

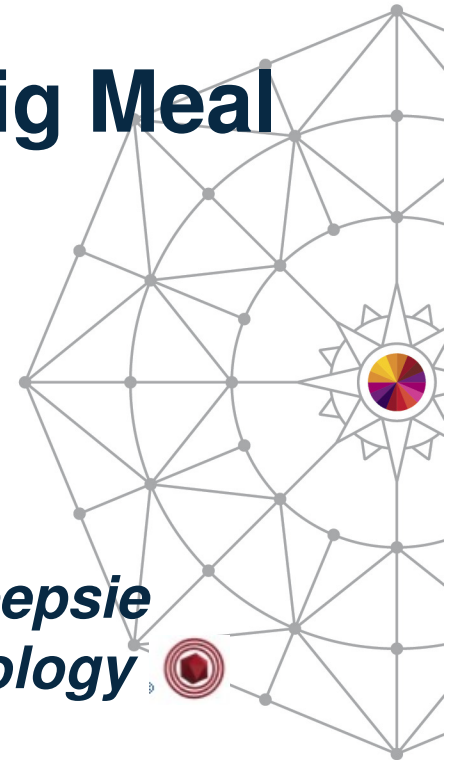


# z/OS Little Enhancements: Many Small Potatoes Can Make a Big Meal

Episode 2014B

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## *Many Small Potatoes Can Make a Big Meal*

- Everyone, right now:
  - Learning about new content from releases
  - Learning about new content from PTFs
- z/OS V2.1:
  - BCP: Dynamic SYSDSN ENQ downgrade
  - BCP: Parallel batch recall
  - Communications Server: TCP/IP profile syntax check
  - ISPF: Swapbar enhancements
- z/OS V1.13:
  - z/OS UNIX: Non-privileged user mount
  - DFSMSdftp: IGGCATxx parmlib member
  - DFSMSdss: Standalone ICKDSF no longer needed...
- z/OS V1.12:
  - BCP: Timed Event Data Report – Dig more out of it
- z/OS V1.11:
  - BCP: DELMIGDS for IEFBR14
  - Communications Server: syslogd browser and search
- Older than the hills:
  - z/OS UNIX: REMOUNT to change the mount mode
  - z/OS UNIX: submit with cron
  - z/OS UNIX: skulker



Everyone, right now! Learning about new content in z/OS releases —

## **IBM Education Assistance**



- **Scoped PDFs files that cover a single enhancement, or group of related enhancements.**

- **Installation and migration information, includes two MP3 recordings from SHARE in Boston 2013.**

- **z/OS V2.1 has 113 files for you!**

- **Divided into categories of value.**

- **Subdivided into elements.**

- **Try it out here! [IBM z/OS V2.1 Education Assistance](#)**

- **z/OS V1.13 IBM Education Assistant information still available here: [IBM z/OS V1.13 Education Assistant](#)**

- **Contains PDFs and some MP3s in an InfoCenter format.**

# Everyone, right now! Learning about new content in z/OS releases — IBM Education Assistance



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## IBM Education Assistance

IBM z/OS® Operating System - Version: V2R1 - Availability

**Description** **Availability** **Scalability & Performance** **Usability & z/OSMF**

**Self-Managing Capabilities** **Industry & Open Standards** **Security**

**Installation & Migration**

**BCP**

- z/OS V2R1 BCP SLIP Zero Address Detection
- z/OS V2R1 BCP RTM SRBTERM
- z/OS V2R1 BCP Consoles Dynamic Add Del Consoles
- [z/OS V2R1 BCP Consoles AUTOR SYNCHDEST](#)
- z/OS V2R1 BCP Consoles FORCE TCB
- z/OS V2R1 BCP Consoles Autor RateLimit
- z/OS V2R1 BCP System Symbol Update
- z/OS V2R1 DFSMS Device Support Architecture Level Set for DASD

**JES3**

- z/OS V2R1 JES3 Spool Delete

**Contact**

Questions, comments?  
Send an email

**Related links**

- z/OS V2R1 Redbooks Publications
- z/OS home page
- zFavorites for System z
- Meet the IBM zEnterprise EC12

Related links

- IBM Publications
- Technical training

Everyone, right now! Learning about new content in z/OS stack PTFs –

## My Notifications



- Receive notification when a z/OS platform APAR has closed.
- Instructions are found in an ATS Techdoc: [ATS TechDoc PRS5188](#)
- Signup through IBM Support Portal, new option added for subscription!
  - All z/OS platform new function PTFs will be identified to you.

The screenshot shows a list of notification categories with checkboxes. The 'New Function APARs' checkbox is checked and highlighted with a red box. A large yellow arrow points from this checkbox towards the list of steps on the right.

- Flashes
- Forums/discussion groups
- News
- Parts information
- Product information and publications
  - Education
  - Manuals
  - MES
  - IPAAid
  - New Function APARs
  - Newsletters
  - Preloaded software information
  - Product documentation

Found through:

1. Manage support notifications
2. Subscribe
3. System z
4. z/OS – OS and related Software
5. Document type: New Function APARs

# Everyone, right now! Learning about new content in z/OS stack PTFs – My Notifications




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File Edit View Create Actions Tools Window Help

Open **Sample email** z x

Search All Mail

New Reply Forward Display Report as Spam Archive More

 **IBM My notifications - System z**  
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[Show Details](#)

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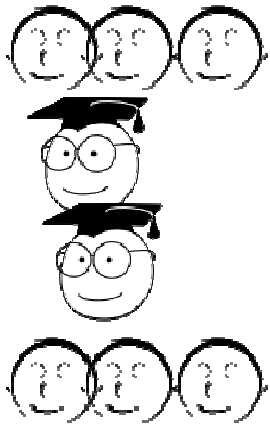
1. z/OS - OS and related software: New Function APARs

- TITLE: COMPONENT ID: 5740XYR00 (5740 IBM DATABASE 2) PM96764 - The New Function APAR has closed. A fix is pending. Subscription to this APAR is available.  
- URL: <http://www-01.ibm.com/support/docview.wss?uid=swg1PM96764&myns=z000&mynp=OCSG004CE&mync=E>  
- ABSTRACT: CHANGE TO THE DEFAULT VALUE OF RBALRSN\_CONVERSION KEYWORD WHEN THE ZPARAM UTILITY\_OBJECT\_CONVERSION IS SET TO NOBASIC
- TITLE: COMPONENT ID: 5655E0600 (IMS HIGHPERF UNLOAD) PM22119 - The New Function APAR has closed. A fix is pending. Subscription to this APAR is available.  
- URL: <http://www-01.ibm.com/support/docview.wss?uid=swg1PM22119&myns=z000&mynp=OCSG004CE&mync=E>  
- ABSTRACT: SUPPORT FOR IMS
- TITLE: COMPONENT ID: 5740XYR00 (5740 IBM DATABASE 2) PM94353 - The New Function APAR has closed. A fix is pending. Subscription to this APAR is available.  
- URL: <http://www-01.ibm.com/support/docview.wss?uid=swg1PM94353&myns=z000&mynp=OCSG004CE&mync=E>  
- ABSTRACT: ENABLING IN SUPPORT OF NEW FUNCTION
- TITLE: COMPONENT ID: 568819801 (LE FOR MVS & VM) PM95809 - The New Function APAR has closed. A fix is pending. Subscription to this APAR is available.  
- URL: <http://www-01.ibm.com/support/docview.wss?uid=swg1PM95809&myns=z000&mynp=OCSG004CE&mync=E>  
- ABSTRACT: NEW FUNCTION

