

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

Episode 2014A

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z/OS Little Enhancements: 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: Add and remove MCS consoles dynamically
 - BCP: Dynamic system symbol support
 - BCP: DISPLAY PPT
 - BCP: BCP parmlib comments
- **z/OS V1.13:**
 - z/OS UNIX: Non-privileged user mount
- **z/OS V1.12:**
 - BCP: Timed Event Data Report – Dig more out of it
 - DFSMS: IDCAMS DELETE All Members, plus more!
- **z/OS V1.11:**
 - BCP: DELMIGDS for IEFBR14
 - Communications Server: syslogd browser and search
- **Older than dirt on potatoes:**
 - z/OS UNIX: REMOUNT to change the mount mode
 - z/OS UNIX: submit with cron
 - ISPF: Member search commands



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.**

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The screenshot shows a web browser window displaying the IBM Redbooks website. The browser's address bar shows the URL: www.redbooks.ibm.com/redbooks.nsf/pages/IBMIEAV21avail?Open. The page title is "IBM Education Assistance" and the subtitle is "IBM z/OS® Operating System - Version: V2R1 - Availability". The page features a navigation menu with categories like "Description", "Availability", "Scalability & Performance", "Usability & z/OSMF", "Self-Managing Capabilities", "Industry & Open Standards", "Security", and "Installation & Migration". A list of links is provided under the "BCP" and "JES3" sections. The right sidebar contains a "Contact" section with a "Send an email" button and a "Related links" section with links to z/OS V2R1 Redbooks Publications, z/OS home page, zFavorites for System z, and Meet the IBM zEnterprise EC12. The IBM logo is visible in the top right corner of the page.

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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

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



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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.

<input type="checkbox"/>	Flashes
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<input type="checkbox"/>	News
<input type="checkbox"/>	Parts information
<input type="checkbox"/>	Product information and publications
<input type="checkbox"/>	Education
<input type="checkbox"/>	Manuals
<input type="checkbox"/>	MES
<input type="checkbox"/>	IPAAid
<input checked="" type="checkbox"/>	New Function APARs
<input type="checkbox"/>	Newsletters
<input type="checkbox"/>	Preloaded software information
<input type="checkbox"/>	Product documentation

Found through:

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

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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

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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

Small Enhancements of System Programmer Interest



❖ **BCP: Dynamic SYSDSN ENQ downgrade**



❖ **BCP: Add and remove MCS consoles dynamically**



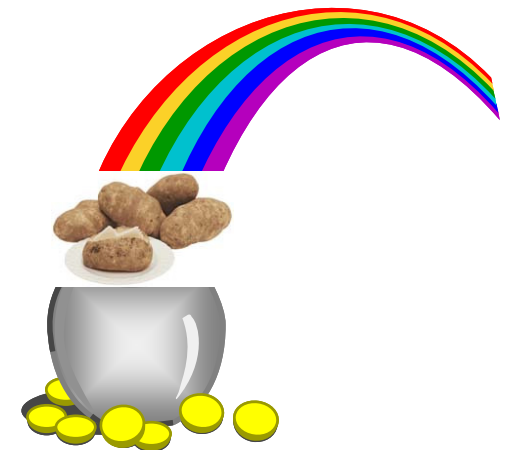
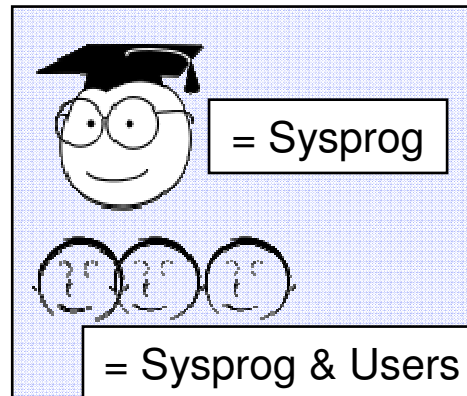
❖ **BCP: Dynamic system symbol support**



