFTER = ***	----- ISREPO01⇒ ISREDDE2⇒ ISREPO01	----- ZSCR_AFTER = OFF ***

## (ISPF) New popup panel ISRUBROW by OPT3.4 BROWSE

### ⊕ Change in z/OS V2R1

- ISPF APAR OA42248 provides a new function to support **Member Generations in PDSE V2** data set
- As a part of this enhancement, **a new popup panel (called ISRUBROW) is displayed**
  - On entry to the BROWSE function from OPT3.4
    - ✓ This new panel is similar to the existing popup panel ISRUEDIT which is displayed during EDIT or VIEW operation in OPT3.4

The primary purpose for ISRUBROW panel is to select the version of a member to be displayed when PDSE member version is active for that member. But, it also will display when a terminal that supports DBCS is being used to allow selection of Mixed Mode display (the same selection that is at the bottom of the Option 1 panel).

- Popup panel ISRUBROW is displayed when
  - BROWSE a sequential data set in OPT3.4 Data Set List (ISRUDSL0)
  - BROWSE a partitioned data set with member name in OPT 3.4 Data Set List (ISRUDSL0)
- Displays only if the following option is selected in ISRDLSET panel
  - **Display Edit/View/Browse entry panel**
    - ✓ “Old option name” was Display Edit/View entry panel



## (ISPF) New popup panel ISRUBROW by OPT3.4 BROWSE

### ⊕ ISRDLSET panel (z/OS V2R1 after APAR OA42248)

```

-   File Colors Workstation Help
I   _____
C   ISRDLSET           Data Set List Settings Main
C   General Options
-   Enter "/" to select option
*   / Display Edit/View/Browse entry panel (*)
    / Automatically update reference lists
    / List pattern for MO, CO, D, and RS actions
    / Show status for MO, CO, D, and RS actions
    / Confirm Member delete
    / Confirm Data Set delete
    / Do not show expanded command
    / Enhanced member list for Edit, View, and Browse
    - Display Total Tracks
    / Execute Block Commands for excluded Data Sets
    - Display Expiration Date

(*) Requires enhanced member list option to be selected

Press EXIT to save, CANCEL to cancel changes.

```

# (ISPF) New popup panel ISRUBROW by OPT3.4 BROWSE

## ⊕ ISRDLSET panel (z/OS V1R12)

```

-   File Colors Workstation Help
I
C   ISRDLSET           Data Set List Settings Main           More:  +
C   General Options
-   Enter "/" to select option
*   / Display Edit/View entry panel (*)
    / Automatically update reference lists
    / List pattern for MO, CO, D, and RS actions
    / Show status for MO, CO, D, and RS actions
    / Confirm Member delete
    / Confirm Data Set delete
    / Do not show expanded command
    / Enhanced member list for Edit, View, and Browse
    / Display Total Tracks
    / Execute Block Commands for excluded Data Sets
    / Display Expiration Date

(*) Requires enhanced member list option to be selected

```

## (ISPF) New popup panel ISRUBROW by OPT3.4 BROWSE

### ⊕ **ISRUEDIT panel (z/OS V1R12)**

```

-   Workstation Help
I   _____
C   ISRUEEDIT          EDIT Entry Panel          More:  +
C   Object Name:
-   'BEANS.DEBUG.DATASET'
E   * No workstation connection
*   Initial Macro . . . _____
    Profile Name . . . _____ (Blank defaults to Type)
    Format Name . . . _____
    Panel Name . . . . _____ (Leave blank for default)

Options
  Confirm Cancel/Move/Replace
  [ ] EDIT Mixed Mode
  [ ] EDIT host file on Workstation
  [ ] Preserve VB record length
  [ ] Warn on First Data Change
  [ ] ASCII data
  
```

## (ISPF) New popup panel ISRUBROW by OPT3.4 BROWSE

### ⊕ **ISRUEDIT panel (z/OS V2R1 after APAR OA42248)**

```

-      Workstation  Help      -
I      _____
C      ISRUEDIT          EDIT Entry Panel          More:  +
C      Object Name:
-      'BEANS.DEBUG.DATASET'
E      * No workstation connection
*      Initial Macro . . .
PDSE Generation. . .
      Line Command Table
      Profile Name . . . (Blank defaults to Type)
      Format Name . . .
      Panel Name . . . (Leave blank for default)

      Options          Data Encoding
      Confirm Cancel/Move/Replace  - 1. ASCII
      [ EDIT Mixed Mode          - 2. UTF-8
      EDIT host file on
      Workstation
      Preserve VB record length
      / Warn on First Data Change
  
```

## (ISPF) New popup panel ISRUBROW by OPT3.4 BROWSE

### ⊕ ISRUBROW new panel (z/OS V2R1 after APAR OA42248)

```

Menu Options View Utilities Compilers Help
-----
ISRUDSL0 Data Sets Matching BEANS.DEBUG                      Row 1 of 1
Command ==> _____ Scroll ==> CSR
Command - Enter "/" to select action                        Dsorg Recfm Lrecl Blksz
-----
B_      BEANS.DEBUG.DATASET                                PS   FB      80 32000
***** End of Data Set list *****

```

```

Menu Options View Utilities Compilers Help
-----
I  ISRUBROW          BROWSE Entry Panel          1
C                                     R
C  Object Name:
C  'BEANS.DEBUG.DATASET'          me
-  PDSE Generation. .
B                                     KA
*                                     ***
  Options
  /  BROWSE Mixed Mode

Press ENTER to continue. Press CANCEL to cancel action.