Local - Office

z/OS V2R1

## Small Enhancements

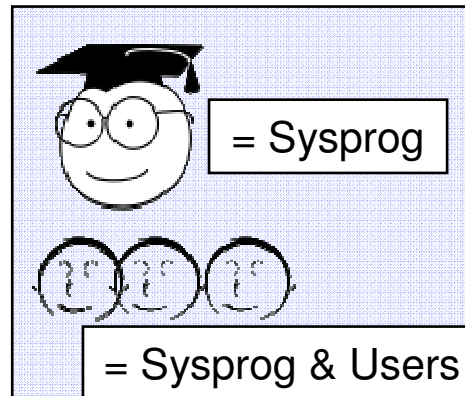


❖ **BCP: Dynamic SYSDSN ENQ downgrade**

❖ **BCP: Parallel Batch Recall**

❖ **CommServer: TCP/IP Profile Syntax Check**

❖ **ISPF: Swapbar Enhancements**





## BCP: Dynamic SYSDSN ENQ downgrade



- **What:** The ability to allow a SYSDSN enqueue downgrade for batch jobs, when appropriate. This allows the possibility for better batch parallelism.
- **How to use:**
  - Must coordinate ability between JES2 JOBCLASS attribute DSENQSHR and JCL JOB keyword DSENQSHR. Defaults to off.
  - JES2 JOBCLASS attribute: **DSENQSHR=**AUTO | **ALLOW** | **DISALLOW**
    - **ALLOW** allows a downgrade only when JCL has **ALLOW**
    - **AUTO** allows a downgrade when JCL has **ALLOW** or **USEJC**
  - JCL JOB keyword: **DSENQSHR=**ALLOW | **USEJC** | **DISALLOW**
    - **USEJC** allows downgrade only when jobclass is **AUTO**
    - **ALLOW** allows a downgrade when JOBCLASS has **AUTO** or **ALLOW**
- **Considerations:**
  - SYSDSN enqueue downgrade occurs once in a job per data set. You can have enqueue downgrades for different data sets at different steps.
  - Prior to this enhancement, the exclusive enqueue was held until the end of the job, even if all subsequent steps were DISP=SHR. Review your DISP= coding to make sure it is accurate before using this enhancement, and you weren't relying on prior behavior.
  - Downgrading the SYSDSN enqueue for one job, may allow other jobs to take advantage of the shared enqueue without those jobs needing to be updated.



# BCP: Dynamic SYSDSN ENQ downgrade

```
//LONG JOB (accounting), DSENQSHR=ALLOW
//STEP1 EXEC PGM=WHATEVER
//NEW DD DSN=MY.DATA.SET, DISP=NEW
//STEP2 EXEC PGM=SOMEPGM
//OLD DD DSN=MY.DATA.SET, DISP=MOD
//STEP3 EXEC PGM=PROGM2
//SHRNOW DD DSN=MY.DATA.SET, DISP=SHR
//STEP4 EXEC PGM=WRITER
//OLDAGAIN DD DSN=MY.DATA.SET, DISP=OLD
//STEP5 EXEC PGM=SOWHAT
//SHRAGIN DD DSN=MY.DATA.SET, DISP=SHR
//STEP6 EXEC PGM=WHOKNOWS
//STILLSHR DD DSN=MY.DATA.SET, DISP=SHR
```

Exclusive ENQ,  
until STEP4 is done

Now, shared ENQ,  
Other jobs may run

```
//WAITING JOB (accounting)
//STEP1 EXEC PGM=READER
//JUSTSHR DD DSN=MY.DATA.SET, DISP=SHR
//STEP2 EXEC PGM=READ2
//STILLSHR DD DSN=MY.DATA.SET, DISP=SHR
```

```
//WAITIN2 JOB (accounting)
//STEP1 EXEC PGM=READER
//JUSTSHR DD DSN=MY.DATA.SET, DISP=SHR
//STEP2 EXEC PGM=READ2
//STILLSHR DD DSN=MY.DATA.SET, DISP=SHR
```

## BCP: Parallel Batch Recall



- **What:** The ability to recall all migrated data sets in the job step in parallel.
  - Legacy behavior is to recall any migrated data sets *serially* at the job step.
  - By recalling the data sets in parallel, you can reduce the delay for other jobs to use that initiator. This allows better parallelism of batch execution.
  
- **How to use:**
  - **SETALLOC SYSTEM, BATCH\_RCLMIGDS=PARALLEL**
  - **PARALLEL** or **SERIAL** are the options.
  - **SERIAL** is the legacy option, for data set-by-data set recall, the default.
  - **ALLOCxx** parmlib member: **SYSTEM BATCH\_RCLMIGDS (PARALLEL)**
  
- **Considerations:**
  - May dynamically change this system-wide setting.
  - Notice the syntax structure difference between the command = and the statement ().
  - Notice that you may (or may not) send many recall requests in bursts. SYSZTIOT contention is not impacted.

Harden used values !



1

```
D ALLOC,OPTIONS
IEFA003I 14.09.47 ALLOC OPTIONS 068
...
SYSTEM          IEFBR14_DELMIGDS: LEGACY
                 TAPELIB_PREF:      EQUAL
                 REMIND_INTV:        90
                 VERIFY_UNCAT:       FAIL
                 TEMPDSFORMAT:       INCLUDELABEL
                 MEMDSENQMGMT:        DISABLE
                 BATCH_RCLMIGDS: SERIAL
                 OPTCDB_SPLIT:       EXPLICIT
```

3

```
D ALLOC,OPTIONS
IEFA003I 14.13.39 ALLOC OPTIONS 072
...
SYSTEM          IEFBR14_DELMIGDS: LEGACY
                 TAPELIB_PREF:      EQUAL
                 REMIND_INTV:        90
                 VERIFY_UNCAT:       FAIL
                 TEMPDSFORMAT:       INCLUDELABEL
                 MEMDSENQMGMT:        DISABLE
                 BATCH_RCLMIGDS: PARALLEL
                 OPTCDB_SPLIT:       EXPLICIT
```

2

```
SETALLOC SYSTEM, BATCH_RCLMIGDS=PARALLEL
IEFA010I SETALLOC COMMAND SUCCESSFUL 070
BATCH_RCLMIGDS SET TO PARALLEL.
```

4

```
EDIT          SYS1.PARMLIB.POK(ALLOCMW) - 01.00
Command ==>
***** ***** Top of Data ****
000100 SYSTEM BATCH_RCLMIGDS(PARALLEL)
***** ***** Bottom of Data **
```



## CommServer: TCP/IP Profile Syntax Check

- **What:** Verify the syntax of profile configuration statements without affecting system.
  - You can use this command on any TCP/IP stack that is the same release as the profile statements in the profile data set for consistency, without regard to what is currently in use on that stack.
  - That stack doesn't necessarily have to be the one that will use the profile. But, if you are verifying system symbols, direct the command to the stack that you intended to use for consistent resolution.
  - Use this before activating the TCP/IP profile, or using the `VARY TCPIP, , OBEYFILE` command.
- **How to use:**
  - `VARY TCPIP, , SYNTAXCHECK, dsname`
  - Can direct the command to specific TCP/IP address space with:  
`VARY TCPIP, procname, SYNTAXCHECK, dsname`
  - *dsname* must be a cataloged sequential data set or PDS(E) member
  - Need CONTROL access to `MVS.VARY.TCPIP.SYNTAXCHECK` in class OPERCMDS
- **Considerations:** Because no updates are done, the command cannot detect or report conflicts with what is currently in use.
  - Duplicate interfaces or deleting a non-existent interface cannot be detected.
  - Keep running the syntax check until it has a clean result, as it may stop after the first syntax error.