❖ **BCP: DISPLAY PPT**



❖ **BCP: BCP parmlib comments**



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

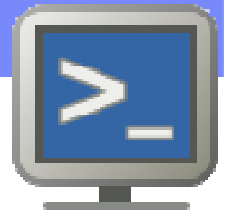
```
//LONG JOB (accounting), DSENQSHR=ALLOW
//STEP1 EXEC PGM=WHATEVER
//NEW DD DSN=MY.DATA.SET, DISP=NEW
//STEP2 EXEC PGM=SOMEPGM
//OLD DD DSN=MY.DATA.SET, DISP=MOD
//STEP3 EXEC PGM=PROGM2
//SHRNOW DD DSN=MY.DATA.SET, DISP=SHR
//STEP4 EXEC PGM=WRITER
//OLDAGAIN DD DSN=MY.DATA.SET, DISP=OLD
//STEP5 EXEC 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: Add and remove MCS consoles dynamically

- **What:** The ability to add and delete consoles without an outage using operator commands, when in Distributed mode.
- **How to use:**
 - **SET CON=xx** processes operational settings and creates new consoles found in that CONSOLxx parmlib member
 - New SMCS or subsystem consoles will be defined sysplex-wide (even pre-V2R1)
 - Cannot add the system console (SYSCON) dynamically
 - Only specified statements will be processed (absence will not mean default)
 - **SETCON DELETE, CN=nnnnnnnn** deletes that inactive console from the sysplex
 - Applies to MCS, HMCS, SMCS, Subsystem, as well as, EMCS consoles
 - Can delete an inactive console from a system that didn't define it (even pre-V2R1)
- **Considerations:** May choose to replace samplib program IEARELCN (removes inactive EMCS consoles) with SETCON DELETE.
 - If you decide to use the specified CONSOLxx parmlib members for subsequent IPLs, you've hardened the usage of the consoles you added.

Example: remove an inactive MCS console, then add it back in.

```

Session C - [24 x 80]
File Edit View Communication Actions Window Help
Display Filter View Print Options Search Help
-----
SDSF SYSLOG      2.101 SY1  SY1  07/26/2013 0W      2,401  COLUMNS 52- 131
(ND INPUT ==> _      SCROLL ==> HALF
0290 D CONSOLES,NACTIVE,CN=C3E4SY1
0090 CNZ4100I 19.56.02 CONSOLE DISPLAY 935
0090 CONSOLES MATCHING COMMAND: D CONSOLES,NACTIVE,CN=C3E4SY1
0090 MSG:CURR=0      LIM=1500 RPLY:CURR=0      LIM=10      SYS=SY1      PFK=NONE
0090 NAME      TYPE      STATUS      DEFINED      MATCHED
0090 C3E4SY1  MCS      INACT      *ALL      *ALL
0290 SETCON DELETE,CN=C3E4SY1
0090 CNZ4300I MCS CONSOLE C3E4SY1 HAS BEEN REMOVED
0290 D CONSOLES,NACTIVE,CN=C3E4SY1
0090 IEE274I DISPLAY CONSOLE C3E4SY1  NOT VALID
0290 SET CON=MW
0090 CNZ6003I COMMAND ACCEPTED FOR EXECUTION: SET CON=MW
0290 IEE252I MEMBER CONSOLMW FOUND IN SYS1.PARMLIB.POK
0090 IEA196I CONSOLMW 03D0: DEVNUM ALREADY DEFINED. STATEMENT IGNORED.
0290 D CONSOLES,NACTIVE,CN=C3E4SY1
0090 CNZ4100I 19.56.47 CONSOLE DISPLAY 945
0090 CONSOLES MATCHING COMMAND: D CONSOLES,NACTIVE,CN=C3E4SY1
0090 MSG:CURR=0      LIM=1500 RPLY:CURR=0      LIM=10      SYS=SY1      PFK=NONE
0090 NAME      TYPE      STATUS      DEFINED      MATCHED
0090 C3E4SY1  MCS      INACT      *ALL      *ALL
MA C
04/021
Connected to remote server/host pokvmtl4.pok.ibm.com using port 23