```

## (ISPF) New popup panel ISRUBROW by OPT3.4 BROWSE

### ⊕ Considerations

- As of APAR OA42248 in z/OS V2R1, the operation flow in BROWSE in ISPF OPT3.4 is changed
  - Recommend to inform ISPF user about the new popup panel ISRUBROW
- Panel ISRUBROW displays the English characters for the Japanese language terminal
  - Opened ISPF APAR OA44713
    - ✓ ISRUBROW is changed to display the Japanese and German languages whenever is required
    - ✓ Also, it is changed to display the **PDSE GENERATION** in capital letters in English for the Japanese language, rather than **PDSE Generation**

## (ISPF) Pack option in panel ISRUMVC (OPT3.4)

### ⊕ Behavior in z/OS V1R12,V1R13, and V2R1 (Before ISPF APAR OA43201)

- While editing a data set or member, you can use the **ISPF EDIT primary command "PACK ON"** to store data in packed format
  - It allows you to use DASD more efficiently
    - ✓ In this format, ISPF replaces any repeating characters with a sequence showing how many times the character is repeated
- You can set the default processing of EDIT primary command via ISPF Configuration Table
  - PACK (default: OFF)
  - FORCE\_PACK (default: NO)
- The behavior of pack option is slightly different depending on the ISPF copy operation
  - In **OPT3.3 COPY**, you can choice the Pack option 3 to keep the packed format
  - The meaning of Default Pack option is not the same in these two panels
    - ✓ In **OPT3.4 COPY**, it means that the target is not packed

Copy operation	Panel	Pack option	Functions
<b>ISPF OPT3.3 COPY</b>	ISRUMC2B	1. Yes 2. No 3. Default	1: Pack the target 2: Not pack the target 3: Same format as source
<b>ISPF OPT3.4 COPY</b>	ISRUMVC	<b>1. Default</b> 2. Pack	<b>1: Not pack the target</b> 2: Pack the target

## (ISPF) Pack option in panel ISRUMVC (OPT3.4)

### ⊕ z/OS V2R1 OPT3.4 (Before ISPF APAR OA43201)

- C line command from the Member list panel
- CO line command from the Data Set list panel

```

ISRUMVC                                COPY Entry Panel
Command ===>                                More: -

To Library                                Options:
Project . . .                               Enter "/" to select option
Group . . .                                 Replace like-named members
Type . . .                                  / Process member aliases

To Other Data Set Name
Name . . . . .
Volume Serial . . . (If not cataloged)

NEW member name . . . (Blank unless member to be renamed)

Options
Sequential Disposition      Pack Option      SCLM Setting
2 1. Mod                    2 1. Default    3 1. SCLM
   2. Old                   2. Pack         2. Non-SCLM
                                   3. As is

Press ENTER to perform action. Press CANCEL to cancel action.
  
```



## (ISPF) Pack option in panel ISRUMVC (OPT3.4)

### ⊕ Behavior in z/OS V1R12,V1R13, and V2R1 (After ISPF APAR OA43201)

- Panel ISRUMVC (OPT3.4 COPY) is changed to **use NO and YES as Pack option**
  - The meaning of these options is the same as before
    - ✓ There is not still a capability to keep the packed format

	Copy operation	Panel	Pack option	Functions
<b>Before</b>	ISPF OPT3.4 COPY	ISRUMVC	1. Default 2. Pack	1: Not pack the target 2: Pack the target
<b>After</b>	ISPF OPT3.4 COPY	ISRUMVC	1. No 2. Yes	1: Not pack the target 2: Pack the target

- In z/OS V2R1 ISPF, the only way to copy members with pack option preserved is to use OPT3.3 COPY (Pack option 3)

```

ISRUMC2B From BEANS.JCLLIB(*)
Command ===>

Specify "To" Data Set Below

< snipped >

To Data Set Options:
  Sequential Disposition
  1  1. Mod
     2. Old
     Pack Option
     3  1. Yes
        2. No
        3. Default
     SCLM Setting
     3  1. SCLM
        2. Non-SCLM
        3. As is
  