**VARY TCPIP, , SYNTAXCHECK, SYS1.TCPPARMS (PROFSYSB)**

EZZ0060I PROCESSING COMMAND: VARY

TCPIP, , SYNTAXCHECK, SYS1.TCPPARMS (PROFSYSB)

EZZ0061I VARY SYNTAXCHECK COMMAND BEGINNING

EZZ0300I OPENED INCLUDE FILE 'SYS1.TCPPARMS (IPSECPRB) '

EZZ0300I OPENED SYNTAXCHECK FILE 'SYS1.TCPPARMS (PROFSYSB) '

EZZ0309I PROFILE PROCESSING BEGINNING FOR 'SYS1.TCPPARMS (PROFSYSB) '

**EZZ0401I SYNTAX ERROR IN FILE: 'SYS1.TCPPARMS (PROFSYSB) ' ON LINE: 38**

**AT: 'TCPCONFIG6'**

**EZZ0324I UNRECOGNIZED STATEMENT TCPCONFIG6 FOUND ON LINE 38**

EZZ0309I PROFILE PROCESSING BEGINNING FOR SYS1.TCPPARMS (IPSECPRB)

EZZ0316I PROFILE PROCESSING COMPLETE FOR FILE 'SYS1.TCPPARMS (IPSECPRB) '

EZZ0304I RESUMING PROCESSING OF FILE 'SYS1.TCPPARMS (PROFSYSB) '

**EZZ0318I TCP WAS FOUND ON LINE 131 AND NUMBER OF PORTS WAS EXPECTED**

EZZ0316I PROFILE PROCESSING COMPLETE FOR FILE 'SYS1.TCPPARMS (PROFSYSB) '

EZZ0064I VARY SYNTAXCHECK FOUND ERRORS: SEE PREVIOUS MESSAGES

EZZ0065I VARY SYNTAXCHECK COMMAND COMPLETE

## ISPF: Swapbar enhancements



- **What:** Swapbar (since z/OS R10) is nice for point-and-shoot session navigation, however it can get “lost” on a busy panel. z/OS V2.1 allows you to customize the swapbar so you can make it easier to notice, with:
  - a divider line
  - session coloring and highlighting, for current and other sessions
- **How to use:**
  - `swapbar /` gives you the tailoring displays
- **Considerations:** current session can be customized differently from the other sessions. Settings are saved in the user’s profile.
  - Remember: \* means current, and – means alternate.

*Before z/OS V2.1:*

```
Specify the name of the CSI that contains the global zone:  
  SMPCSI DATA SET   ==> 'MVSBUILD.ZOS21.CSI'  
(Leave blank for a list of SMPCSI data set names.)
```

```
ISR@PRIM UDLIST   *GIM@PRI -DSLIST
```

```
MA
```

```
B
```

```
02/007
```

```
Connected to remote server/host plpsc.pok.ibm.com using lu/pool M05TC1 uspokI58-A39-01-710-Poughkeepsie on uspokI58
```



With z/OS V2.1: `swapbar /`

```
— ISPF Settings —  
Tailor SWAPBAR Display  
  
_ Show SWAPBAR divider line ( enter "/" to select)  
  
_ S to update SWAPBAR, C for current session,  
  D to clear current session  
  
Enter first letter of color and hilite to set  
_ color (Blue,Red,Pink,Green,Turquoise,Yellow,White)  
_ hilite (None,Blink,Reverse,Underscore)
```

S: the whole swapbar to use the settings

C: only the current screen to use the settings

D: delete the settings for the entire swapbar

Then, color and highlighting are what to use for the S or C selection.





I want to:

- 1 use a dividing line
- 2 make non-current sessions yellow, no highlighting
- 3 make current session pink, with underline.

```
ISPF Settings
Tailor SWAPBAR Display

1 / Show SWAPBAR divider line ( enter "/" to select)
S S to update SWAPBAR, C for current session,
D to clear current session

2 Enter first letter of color and hilite to set
Y color (Blue,Red,Pink,Green,Turquoise,Yellow,White)
N hilite (None,Blink,Reverse,Underscore)
```

Then exit to save after 2

```
ISPF Settings
Tailor SWAPBAR Display

/ Show SWAPBAR divider line ( enter "/" to select)
C S to update SWAPBAR, C for current session,
D to clear current session

3 Enter first letter of color and hilite to set
P color (Blue,Red,Pink,Green,Turquoise,Yellow,White)
U hilite (None,Blink,Reverse,Underscore)
```

Then exit to save after 3

```
W WHAT IS NEW - W

Specify the name of the CSI that contains the global zone:
SMPCSI DATA SET ==> 'MVSBUILD.ZOS21.CSI'
(Leave blank for a list of SMPCSI data set names.)

ISR@PRIM UDLIST *GIM@PRI -DSLIST
```

z/OS R13

## Small Enhancements



❖ **z/OS UNIX: Non-privileged user mount**



❖ **DFSMSdfp: IGGCATxx parmlib member**



❖ **DFSMSdss: Standalone ICKDSF no longer needed for initialization on RESTOREs**



## z/OS UNIX: Non-privileged user mount



### ■ How to mount:

- Read access to SUPERUSER.FILESYS.USERMOUNT UNIXPRIV profile
- Read-Write-Execute (RWX) access permission to the mount point directory
  - If Sticky bit is set, then the user must be the owner of mount point directory
- Mount point directory must be **empty**
- Read-Write-Execute (RWX) access permission to the file system root directory to mount
  - If Sticky bit is set, then the user must be the owner of file system root to mount

### ■ How to unmount: Read access to that UNIXPRIV profile, and be the one that mounted it.

### ■ System-wide control with the following new keywords in BPXPRMxx:

#### – MAXUSERMOUNTSYS ( ) :

- Use the MAXUSERMOUNTSYS statement to specify the maximum number of nonprivileged user mounts in the system or in shared file system configuration.
- Default is 0 (none).

#### – MAXUSERMOUNTUSER ( ) :

- Use the MAXUSERMOUNTUSER statement to specify the maximum number of nonprivileged user mounts allowed for any nonprivileged user in the system or in shared file system configuration.
- Default is 0 (none).

# z/OS UNIX: Non-privileged user mount

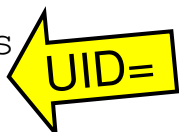
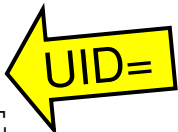


## ■ Display non-privileged user mount information using filters

– **D OMVS,FILE,UID=<euid|USER|PRIV>**

### ■ **D OMVS, F, UID=USER** for non-privileged mounts

```
BPX0045I 13.37.38 DISPLAY OMVS 589
OMVS      000E ACTIVE          OMVS=(Y2,3Z)
TYPENAME  DEVICE  -----STATUS----- MODE  MOUNTED  LATCHES
ZFS       19 ACTIVE          RDWR  07/22/2010  L=27
        NAME=MYFS1.ZFS          13.37.25  Q=0
        PATH=/u/myzfs1/mntzfs
        UID=295
HFS       20 ACTIVE          RDWR  07/22/2010  L=23
        NAME=MYFS2.HFS          13.37.28  Q=0
        PATH=/u/myhfs2/mntzfs
        UID=47
```



### ■ **D OMVS, F, UID=PRIV** for privileged mounts

```
BPX0045I 13.38.38 DISPLAY OMVS 592
OMVS      000E ACTIVE          OMVS=(Y2,3Z)
TYPENAME  DEVICE  -----STATUS----- MODE  MOUNTED  LATCHES
ZFS       3 ACTIVE          RDWR  07/22/2010  L=15
        NAME=ZOS113.VAR.ZFS    12.46.09  Q=0
        PATH=/SYSTEM/var
ZFS       2 ACTIVE          RDWR  07/22/2010  L=14
        NAME=ZOS113.ETC.ZFS    12.46.09  Q=0
        PATH=/SYSTEM/etc
```



# z/OS UNIX: Non-privileged user mount



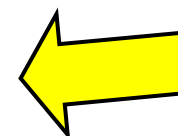
- Display nonprivileged user mount information and settings
  - DISPLAY OMVS,USERMOUNTS**

```
BPX0072I 13.28.20 DISPLAY OMVS 544
OMVS      000E ACTIVE          OMVS=(Y2,3Z)
NONPRIVILEGED USER MOUNTS SUMMARY
      UID      CURRENT MOUNTS
      295      1
      47       2
      25       1
```

Added to D OMVS, OPTIONS also!