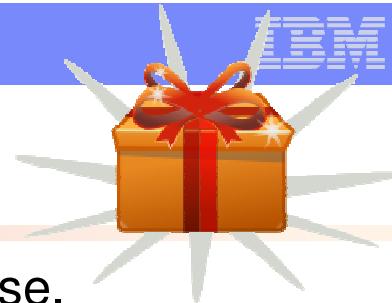
```



BCP: Dynamic system symbol support

- **What:** The ability to add or change system symbols in a supported way on a local system. Two new methods are provided to do this: **SETLOAD xx, IEASYM** and **IEASYMU2**.
- **How to use:**
 - **SETLOAD xx, IEASYM** “starts fresh and ready for next IPL” : This indicates to process the **IEASYM** statement in **LOADxx** found in your parmlib concatenation. (There is a **SETLOAD xx, IEASYM, DSNAME=dd, VOLUME=vv**. if you want to point to a data set outside the parmlib concatenation.)
 - A new complete system symbol table is built. The prior system symbol table remains allocated. Therefore, it’s better to do fewer rebuilds than more rebuilds.
 - **IEASYMU2 “the accumulator”** replaces **IEASYMUP**. **IEASYMU2** is similar to **IEASYMUP**, in that you can run a batch job to update the system symbols. The same FACILITY class profile (**IEASYMUP.***) is used.
 - However, **IEASYMU2** changes (or a continued use of **IEASYMUP**, for that matter) will **not** be reflected when you do a subsequent **SETLOAD xx, IEASYM**.
 - No changes in the limit in the number of system symbols: remains at least 800 symbols.
- **Considerations:** Don’t use the old unsupported method (**IEASYMUP**) anymore. Understand the interactions between **SETLOAD xx, IEASYM**, **IEASYMU2**, and **IEASYMUP**, as your **IEASYMU2 / IEASYMUP** changes will be lost when a **SETLOAD xx, IEASYM** is done.
 - If you decide to use specified **LOADxx** parmlib member for subsequent IPLs, you’ve hardened the usage the symbols you’ve changed with the **SETLOAD xx, IEASYM**.

BCP: A BONUS system symbol - &SYSOSLVL !!

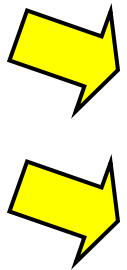


- **What:** A new system-defined symbol to indicate the z/OS release.
 - The format for z/OS is: **z1vvrrmm**
 - z/OS V2 R1 is: **z1020100**
- **How to use:**
 - Use it as you wish and where allowed to: in data set names, etc.
- **Considerations:** If you defined a system symbol to do this yourself, consider using the system-defined one instead. z/OS defines six for you.

```
00- SY1  d symbols
      SY1  IEA007I STATIC SYSTEM SYMBOL VALUES 840
          &SYSALVL.  = "2"
          &SYSCLONE. = "Y1"
          &SYSNAME.  = "SY1"
          &SYSOSLVL. = "Z1020100"
          &SYSPLFX.  = "LOCAL"
          &SYSR1.    = "ZDR21"
```

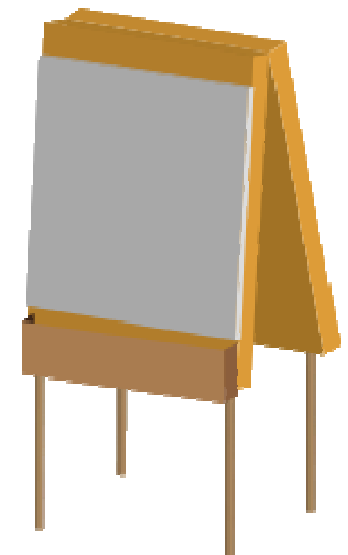
BCP: DISPLAY PPT

- **What:** A new system command to display the currently effective program properties table (PPT). Including options to show:
 - **ALL:** all the entries in the PPT
 - **PARMLIB:** entries specified from SCHEDxx
 - **DEFAULT:** entries that are IBM-supplied defaults and have not been re-specified by SCHEDxx
 - **NAME=*pattern*:** entries that match a pattern (wildcards accepted)
- **How to use:** D PPT or D PPT, options
- **Example:**



```

D PPT
IEF386I 20.58.57 DISPLAY PPT 837
Parmlib Values
PgmName  NC NS PR ST ND BP Key 2P 1P NP NH CP
ADRSSU   .  . . . . Y 8  . . . . .
AFPS010S .  Y . Y Y . 1  . . . Y . .
...
Default Values
PgmName  NC NS PR ST ND BP Key 2P 1P NP NH CP
APSHPOSE .  Y . Y Y . 1  . . . Y . .
APSKAFPD .  Y . Y Y . 1  . . . Y . .
...
Reference
Synonym  -----Meaning-----      ----SCHEDxx keyw
NC       Non-cancelable           NOCANCEL
NS       Non-swappable             NOSWAP
PR       Privileged                PRIV
    