```

## (ISPF) OPT3.2 and OPT3.4 New Allocation

### ⊕ Behavior in z/OS V1R12 ISPF

- Beginning in z/OS V1R11 DFSMS, the end-of-file (EOF) marker is written during the new allocation of **non-SMS-managed sequential data set**
  - The behavior is now consistent with the SMS-managed sequential data set
- Historically, the allocation option (OPT3.2) in ISPF opens and closes new non-SMS-managed sequential data set to make system write EOF marker
  - This action is continued in z/OS V1R12 ISPF despite of the above DFSMS enhancement

### ⊕ Change in z/OS V1R13 ISPF

- This action is no longer performed for both OPT3.2 new allocation and OPT3.4 AL new line command panels in order to support the new feature of z/OS V1R11 DFSMS
  - **No open and close is done by ISPF** for new allocated non-SMS-managed sequential data set

		z/OS V1R12	z/OS V1R13	z/OS V2R1
<b>SMS-managed sequential data set</b>	ISPF OPT3.2 "A" ISPF OPT3.4 "AL"	<b>ISPF does not OPEN/CLOSE</b>		
	New allocation	<b>System writes EOF</b>		
<b>Non-SMS-managed sequential data set</b>	New allocation	<b>System writes EOF</b>		
	ISPF OPT3.2 "A" ISPF OPT3.4 "AL"	<b>ISPF does OPEN/CLOSE</b>	<b>ISPF does not OPEN/CLOSE</b>	

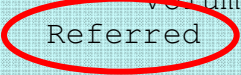

## (ISPF) OPT3.2 and OPT3.4 New Allocation

### ⊕ Considerations

- As a result, **the last referenced date** is no longer updated on the panel output right after the OPT3.2 and OPT3.4 new allocation of non-SMS managed sequential data set
  - Instead, \*\*\*None\*\*\* is displayed in the Referred column in OPT3.4 panel
    - ✓ This behavior is now consistent whether the data set is SMS-managed or not
- **z/OS V1R12 ISPF OPT3.2 New Allocation**

```

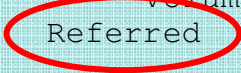

Command - Enter "/" to select action
Tracks %   XT Device  Dsorg Recfm Lrecl Blksz  Message
          Catalog    Created  Referred Volume
-----
BEANS.TEST.D0626A
  1  0     1 3390    PS  FB      80 27920 2014/06/26 2014/06/26  SYSWK1
CATALOG.ZR1C.MASTER
  
```

- **z/OS V2R1 ISPF OPT3.2 New Allocation**

```

Command - Enter "/" to select action
Tracks %   XT Device  Dsorg Recfm Lrecl Blksz  Message
          Catalog    Created  Referred Volume
-----
BEANS.TEST.D0626B
  1  0     1 3390    PS  FB      80 27920 2014/06/26 ***None***  SYSWKA
USER.FS16.CATALOG
  
```

## Today's summary

- ⊕ **(BCP) New DATA SET NOT FOUND message in Batch allocation**
  - New message IEFA107I replaces IEF212I to display a name of data set which is not found
- ⊕ **(BCP) Automatic start of IBM Health Checker for z/OS**
  - Need to stop address spaces before shutting down the JES
- ⊕ **(BCP) Auxiliary storage shortage message**
  - News message IRA203E replaces IRA210E when the detected address space is SWAPPABLE
- ⊕ **(BCP) Default PPT for CICS**
  - No longer need to specify the PPT entry via SCHEDxx parmlib member
- ⊕ **(BCP) Default PPT for System REXX**
  - No longer need to specify the PPT entry via SCHEDxx parmlib member
- ⊕ **(BCP) Restoring CSVLLA suffix during LLA restart**
  - Need to specify LLA=NONE on a subsequent start to enable the "no parmlib member" state
- ⊕ **(SDSF) Max-RC displays blank for TYPRUN=SCAN job**
  - SDSF Max-RC column displays blank rather than CC 0000

## Today's summary (continued)

- ⊕ **(SDSF) Activating a new console with a different name**
  - SDSF activates a new extended MCS console with a different name by default
- ⊕ **(ISPF) PDSE Version 2 Member Generations**
  - Watch out for APAR OA45426 (ISPF) and OA45256 (BCP) about MAXGENS new option
- ⊕ **(ISPF) VSAM commands for Edit, View, and Browse**
  - Need to use the new defaults specified in ISPF Configuration Table
- ⊕ **(ISPF) Dialogs using ZSCR variable**
  - Application needs to be reviewed and you might have to change your dialog (exec and panel)
- ⊕ **(ISPF) New popup panel ISRUBROW by OPT3.4 BROWSE**
  - Recommend to inform ISPF user about the new popup panel ISRUBROW
- ⊕ **(ISPF) Pack option in panel ISRUMVC (OPT3.4)**
  - Panel ISRUMVC (OPT3.4 COPY) is changed to use NO and YES as Pack option
- ⊕ **(ISPF) OPT3.2 and OPT3.4 New Allocation**
  - No open and close is done by ISPF for new allocated non-SMS-managed sequential data set

Thank You