- Display nonprivileged user mount settings and high-water marks
  - D OMVS,LIMITS**

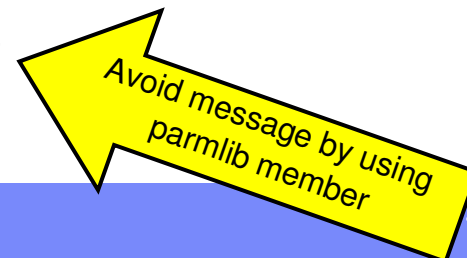
```
SY1 BPX0051I 19.35.21 DISPLAY OMVS 896
OMVS      000E ACTIVE          OMVS=(Y8,MZ)
SYSTEM WIDE LIMITS:          LIMMSG=NONE
      CURRENT  HIGHWATER  SYSTEM
      USAGE    USAGE     LIMIT
MAXPROCSYS      7         9      900
MAXUIDS         2         2      200
.....
SHRLIBRGNSIZE   0         0     67108864
SHRLIBMAXPAGES  0         0      4096
MAXUSERMOUNTSYS 15      20      100
MAXUSERMOUNTUSER 7       8       10
```



## DFSMSdfp: IGGCATxx parmlib member



- **What:** Specify catalog options in a parmlib member
  - Allows more catalog options to be specified than LOADxx (only have 72 columns there!)
  - Relief from having to do an F CATALOG after IPL
  - If used, then parameters have precedence over LOADxx and SYSCATxx
  - Default is IGGCAT00.
  
- **How to use:**
  - **IEASYSxx CATALOG= (xx, yy, ...)** will indicate which IGGCATxx parmlib members to use
  - **/\* comments \*/** are allowed between parameters
  - If duplicate parameters are given, last one will be used, in the later member.
  
- **Considerations:**
  - Defaults are used if no catalog specifications are given.
  - Parmlib members will be used if doing a CAS restart (except for TASKMAX)
  - If IEASYSxx CATALOG= isn't specified, IGGCAT00 will be used. If IGGCAT00 cannot be found, then this message will appear at IPL:
    - **IEA301I IGGCAT00 NOT FOUND IN PARMLIB**



## LOADxx SYSCAT statement:

### Column Contents

1-6 SYSCAT

10-15 The volume serial of the device that contains the master catalog.

16 If SYS% to SYS1 conversion is active → SYS%

17 Alias name level of qualification → ALIASLEVEL

18-19 CAS service task lower limit → TASKMIN(nnn)

20-63 The 44-byte data set name of the master catalog.

64-71 HLQ of the tape volume catalog → TAPEHLQ

72 Enable AUTOADD → AUTOADD



IGGCATxx has so much  
more than LOADxx!

## IGGCATxx parameters:

<i>resource(minutes,action)</i>	DSNCHECK(YES NO)	NOTIFYEXTENT( <i>percent</i> )	TASKTABLESIZE( <i>nnn</i> )
<b>ALIASLEVEL(<i>n</i>)</b>	DUMP(ON OFF)	SYMREC(YES NO)	UPDTFAIL(YES NO)
<b>AUTOADD(ON OFF)</b>	DUMPON( <i>rc,rsn,mod</i> )	<b>SYS%(ON OFF)</b>	VVDSSPACE( <i>primary,sec ondary</i> )
CATMAX( <i>nnnn</i> )	DUMPON( <i>rc,rsn,mod,cnt</i> )	<b>TAPEHLQ(<i>name</i>)</b>	VVRCHECK(YES NO)
DELFORCEWNG(YES NO)	EXTENDEDALIAS(YES N O)	TASKMAX( <i>nn</i> )	
DELRECOVWNG(YES NO)	GDGFIFOENABLE(YES N O)	<b>TASKMIN(<i>nnn</i>)</b>	

## DFSMSdss: Standalone ICKDSF no longer needed for initialization on RESTORES



- **What:** Previously, for a "very first environment" (for DR, new systems,...) you might have had a tape with:
  - *File 1:* Standalone ICKDSF, to initialize the volumes to be restored.
  - *File 2:* Standalone DFSMSdss, to restore the volumes needed to IPL
- First step: IPL standalone ICKDSF and initialize the volumes to be restored.
- Second step: IPL standalone DFSMSdss
- Third step: Restore the volumes needed to IPL z/OS.
- Fourth step: IPL z/OS and run remaining RESTORES in batch, in parallel
  
- As of z/OS R13, standalone DFSMSdss no longer requires a prior initialization of the volumes (the First Step)
  
- You can specify NOVERIFY on RESTORE to tell Standalone DFSMSdss not to read the volume label
  
- Therefore, ICKDSF no longer needs to be used ahead of time to initialize the volume!



## **DFSMSdss: Standalone ICKDSF no longer needed for initialization on RESTORES**



### ■ **How to use:**

- Standalone DFSMSdss (at or above the z/OS R13 level) can be File 1.
- Don't necessarily need Standalone ICKDSF. Only need Standalone ICKDSF if you don't want to use NOVERIFY, and want have the target volume verified.

- New sequence could then be:

First step: IPL standalone DFSMSdss (File 1)

Second step:

```
RESTORE FRMDV(TAPE) FRMADR(nnn) TOADR(nnn) NOVERIFY
```

Repeat as needed

Third step: IPL your z/OS system from the restored volumes

### ■ **Considerations:**

- R13 Standalone DFSMSdss can be used to RESTORE dumps taken with lower levels of DFSMSdss



## ❖ **BCP:** Other Uses for Timed Event Data Report





## BCP: Recap - Timed Event Data Report

- **What:** IEAVFTED is a compiled REXX program (requiring the full REXX compiler runtime libraries, not the REXX Alternate Runtime Library). It retrieves data from the Timed Event Data Table .
  - Several z/OS components use this table, as of z/OS R12.
- **How to use:** Most simple invocation from TSO/E is
  - ====> `IEAVFTED DA('output_data_set')`
  - Where 'output\_data\_set' must be the name of a pre-allocated data set with an LRECL of 512 and a RECFM of V or VB
- Reference information: *z/OS MVS Programming: Authorized Assembler Services Reference, Volume 2 (EDT-IXG)*
- Take the bottom half of the information from this output data set, and import it into a spreadsheet...

# BCP: Recap - Timed Event Data Report



Microsoft Excel - IEAVFTED.SPREADSHEET

File Edit View Insert Format Tools Window Help Nuance PDF Adobe PDF

Type a question for help

Changes... Egd Review...