```



BCP: Parmlib comments



- **What:** The ability to add comments to certain parmlib members, throughout the member. This allows for better documentation of the member (and can be less error-prone).
 - Previously, some parmlib members only allowed comments at the end of the line, or at the end of the member, or possibly no comments at all.
 - For Parmlib members COMMNDxx, GTFPARM, IEAABD00, IEACMD00, IEADMP00, IEADMR00, IEAPAKxx, IEASYSxx, LPALSTxx, VATLSTxx. (IGDSMSxx already supported comments /* */)
- **How to use:** Put an asterisk in column 1. That line is ignored.
- **Considerations:** With OA38328 back to R12, for parmlib sharing.
- **Example:**

```
SYS1.PARMLIB.POK(COMMNDMW) - 01.00
Command ==>
***** Top of Data *****
COLS> ----+----1----+----2----+----3----+----4----+----5-
00001 *****
00002 * USE MPFLSTAI for MPF Table Marna 7/31/2013 *
00003 *****
00004 COM='SET MPF=AI'
***** Bottom of Data *****
```


z/OS R13 Enhancements

Small Enhancements of System Programmer Interest

❖ z/OS UNIX: Non-privileged user mount



z/OS UNIX: Non-privileged user mount



- **What:** SUPERUSER.FILESYS.MOUNT is a user mount option, however there is no verification if the user is allowed to mount or unmount a file system *at that mount point*.
 - Now, there is a “safer” and “easier” way to allow users to mount their own file systems.
 - Only supported with BPX2MNT (mount2) interface (ex. /usr/sbin/mount and TSO MOUNT commands)

- **Considerations:**
 - Supported file system types are HFS, zFS and NFS
 - SYSNAME option is **not** supported
 - NOSECURITY option **cannot** be specified
 - NOSETUID option **must** be specified
 - chmount is **not** supported for nonprivileged users
 - Remount is **not** supported for nonprivileged users
 - Use of /// as a file system name placeholder is **not** supported
 - BPX1MNT callable service is **not** supported for nonprivileged users

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

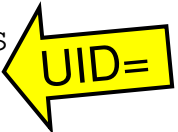
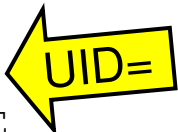


■ Display non-privileged user mount information using filters

– **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 non-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



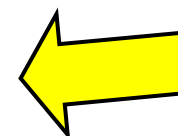
- Display nonprivileged user mount information and settings
 - DISPLAY OMVS,USERMOUNTS**

```
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
```



Small Enhancements of System Programmer Interest



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



❖ **DFSMS: IDCAMS DELETE Members**





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

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1																	
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 parmib - process LOADxx	IPST	0.026053	0		0	*MASTER	'0001	'0001	IEAIPL50	
22	LOCAL-SY	'10:54:23.512138	#####	IEAIPL50	IEAIPL50	End	IPL parmib - 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 24



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 R12 Enhancements (OK, really z/OS R11!)

DFSMS: IDCAMS DELETE MASK

- **What:** As of z/OS R11, IDCAMS DELETE **MASK** allows you to delete more than one data set at a time by specifying multiple qualifiers (and within a qualifier). Previously you could only use a wildcard delete on a single qualifier (for instance, MWALLE.*.JOBS).
- **Considerations:** Only one data set mask can be provided at a time. **All** data sets matching the mask will be deleted – be careful what you ask for!

- **Usage Example:**

```

-//DELMEM      EXEC PGM=IDCAMS
-//SYSPRINT DD SYSOUT=*
-//SYSIN       DD *
-              DELETE MWALLE.TEST%%%.PDS* MASK
-/*
  
```

- **Output:**

```

-DELETE MWALLE.TEST%%%.PDS* MASK
-IDC0550I ENTRY (A) MWALLE.TESTDEL.PDS1 DELETED
-IDC0550I ENTRY (A) MWALLE.TESTDEL.PDS10 DELETED
-IDC0550I ENTRY (A) MWALLE.TESTDEL.PDS100 DELETED
-...(for all the data sets, which were more than 100!)
  
```

- **Warning! Don't put MASK before the entry name...**