D15 IEAIPL30

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
2	LOCAL-SY	'00:00:00.000000	#####	'12:13:36	Report HB	System: Local System: SY	Time: 12:13:36	Machine: 4	IPL Start: 19 Aug 2010 10:54:23.421853								
3	LOCAL-SY	'10:54:23.421853	#####	IPST	Create	Size: 00001000	Used: 00000E82	Free: 0000017E									
4	Unique Id	Event Time	Date	Event Thre	Thread EB	Type	Description	Componer	IPL Start	Thread Ste	T.E.D. Reg	Thread Pri	Jobname	HASN	PASN	Module	Level
5	LOCAL-SY	'10:54:23.421853	#####	IPL	IPL	Start	Start of IPL	IPST	0	0		0	*MASTER	'0001	'0001	IEAIPL00	
6	LOCAL-SY	'10:54:23.421853	#####	IRIM	IRIM	Start	Start of IRIM Processing	IPST	0	0		0	*MASTER	'0001	'0001	IEAIPL00	
7	LOCAL-SY	'10:54:23.426131	#####	IEAIPL10	IEAIPL10	Start	ISNIRIM - Read SCPINFO	IPST	0.004277	0		0	*MASTER	'0001	'0001	IEAIPL10	
8	LOCAL-SY	'10:54:23.426139	#####	IEAIPL10	IEAIPL10	End	ISNIRIM - Read SCPINFO	IPST	0.004285	0.000008		0.000008	*MASTER	'0001	'0001	IEAIPL10	
9	LOCAL-SY	'10:54:23.427837	#####	IEAIPL20	IEAIPL20	Start	Test Block storage to 2G	IPST	0.005983	0		0	*MASTER	'0001	'0001	IEAIPL20	
10	LOCAL-SY	'10:54:23.427837	#####	IEAIPL20	IEAIPL20	End	Test Block storage to 2G	IPST	0.005983	0		0	*MASTER	'0001	'0001	IEAIPL20	
11	LOCAL-SY	'10:54:23.429780	#####	IEAIPL11	IEAIPL11	Start	Fast FIND initialization	IPST	0.007926	0		0	*MASTER	'0001	'0001	IEAIPL11	
12	LOCAL-SY	'10:54:23.436577	#####	IEAIPL11	IEAIPL11	End	Fast FIND initialization	IPST	0.014723	0.006797		0.006797	*MASTER	'0001	'0001	IEAIPL11	
13	LOCAL-SY	'10:54:23.437089	#####	IEAIPL31	IEAIPL31	Start	LOAD service initialization	IPST	0.015235	0		0	*MASTER	'0001	'0001	IEAIPL31	
14	LOCAL-SY	'10:54:23.437926	#####	IEAIPL31	IEAIPL31	End	LOAD service initialization	IPST	0.016072	0.000837		0.000837	*MASTER	'0001	'0001	IEAIPL31	
15	LOCAL-SY	'10:54:23.439438	#####	IEAIPL30	IEAIPL30	Start	Load IPLWTO. Allocate IPL Msg Q	IPST	0.017584	0		0	*MASTER	'0001	'0001	IEAIPL30	
16	LOCAL-SY	'10:54:23.439754	#####	IEAIPL30	IEAIPL30	End	Load IPLWTO. Allocate IPL Msg Q	IPST	0.0179	0.000316		0.000316	*MASTER	'0001	'0001	IEAIPL30	
17	LOCAL-SY	'10:54:23.441023	#####	IEAIPL46	IEAIPL46	Start	Read SCHIBs into IPL workspace	IPST	0.019169	0		0	*MASTER	'0001	'0001	IEAIPL46	
18	LOCAL-SY	'10:54:23.446080	#####	IEAIPL46	IEAIPL46	End	Read SCHIBs into IPL workspace	IPST	0.024226	0.005056		0.005056	*MASTER	'0001	'0001	IEAIPL46	
19	LOCAL-SY	'10:54:23.446701	#####	IEAIPL49	IEAIPL49	Start	Process Load and Default parms	IPST	0.024847	0		0	*MASTER	'0001	'0001	IEAIPL49	
20	LOCAL-SY	'10:54:23.446702	#####	IEAIPL49	IEAIPL49	End	Process Load and Default parms	IPST	0.024848	0		0	*MASTER	'0001	'0001	IEAIPL49	
21	LOCAL-SY	'10:54:23.447907	#####	IEAIPL50	IEAIPL50	Start	IPL parmli - process LOADxx	IPST	0.026053	0		0	*MASTER	'0001	'0001	IEAIPL50	
22	LOCAL-SY	'10:54:23.512138	#####	IEAIPL50	IEAIPL50	End	IPL parmli - process LOADxx	IPST	0.090284	0.064231		0.064231	*MASTER	'0001	'0001	IEAIPL50	
23	LOCAL-SY	'10:54:23.513069	#####	IEAIPL51	IEAIPL51	Start	System architecture	IPST	0.091216	0		0	*MASTER	'0001	'0001	IEAIPL51	
24	LOCAL-SY	'10:54:23.513079	#####	IEAIPL51	IEAIPL51	End	System architecture	IPST	0.091225	0.000009		0.000009	*MASTER	'0001	'0001	IEAIPL51	
25	LOCAL-SY	'10:54:23.515338	#####	IEAIPL43	IEAIPL43	Start	Find and Open IODF data set	IPST	0.093484	0		0	*MASTER	'0001	'0001	IEAIPL43	
26	LOCAL-SY	'10:54:23.524945	#####	IEAIPL43	IEAIPL43	End	Find and Open IODF data set	IPST	0.103091	0.009607		0.009607	*MASTER	'0001	'0001	IEAIPL43	
27	LOCAL-SY	'10:54:23.526187	#####	IEAIPL60	IEAIPL60	Start	Read NCRs from IODF	IPST	0.104333	0		0	*MASTER	'0001	'0001	IEAIPL60	
28	LOCAL-SY	'10:54:23.527768	#####	IEAIPL60	IEAIPL60	End	Read NCRs from IODF	IPST	0.105914	0.00158		0.00158	*MASTER	'0001	'0001	IEAIPL60	
29	LOCAL-SY	'10:54:23.529369	#####	IEAIPL70	IEAIPL70	Start	UIM environment - load CBD/IOS	IPST	0.107515	0		0	*MASTER	'0001	'0001	IEAIPL70	
30	LOCAL-SY	'10:54:23.582386	#####	IEAIPL70	IEAIPL70	End	UIM environment - load CBD/IOS	IPST	0.160532	0.053017		0.053017	*MASTER	'0001	'0001	IEAIPL70	
31	LOCAL-SY	'10:54:23.583296	#####	IEAIPL71	IEAIPL71	Start	Build DFT for each device	IPST	0.161442	0		0	*MASTER	'0001	'0001	IEAIPL71	
32	LOCAL-SY	'10:54:23.596939	#####	IEAIPL71	IEAIPL71	End	Build DFT for each device	IPST	0.175085	0.013642		0.013642	*MASTER	'0001	'0001	IEAIPL71	
33	LOCAL-SY	'10:54:23.598923	#####	IEAIPL08	IEAIPL08	Start	Read EDT information from IODF	IPST	0.17707	0		0	*MASTER	'0001	'0001	IEAIPL08	
34	LOCAL-SY	'10:54:23.602751	#####	IEAIPL08	IEAIPL08	End	Read EDT information from IODF	IPST	0.180897	0.003827		0.003827	*MASTER	'0001	'0001	IEAIPL08	

Ready 28

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## BCP: Uses for the Timed Event Data Report

### What you can find in the IEAVFTED report:

- **BEGINPARALLEL** benefits: Start and End of “SSN= subsystem”
- **General:** comparisons between one IPL and another
- **IPL time:** Start of “Start of IPL” and End of “End of IPL”. NIP too.
  - “End of IPL” is after the first CommServer stack is available..
- **PLPA build** time: Start and End of “Build Pageable Link Pack Area” in IEAVNPC5.
- **GRS Star initialization** time: Start of "Start of STAR init processing" and End of "STAR init complete“.
- **JES2 initialization** times: Start and End of “JES2 initialization time”
- **JES2 spool format or initialization** time: Start and End of “CHECKPOINT/SPOOL”
- **Several other JES2 events:** exit 24, NJE and RJE completion, SSI Verify/Set ...