```

DELETE MASK MWALLE.TEST%%%.PDS*
IDC3211I KEYWORD 'MWALLE.TEST%%%.PDS*' IS IMPROPER
IDC3202I ABOVE TEXT BYPASSED UNTIL NEXT COMMAND. CONDITION CODE IS 12
  
```



DFSMS: IDCAMS DELETE All Members

- **What:** Prior to z/OS R12, IDCAMS DELETE could only delete only one member at a time. You'd have to invoke the DELETE command for each member you wanted to delete. Now, you can delete all members at once!

- **Usage Example:**

```
- //DELMEM      EXEC PGM=IDCAMS
- //SYSPRINT DD  SYSOUT=*
- //SYSIN       DD  *
-              DELETE MWALLE.TESTDEL.MEMS (*)
- /*
```

- **Output:**

```
-DELETE MWALLE.TESTDEL.MEMS (*)
-IDC0553I ALL MEMBERS IN DATA SET
MWALLE.TESTDEL.MEMS DELETED
-IDC0001I FUNCTION COMPLETED, HIGHEST
CONDITION CODE WAS 0
```



DFSMS: IDCAMS DELETE All Members



Before deleting all members:

```
Session A - [24 x 80]
File Edit View Communication Actions Window Help
Data Set Information
Command ==>
Data Set Name . . . : MWALLE.TESTDEL.PDS1
General Data
Volume serial . . . : ZDI18
Device type . . . . : 3390
Organization . . . . : P0
Record format . . . : FB
Record length . . . : 90
Block size . . . . . : 32760
1st extent blocks . : 1
Secondary blocks . . : 1
Current Allocation
Allocated blocks . . : 16
Allocated extents . . : 16
Maximum dir. blocks : 1
Current Utilization
Used blocks . . . . . : 16
Used extents . . . . . : 16
Used dir. blocks . . . : 1
Number of members . . : 5
Dates
Creation date . . . . : 2013/04/05
Referenced date . . . : 2013/04/05
Expiration date . . . : ***None***
MA A 02/015
```

DFSMS: IDCAMS DELETE All Members



After deleting all members:

```
Session A - [24 x 80]
File Edit View Communication Actions Window Help
Data Set Information
Command ===>
Data Set Name . . . : MWALLE.TESTDEL.PDS1
General Data
Volume serial . . . : ZDI18
Device type . . . . : 3390
Organization . . . . : P0
Record format . . . . : FB
Record length . . . . : 90
Block size . . . . . : 32760
1st extent blocks . : 1
Secondary blocks . . : 1
Current Allocation
Allocated blocks . . : 16
Allocated extents . . : 16
Maximum dir. blocks : 1
Current Utilization
Used blocks . . . . . : 1
Used extents . . . . . : 2
Used dir. blocks . . . : 1
Number of members . . : 0
Dates
Creation date . . . . : 2013/04/05
Referenced date . . . : 2013/04/05
Expiration date . . . : ***None***
MA A 02/015
```

z/OS R12 Enhancements (OK, really z/OS V2.1!)

DFSMS: IDCAMS DELETE Some Members

- **What:** Note that on z/OS V2.1, we now have “partial” wildcard delete support!

- **Usage Example:**

```
//DELJCL EXEC PGM=IDCAMS
-//SYSPRINT DD SYSOUT=*
-//SYSIN DD *
- DELETE MWALLE.TESTDEL.MEMS (*JCL*)
-/*
```

- **Results in:**