## BCP: Uses for the Timed Event Data Report



### Some things to note in the IEAVFTED report:

- Attention on the XCF/XES information! Depending on what the system is doing in the sysplex, you may not have similar comparisons between IPLs. Some considerations are:
  - First system likely will initialize CDS's, Subsequent systems may not be doing the same amount of work.
  - Systems IPLing in parallel may result in systems sharing initialization or even competing for it.
  - Differing times on how long it takes another system to recognize a new member of the sysplex.
- Of course, any times affected by outstanding WTORs should be taken into consideration.

z/OS R11

## Small Enhancements



❖ **BCP: DELMIGDS for IEFBR14**



❖ **CommServer: syslogd browser and search facility**



## BCP: DELMIGDS for IEFBR14



- **What: Allocation and DFSMSHsm to use HDELETE for IEFBR14**
  - When DISP=(*anything*,DELETE) for a DFSMSHsm-migrated data set, an HDELETE will be done instead of recalling then deleting.
  - ALLOCxx: SYSTEM IEFBR14\_DELMIGDS (NORECALL)
    - Can be changed dynamically with the SETALLOC command
      - SETALLOC SYSTEM,IEFBR14\_DELMIGDS=NORECALL
    - Intended to avoid associated delay with a recall, just to delete the data set.
- **How to use:** Support is turned off by default. You can turn it off: SETALLOC SYSTEM,IEFBR14\_DELMIGDS=LEGACY command.
- **Considerations:** D ALLOC,OPTIONS can tell you what you currently have.

```
SYSTEM IEFBR14_DELMIGDS: LEGACY
TAPEDB_PREF: EQUIL
REMINO_INTV: 90
VERIFY_UNCAT: FAIL
TEMPDSFORMAT: INCLUDELABEL
MEMDSENQMGMT: DISABLE
BATCH_RCLMIGDS: SERIAL
OPTCDB_SPLIT: EXPLICIT
```

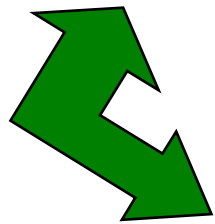


## z/OS R11 Enhancements

# BCP: DELMIGDS for IEFBR14



```
***** Top of Data *****
000001 //MWALLEDM JOB 'C90A', 'IEFBR14-DELMIGDS',
000002 //      MSGLEVEL=(1,1),CLASS=S,MSGCLASS=H,NOTIFY=MWALLE
000003 //STEP1      EXEC PGM=IEFBR14
000004 //DD1        DD      DSN=MWALLE.DELMIGDS.DS1,DISP=(OLD,DELETE)
000005 //DD1        DD      DSN=MWALLE.DELMIGDS.DS2,DISP=(OLD,DELETE)
000006 //DD1        DD      DSN=MWALLE.DELMIGDS.DS3,DISP=(OLD,DELETE)
000007 //DD1        DD      DSN=MWALLE.DELMIGDS.DS4,DISP=(MOD,DELETE)
000008 //DD1        DD      DSN=MWALLE.DELMIGDS.DS5,DISP=(MOD,DELETE)
000009 //DD1        DD      DSN=MWALLE.DELMIGDS.DS6,DISP=(MOD,DELETE)
000010 //DD1        DD      DSN=MWALLE.DELMIGDS.DS7,DISP=(SHR,DELETE)
000011 //DD1        DD      DSN=MWALLE.DELMIGDS.DS8,DISP=(SHR,DELETE)
000012 //DD1        DD      DSN=MWALLE.DELMIGDS.DS9,DISP=(SHR,DELETE)
***** Bottom of Data *****
```



```
SDSF OUTPUT DISPLAY MWALLEDM JOB25480  DSID      4 LINE 12      COLUMNS 02- 81
COMMAND INPUT ==>
IEF142I MWALLEDM STEP1 - STEP WAS EXECUTED - COND CODE 0000
IEF285I  MWALLE.DELMIGDS.DS1                      HDELETED
IEF285I  VOL SER NOS= MIGRAT.                      HDELETED
IEF285I  MWALLE.DELMIGDS.DS2                      HDELETED
IEF285I  VOL SER NOS= MIGRAT.                      HDELETED
IEF285I  MWALLE.DELMIGDS.DS3                      HDELETED
IEF285I  VOL SER NOS= MIGRAT.                      HDELETED
IEF285I  MWALLE.DELMIGDS.DS4                      HDELETED
IEF285I  VOL SER NOS= MIGRAT.                      HDELETED
IEF285I  MWALLE.DELMIGDS.DS5                      HDELETED
IEF285I  VOL SER NOS= MIGRAT.                      HDELETED
IEF285I  MWALLE.DELMIGDS.DS6                      HDELETED
IEF285I  VOL SER NOS= MIGRAT.                      HDELETED
IEF285I  MWALLE.DELMIGDS.DS7                      HDELETED
IEF285I  VOL SER NOS= MIGRAT.                      HDELETED
IEF285I  MWALLE.DELMIGDS.DS8                      HDELETED
IEF285I  VOL SER NOS= MIGRAT.                      HDELETED
IEF285I  MWALLE.DELMIGDS.DS9                      HDELETED
IEF285I  VOL SER NOS= MIGRAT.
```



## CommServer: syslogd browser and search facility

- **What:** An easy way to look at and search through active syslogd files, and if you like, archived files.
  - Active syslogd files are always z/OS UNIX files
  - Archived files are z/OS UNIX files, or MVS GDG and sequential data sets.
  
- So many functions! Change the configuration options for the syslogd, find which facilities have written to various files, search across active files for something, browse individual active files...and much more!
  
- **How to use:**
  1. Customize (one HLQ!) and invoke the REXX exec to set up it. Model it from TCPIP.SEZAEXEC(EZABROWS).
    - → ex 'mwalle.exec(ezabrows)'
  2. Explore the panels and enjoy the benefits!
  
- **Considerations:** Can also use it under z/OSMF ISPF “classic interface”...mostly, but I prefer “native” ISPF.



# CommServer: syslog browser and search facility

```
S1 ----- z/OS CS Syslogd Browser ----- Row 1 to 1 of 1
Command ==> _                               Scroll ==> PAGE

Enter syslogd browser options
Recall migrated data sets ==> NO             (Yes/No) Recall data sets or not
Maximum hits to display   ==> 200           (1-99999) Search results to display
Maximum file archives     ==> 30            (0-400) Days to look for file archives
Display start date/time   ==> YES           (Yes/No) Retrieve start date/time
Display active files only ==> NO            (Yes/No) Active files only, no archives
DSN Prefix override value ==>

Enter file or data set name of syslogd configuration, or select one from below:

File/DS Name ==> /etc/syslog.conf
Enter the config file you want to work with

Press ENTER to continue, or press END PF key to exit without a selection

Line commands: S Select, R Remove from list, B Browse content, E Edit content

Cmd Recently used syslogd configuration file or data set name
-----
/etc/syslog.conf

*EZASYPO
```



# CommServer: syslog browser and search facility

```
S1 ----- z/OS CS Syslogd Browser ----- Row 1 to 2 of 5
OPTION ==> 4_ Handy! Scroll ==> PAGE

Select one of the following, or press END PF key to exit the syslogd browser

  1 Change current syslogd configuration file and/or options
  2 Guide me to a possible syslogd destination
  3 Clear guide-me hits (indicated by ==> in the Cmd column)
  4 Search across all active syslog files

Current config file ==> /etc/syslog.conf

Line commands: B Browse, A List archives, S Search active file and archives,
               SF Search active file, SA Search archives, I File/DSN info

Cmd Rule/Active UNIX file name                Start Time      Archive
-----
*. *; local1.none; local2.none                02 Sep 2013 10:20 None 0
/tmp/syslog.log
-----
daemon.info;mail.info                          02 Sep 2013 10:20 None 0
/tmp/syslog.log

*EZASYPO
```



# CommServer: syslog browser and search facility

```
S1 ----- z/OS CS Syslogd Browser -----*
OPTION ==>
                                     More: +
Enter your search options.

Case sensitive ==> YES                (Yes/No) Are string arguments case sensitive?
Maximum hits   ==> 200                (1-99999) Max number of hits to display
Result DSN name ==> 'MWALLE.SYSLOGD.LIST'
Result DSN UNIT ==> SYSALLDA         Unit name for allocating new result DSN
Result DSN disp ==> 1                1:Keep, 2:Delete, 3:Display print menu

Enter your search arguments. All arguments will be logically ANDed.

From date . . . ==> 2014/02/16        (yyyy/mm/dd) Search from date
- and time . . . ==> 08:00:00        (hh:mm:ss) - and time (24-hour clock)
To date . . . ==> 2014/02/16        (yyyy/mm/dd) Search to date
- and time . . . ==> 10:00:00       (hh:mm:ss) - and time (24-hour clock)
User ID . . . ==> _                  z/OS user ID of logging process
Job name . . . ==> _                 z/OS jobname of logging process
Rem. host name ==>
Rem. IP address ==>
Message tag . . ==>                  Enter ? for list
```

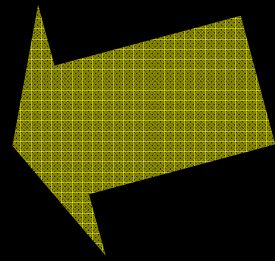
Lots more arguments!

\*EZASYPO



# CommServer: syslog browser and search facility

```
File Edit Edit_Settings Menu Utilities Compilers Test Help
S1 W MWALLE.SYSLOGD.LIST Columns 00001 00072
Command ==> PAGE
***** ***** Top of Data *****
000001 z/OS CS Syslogd Browser Search Results - Date: 28 Feb 2014 Time: 13:48:0
000002
000003 Case sensitive . . . YES
000004 Max. number of hits . 200
000005 Syslogd Config . . . /etc/syslog.conf
000006 Searched files/DSNs . 5
000007 File/DSN . . . /tmp/syslog.log
000008 File/DSN . . . /tmp/syslog.log
000009 File/DSN . . . /tmp/auth.log
000010 File/DSN . . . /tmp/error.log
000011 File/DSN . . . /tmp/debug.log
000012
000013 Search Arguments:
000014
000015 From date . . . 2014/02/16
000016 and time . . . 08:00:00
000017 To date . . . 2014/02/16
*ISREDDDE
```



...followed by the results, separated by each file...

Older than dirt on potatoes

## Small Enhancements



❖ **z/OS UNIX: REMOUNT to change the mode**

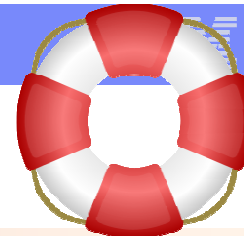


❖ **z/OS UNIX: submit with cron**



❖ **z/OS UNIX: skulker**





Older than the hills (z/OS R5):

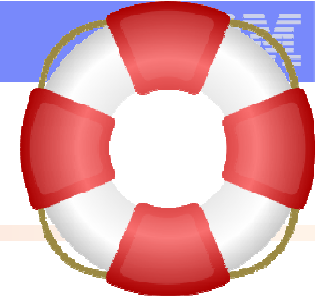
## z/OS UNIX: REMOUNT to change the mode

- **What:** You've got a new product's file system to mount. Where you want to mount it is read-only right now. You don't want to lose access to all the child file systems currently mounted to create a new mountpoint for the new product.
  - **UNMOUNT REMOUNT** to the rescue!
  - Switch between **read-only** and **read-write** mode without unmounting child file systems
- **How to use:**
  - With TSO: `umount filesystem('xxx') remount (rdwr)`
  - With ISHELL: File\_Systems pull down
  - With shell: `chmount -w /my_mountpoint`
- **Even more!** In R11, you can use the `samemode` option to internally unmount and mount in the same mode. Saves from having to do a double-remount!
  - This recovers a file system that is disabled for writes
  - `write()` calls to the file system will not fail during processing.



Older than the hills (z/OS R5):

## z/OS UNIX: REMOUNT to change the mode



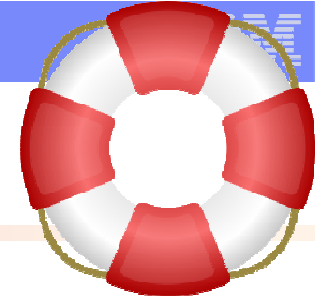
- Now, all file systems are mounted read-only:

```
Session B - [24 x 80]
File Edit View Communication Actions Window Help
Work with Mounted File Systems
Select one or more file systems with / or action codes.
U=Unmount A=Attributes M=Modify R=Reset unmount or quiesce
R/O Mount Point File system name Row 18
- Yes /u/MWALLE/system/jav MWALLE.JAVA60.ROOT
- Yes /u/MWALLE/system/jav MWALLE.JAVA601.ROOT
- Yes /u/MWALLE/system MWALLE.PRODUCT.ROOT
- No /u/MWALLE MWALLE.USER.HFS
- No /SYSB/var/wbem OS.CIM.VARWBEM.ZFS
- No /local/tools HFS.LOCAL.TOOLS.HFS
- Yes /altroot HFS.WSCZPLEX.SYSPLEX.ALTRoot.ZFS
```

Want to add a new directory's product file system

Older than the hills (z/OS R5):

## z/OS UNIX: REMOUNT to change the mode



- Change mount mode to RW, to add a new directory:

```
ISPF Command ==>
Enter TSO or Workstation commands below:
==> unmount filesystem('mwalle.product.root') remount(rdwr)
```

Session B - [24 x 80]

File Edit View Communication Actions Window Help

Work with Mounted File Systems

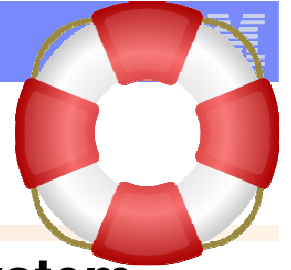
Select one or more file systems with / or action codes.  
U=Unmount A=Attributes M=Modify R=Reset unmount or quiesce

R/O	Mount Point	File system name	Row
Yes	/u/MWALLE/system/jav	MWALLE.JAVA60.ROOT	18
Yes	/u/MWALLE/system/jav	MWALLE.JAVA601.ROOT	
No	/u/MWALLE/system	MWALLE.PRODUCT.ROOT	
No	/u/MWALLE	MWALLE.USER.HFS	
No	/SYSB/var/wbem	OEHFS.CIM.VARWBEM.ZFS	
No	/u/coal/tools	OEHFS.LOCAL.TOOLS.HFS	

A yellow arrow pointing to the 'Yes' checkbox in the first row of the table.