```
-DELETE MWALLE.TESTDEL.MEMS (*JCL*)
-IDC0549I MEMBER JCLE DELETED
-IDC0549I MEMBER JCLEF DELETED
-IDC0549I MEMBER JCLMLW DELETED
-IDC0549I MEMBER JCL1 DELETED
-IDC0549I MEMBER JCL12 DELETED
-IDC0549I MEMBER JCL2 DELETED
-IDC0549I MEMBER MYJCL DELETED
-IDC0549I MEMBER YOURJCL DELETED
-IDC0001I FUNCTION COMPLETED, HIGHEST CONDITION CODE WAS 0
-IDC0002I IDCAMS PROCESSING COMPLETE. MAXIMUM CONDITION CODE WAS 0
```



Small Enhancements of System Programmer Interest



❖ **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.

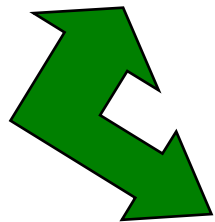
```
SYSTEM IEFBR14_DELMIGDS: LEGACY
TAPEDB_PREF: EQUIL
REMINO_INTV: 90
VERIFY_UNCAT: FAIL
TEMPDSFORMAT: INCLUDELABEL
MEMDSENQMGMT: DISABLE
BATCH_RCLMIGDS: SERIAL
OPTCDB_SPLIT: EXPLICIT
```

z/OS R11 Install-Related 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: syslog 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 syslogd 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 ==>

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.

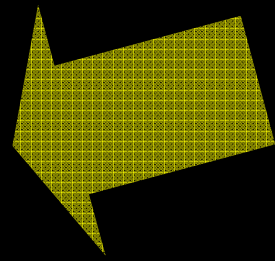
From date . . . ==> 2014/02/16 (yyyy/mm/dd) Search from date
- and time . . . ==> 08:00:00 (hh:mm:ss) - and time (24-hour clock)
To date . . . ==> 2014/02/16 (yyyy/mm/dd) Search to date
- and time . . . ==> 10:00:00 (hh:mm:ss) - and time (24-hour clock)
User ID . . . ==> _           z/OS user ID of logging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

*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 of System Programmer Interest



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

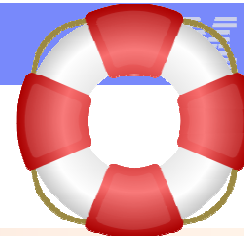


❖ **z/OS UNIX: submit with cron**



❖ **ISPF: Member search commands**



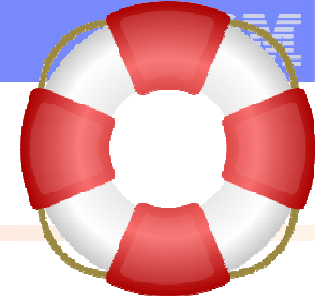


Older than dirt on potatoes (z/OS R5):

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: `unmount 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 dirt on potatoes (z/OS R5): z/OS UNIX: REMOUNT to change the mode



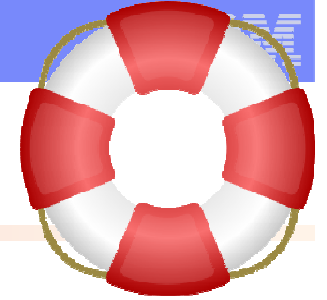
- Now, all file systems are mounted read-only:

```
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 dirt on potatoes (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)
```

A screenshot of a z/OS UNIX Work with Mounted File Systems dialog box. The window title is "Session B - [24 x 80]". The menu bar includes File, Edit, View, Communication, Actions, Window, and Help. The main area displays a list of mounted file systems with columns for R/O, Mount Point, File system name, and Row. A yellow arrow points to the "Yes" checkbox in the first row.

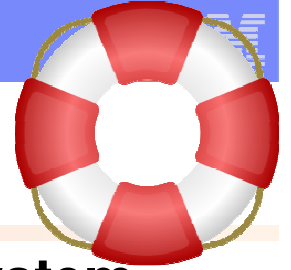
Work with Mounted File Systems

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
<input checked="" type="checkbox"/>	/u/MWALLE/system/jav	MWALLE.JAVA60.ROOT	18
<input checked="" type="checkbox"/>	/u/MWALLE/system/jav	MWALLE.JAVA601.ROOT	
<input type="checkbox"/>	/u/MWALLE/system	MWALLE.PRODUCT.ROOT	
<input type="checkbox"/>	/u/MWALLE	MWALLE.USER.HFS	
<input type="checkbox"/>	/SYSB/var/wbem	OEHFS.CIM.VARWBEM.ZFS	
<input type="checkbox"/>	/local/tools	OEHFS.LOCAL.TOOLS.HFS	

Older than dirt on potatoes (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]

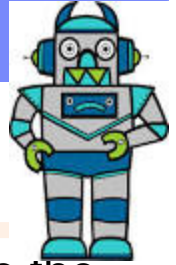
File Edit View Communication Actions Window Help

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 18
Yes	/u/MWALLE/system/jav	MWALLE.JAVA60.ROOT	
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 dirt on potatoes (z/OS R10):

z/OS UNIX: submit with cron

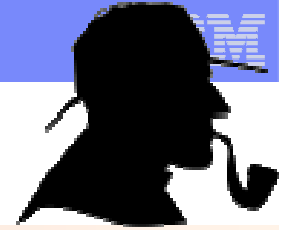
- **What:** Easiest and cheapest way I know of to submit a job automatically! Use the **submit** shell command (R10, previously had to open a TSO session), and the cron facility (ancient).
 - SMP/E RECEIVE ORDER every night is a great fit for this combination!
- **How to use:**
 1. Probably already have 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      /AQTS/var/spool/cron/crontabs/MWALLE      Line 00000000 Col 001 062
Command ==> _      Scroll ==> HALF
***** Top of Data *****
# Run the RECEIVE ORDER job nightly at 17:15 to get HOLDDATA
15 17 * * * /bin/submit '//mwallo.util.jobs(smpdire2)'"
***** 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 dirt on potatoes:

ISPF: Member Search



- **What:** Look for data sets containing a member name from ISPF 3.4 quickly. You can exclude data sets to search and say if you want to search migrated data sets .
 - Wildcards are supported for member names.
 - First data set containing the member name (or matching name) is placed at the top of the list.

- **How to use:** On the DSLIST command line:
 - **MEMBER** *name* (or **MEM** *name* or **M** *name*)
 - Options you can specify are:
 - X** or **EX**: search only excluded
 - NX**: search only not excluded data sets
 - RECALL1**: Also, search data sets that are migrated to DASD
 - RECALL2**: Also, search data sets that are migrated to tape

- **Considerations:** Easy as pie!



Before: Which data sets have members that start with ALT in them?

- One of them is migrated to DASD, so I'll use RECALL1.
- I've excluded 10 data sets I don't care about, so I'll use NX

```
Session B - [24 x 80]
File Edit View Communication Actions Window Help
Menu Options View Utilities Compilers Help
DSLIST - Data Sets Matching MVSBUILD.OS*.SCPPBENU Row 1 of 35
Command ==> M ALT* NX RECALL1_ Scroll ==> HALF
Command - Enter "/" to select action Message Volume
-----
MVSBUILD.OS000020.SCPPBENU.BACKUP MIGRAT2
MVSBUILD.OS110011.SCPPBENU MIGRAT2
MVSBUILD.OS110016.SCPPBENU MIGRAT2
MVSBUILD.OS110095.SCPPBENU MIGRAT2
MVSBUILD.OS120036.SCPPBENU MIGRAT1
MVSBUILD.OS130011.SCPPBENU C90BA4
MVSBUILD.OS130017.SCPPBENU HSMU05
MVSBUILD.OS130026.SCPPBENU HSMU0Z
MVSBUILD.OS130031.SCPPBENU HSMU0Z
MVSBUILD.OS130084.SCPPBENU C90BA4
MVSBUILD.OS140001.SCPPBENU MIGRAT2
MVSBUILD.OS141609.SCPPBENU MIGRAT2
MVSBUILD.OS141655.SCPPBENU C90PK1
MVSBUILD.OS142107.SCPPBENU MIGRAT2
- - - - - 10 data set(s) not displayed
MVSBUILD.OS180023.SCPPBENU MIGRAT2
MVSBUILD.OS19000X.SCPPBENU C90PKA
MA B 04/032
Connected to remote server/host plpsc.pok.ibm.com using lu/pool M05TC323 and port
```



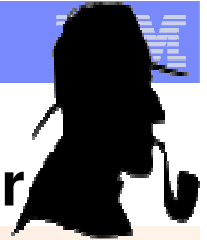
After: 7 data sets have member names that start with ALT

- The one data set migrated to DASD was recalled.
- First data set with ALT* is at the top

```
Session B - [24 x 80]
File Edit View Communication Actions Window Help
Menu Options View Utilities Compilers Help

DSLIST - Data Sets Matching MVSBUILD.OS*.SCPPBENU
Command ==> _
Member(s) found
Scroll ==> HALF