Older than the hills (z/OS R5):

## z/OS UNIX: REMOUNT to change the mode



- Mkdir the new directory and mount the new product file system.  
Change mount mode back to read-only:

```
ISPF Command ==>
Enter TSO or Workstation commands below:
==> unmount filesystem('mwalle.product.root') remount(read)
```

Session B - [24 x 80]

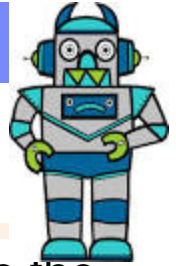
File Edit View Communication Actions Window Help

Work with Mounted File Systems

Select one or more file systems with / or action codes.  
U=Unmount A=Attributes M=Modify R=Reset unmount or quiesce

R/O	Mount Point	File system name	Row
Yes	/u/MWALLE/system/jav	MWALLE.JAVA60.ROOT	18
Yes	/u/MWALLE/system/jav	MWALLE.JAVA601.ROOT	
Yes	/u/MWALLE/system/jav	MWALLE.JAVA70.ROOT	
Yes	/u/MWALLE/system	MWALLE.PRODUCT.ROOT	
No	/u/MWALLE	MWALLE.USER.HFS	

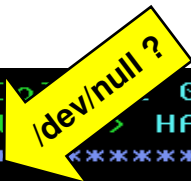
**New!**



## Older than the hills (z/OS R10): z/OS UNIX: submit with cron

- **What:** Easiest and cheapest way I know of to submit a job automatically! Use the **submit** shell command (R10, previously had to open a TSO session), and the cron facility (ancient).
  - SMP/E RECEIVE ORDER every night is a great fit for this combination!
- **How to use:**
  1. Probably already have cron daemon running...if not start it.
    - See *z/OS UNIX Planning* to do this.
  2. Set up your JCL you want to run in an MVS data set (or file).
  3. Change or add a crontab file, probably in var/spool/cron/crontabs :

```
BROWSE    /AQT5/var/spool/cron/crontabs/MWALLE    Line 00000000 068
Command ==>                                     Scroll  > HALF
***** Top of Data *****
# Run the RECEIVE ORDER job nightly at 17:15 to get HOLDDATA
15 17 * * * /bin/submit '//mwalles.util.jobs(smpdire2)' > /dev/null
***** Bottom of Data *****
```



- **submit** is the shell command that will send a batch job to JES
- Hint: cut and paste the command, and run it manually from the shell to make sure the syntax is correct.
- 4. Create or change your crontab entry: **crontab MWALLE**

## Older than the hills: z/OS UNIX: skulker



- **What:** Allows you to clean out old files in a directory, based on last access time and location.
  - skulker is a sample shell script provided in /samples/.
  - You may copy it to /bin, /usr/bin, /usr/sbin/ ... and modify it as you see fit.
  - /tmp/ is an ideal location to use skulker on
- **How to use:**
  - `/samples/skulker -i -l /u/mwalle/myskul.k.log -R /u/mwalle/tmp/ 365`where some of the options are:
  - `-i` interactively ask about files or directories that will be deleted.
  - `-l` log the deleted files, warning, errors
  - `-R` recursively moves through dirs and delete dirs and files, `-r` recursively moves through dir and deletes files
- **Considerations:** skulker with cron is a great combination!
  - Don't use `-i` from cron. If used from cron, nothing will be deleted.

# Older than the hills: z/OS UNIX: skulker example



```
EDIT      /AQTS/var/spool/cron/crontabs/MWALLE      Columns 00004 00075
Command ==> _      Scroll ==> HALF
***** ***** Top of Data *****
- - - - - 5 Line(s) not Displayed
000006 Clean out all 3 day old stuff in /u/mwalle/tmp daily at 15:00
000007 15 * * * /samples/skulker -l /u/mwalle/myskulk.log -R /u/mwalle/tmp/ 3
***** ***** Bottom of Data *****
```

- Clean out /u/mwalle/tmp/ every day at 3pm, with files and dirs that are at least three days old.
- Put what is deleted into the file myskulk.log:

```
BROWSE    /u/mwalle/myskulk.log      Line 00000011 Col 001 059
Command ==> _      Scroll ==> HALF
'/u/mwalle/tmp/junkdir/junkdir2/run2'
'/u/mwalle/tmp/junk2'
'/u/mwalle/tmp/run'
skulker run on Sat Jul 12 15:00:01 EDT 2014
No files found older than specified date.  Nothing removed.
skulker run on Sun Jul 13 15:00:01 EDT 2014
No files found older than specified date.  Nothing removed.
skulker run on Mon Jul 14 15:00:01 EDT 2014
No files found older than specified date.  Nothing removed.
skulker run on Tue Jul 15 15:00:01 EDT 2014
Files removed on Tue Jul 15 15:00:01 EDT 2014:
'/u/mwalle/tmp/run'
'/u/mwalle/tmp/junkdir/junkdir2/run2'
skulker run on Wed Jul 16 15:00:01 EDT 2014
No files found older than specified date.  Nothing removed.
skulker run on Thu Jul 17 15:00:00 EDT 2014
No files found older than specified date.  Nothing removed.
***** ***** Bottom of Data *****
```

## Summary of What We Might Want to Share with Our User Community:

- System Programmer & User Items:



- z/OS new release content
- z/OS platform PTFs new enhancements
- BCP (V2.1): Dynamic SYSDSN ENQ downgrades
- ISPF (V2.1): Swapbar enhancements
- z/OS UNIX (R13): Non-privileged user mount
- BCP (R11): DELMIGDS for IEFBR14
- z/OS UNIX (old): submit with cron
- z/OS UNIX (old): skulker



- System Programmers Items:

- BCP (V2.1): Parallel Batch Recall
- CommServer (V2.1): TCP/IP Profile syntax check
- DFSMS (R13): IGGCATxx parmlib member
- DFSMS (R13): Standalone ICKDSF not needed for s/a resto
- BCP (R12): More uses for the Timed Event Data Report
- CommServer (R11): syslogd browser and search facility
- z/OS UNIX (old): REMOUNT to change mount mode



## ***z/OS Little Enhancements: Many Small Potatoes Can make a Big Meal Summary***



- **Everyone, right now:**
  - **Learning about new content from releases**
    - IBM Education Assistance website, PDFs & some MP3.
  - **Learning about new content from PTFs**
    - My Notifications signup, then email or folder distribution
- **z/OS V2.1:**
  - **BCP: Dynamic SYSDSN ENQ downgrade**
    - For better throughput, but verify before using.
  - **BCP: Parallel Batch Recall**
    - Nice for better batch parallelism. Watch ALLOCxx vs. SETALLOC syntax.
  - **CommServer: TCP/IP profile syntax check**
    - Use before stack initialization, or OBEYFILE command.
  - **ISPF: Swapbar enhancements – Pretty up your screen.**
- **z/OS V1.13:**
  - **z/OS UNIX: Non-privileged user mount** - Give users what they want.
  - **DFSMSdfp: IGGCATxx parmlib member** - Leaves LOADxx SYSCAT in the dust.
  - **DFSMSdss: S/A ICKDSF not needed for init on RESTORE** - May eliminate a step.



## Small Stuff You May Want to Use on z/OS Summary



- z/OS V1.12:
  - **BCP:** Timed Event Data Report – Dig more out of it
- z/OS V1.11:
  - **BCP:** DELMIGDS for IEFBR14
    - Good for throughput.
  - **CommServer:** syslogd browser and search
    - Very easy to use, and very powerful and intuitive.
- Older than the hills:
  - **z/OS UNIX:** REMOUNT to change the mount mode
    - Still unknown to many, and very important for availability
  - **z/OS UNIX:** submit with cron
    - Cheapest and easiest way I use for submitting jobs.
  - **z/OS UNIX:** skulker
    - Keep a tidy file system.