Command - Enter "/" to select action
-----
MVSBUILD.OS130011.SCPPBENU      Member: ALT*      C90BA4
MVSBUILD.OS130017.SCPPBENU      Member: ALT*      HSMU05
MVSBUILD.OS130026.SCPPBENU      Member: ALT*      HSMU0Z
MVSBUILD.OS130031.SCPPBENU      Member: ALT*      HSMU0Z
MVSBUILD.OS130084.SCPPBENU      Member: ALT*      C90BA4
MVSBUILD.OS140001.SCPPBENU      Migrated          MIGRAT2
MVSBUILD.OS141609.SCPPBENU      Migrated          MIGRAT2
MVSBUILD.OS141655.SCPPBENU      Migrated          C90PK1
MVSBUILD.OS142107.SCPPBENU      Migrated          MIGRAT2
- - - - -
10 data set(s) not displayed
MVSBUILD.OS180023.SCPPBENU      Migrated          MIGRAT2
MVSBUILD.OS19000X.SCPPBENU      Migrated          C90PKA
Z
Member ALT* found in          7 data sets.      15 migrated data sets were not
searched.
T
4
T2
MVSBUILD.OS250007.SCPPBENU      Migrated          MIGRAT2
MA B
04/015
Connected to remote server/host plpsc.pok.ibm.com using lu/pool M05TC323 and port
```

Older than dirt on potatoes:

ISPF: ..and while on the topic, text search *within* a member

- **What:** Search through data sets and through members for a particular text string quickly.
- **How to use:** From data set list **or** member list, issue `SRCHFOR` with or without a text string. Search output (SuperC) written to `userid.SRCHxx.LIST` by default..
- Can “Exclude not found” or “Filter list” to only show found members.
- `SORT PROMPT` is handy to get those “**FOUND” members at the top!
- No data string will give you a panel to specify options you want:

```

end options view utilities compilers help
----- DSLIST Srchfor Options -----

Command ==>

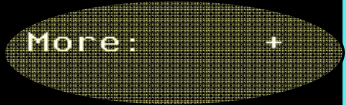
You are about to search multiple data sets.
Specify search string(s) and options and press ENTER to run the search.
Enter the END or the CANCEL command to cancel the search.

==> pgm=iebcopy
==> pgm=iebdscopy_
==>
==>
==>
==>

Listing DSN: 'MWALLE.SRCHDSL.LIST'

Select Process      Search      Search      Select Display
Options with /     Migrated   Excluded    Options with /
Mixed Mode         1  1. None    3  1. Excluded  View output
Any case           2  2. First level 2. Non-excluded Exclude not
ASCII              3  3. All       3. Both      found
  
```

Handy for z/OS V2.1 migration 😊



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
- z/OS UNIX (R13): Non-privileged user mount
- DFSMS (R12): IDCAMS DELETE plus!
- BCP (R11): DELMIGDS for IEFBR14
- z/OS UNIX (old): submit with cron
- ISPF (old): Member search commands



- System Programmers Items:

- BCP (V2.1): Add and remove consoles dynamically
- BCP (V2.1): Dynamic System Symbol Support
- BCP (V2.1): DISPLAY PPT
- BCP (V2.1 and APAR): BCP Parmlib Comments
- BCP (R12): 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: Add and remove MCS consoles dynamically**
 - Nice to use, deletion could replace IEARELCN. On SET CON, won't see messages for successful addition.
 - **BCP: Dynamic system symbol support**
 - Two ways, understand interactions between them.
 - **BCP: DISPLAY PPT - Easy to use, logically separately.**
 - **BCP: BCP parmlib comments - At last!**
- z/OS V1.13:
 - **z/OS UNIX: Non-privileged user mount - Give users what they want.**



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

Summary

- **z/OS V1.12:**
 - **BCP:** Timed Event Data Report – Dig more out of it
 - **DFSMS:** IDCAMS DELETE All Members, plus more!
 - Many desired options, and long awaited for.
- **z/OS V1.11:**
 - **BCP:** DELMIGDS for IEFBR14
 - Good for throughput.
 - **Communications Server:** syslogd browser and search
 - Very easy to use, and very powerful and intuitive.
- **Older than dirt on potatoes:**
 - **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.
 - **ISPF:** Member search commands
 - Old stuff, but nice to have with so many ways of looking!



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

March 13, 2014

