#SHAREorg

SHARE

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

Marna WALLE
mwalle@us.ibm.com
IBM Poughkeepsie
z/OS System Installation

August 16, 2013

Permission is granted to SHARE to publish this presentation paper in the SHARE proceedings; IBM retains the right to distribute copies of this presentation to whomever it chooses.

Episode #2013B

SHARE in Boston

Copyright (c) 2013 by SHARE Inc. Except where otherwise noted, this work is licensed under http://creativecommons.org/licenses/by-nc-sa/3.0/

Trademarks

The following are trademarks of the International Business Machines Corporation in the United States, other countries, or both.

Not all common law marks used by IBM are listed on this page. Failure of a mark to appear does not mean that IBM does not use the mark nor does it mean that the product is not actively marketed or is not significant within its relevant market.

Those trademarks followed by ® are registered trademarks of IBM in the United States; all others are trademarks or common law marks of IBM in the United States.

For a complete list of IBM Trademarks, see www.ibm.com/legal/copytrade.shtml:

*, AS/400®, e business(logo)®, DBE, ESCO, eServer, FICON, IBM®, IBM (logo)®, iSeries®, MVS, OS/390®, pSeries®, RS/6000®, S/30, VM/ESA®, VSE/ESA, WebSphere®, xSeries®, z/OS®, zSeries®, z/VM®, System i, System i5, System p, System p5, System x, System z, System z9®, BladeCenter®

The following are trademarks or registered trademarks of other companies.

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.
Cell Broadband Engine is a trademark of Sony Computer Entertainment, Inc. in the United States, other countries, or both and is used under license therefrom.
Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.
Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.
Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.
UNIX is a registered trademark of The Open Group in the United States and other countries.
Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.
ITIL is a registered trademark, and a registered community trademark of the Office of Government Commerce, and is registered in the U.S. Patent and Trademark Office.
IT Infrastructure Library is a registered trademark of the Central Computer and Telecommunications Agency, which is now part of the Office of Government Commerce.

* All other products may be trademarks or registered trademarks of their respective companies.

Notes:

Performance is in Internal Throughput Rate (ITR) ratio based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput improvements equivalent to the performance ratios stated here.

IBM hardware products are manufactured from new parts, or new and serviceable used parts. Regardless, our warranty terms apply.

All customer examples cited or described in this presentation are presented as illustrations of the manner in which some customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics will vary depending on individual customer configurations and conditions.

This publication was produced in the United States. IBM may not offer the products, services or features discussed in this document in other countries, and the information may be subject to change without notice. Consult your local IBM business contact for information on the product or services available in your area.

All statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

Information about non-IBM products is obtained from the manufacturers of those products or their published announcements. IBM has not tested those products and cannot confirm the performance, compatibility, or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

Prices subject to change without notice. Contact your IBM representative or Business Partner for the most current pricing in your geography.

Notice Regarding Specialty Engines (e.g., zIIPs, zAAPs and IFLs):

Any information contained in this document regarding Specialty Engines ("SEs") and SE eligible workloads provides only general descriptions of the types and portions of workloads that are eligible for execution on Specialty Engines (e.g., zIIPs, zAAPs, and IFLs). IBM authorizes customers to use IBM SE only to execute the processing of Eligible Workloads of specific Programs expressly authorized by IBM as specified in the "Authorized Use Table for IBM Machines" provided at www.ibm.com/systems/support/machine_warranties/machine_code/aut.html ("AUT").

No other workload processing is authorized for execution on an SE.

IBM offers SEs at a lower price than General Processors/Central Processors because customers are authorized to use SEs only to process certain types and/or amounts of workloads as specified by IBM in the AUT.

© 2013 IBM Corporation

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

- **z/OS V2.1:**
  - **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: Prevent Content Overlay during MOUNT**
  - **DFSMS: IEBPDSE Batch Program**
  - **SDSF: Cursor-sensitive Sort**
- **z/OS V1.12:**
  - **BCP: IEFSSNxx BEGINPARALLEL**
  - **BCP: Timed Event Data Report**
  - **BCP: Some PROGxx Goodies (in handout only)**
  - **DFSMS: IDCAMS DELETE All Members, plus more!**
- **z/OS V1.11:**
  - **TSO/E: LOGONHERE reconnect support**
  - **BCP: D ALLOC and SETALLOC commands**
- **Older than dirt on potatoes:**
  - **DFSMS: STGADMIN.DPDSRN.*oldname***
  - **ISPF: Member Search**

© 2013 IBM Corporation

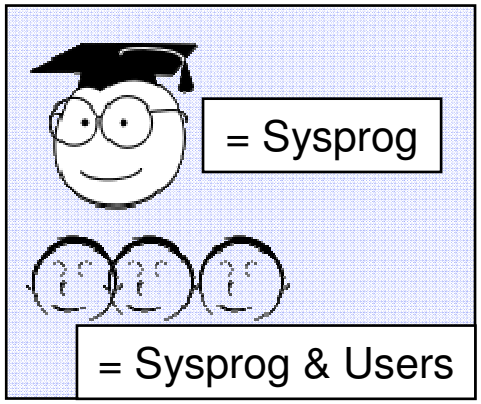
Small Enhancements of System Programmer Interest

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

- **BCP: Dynamic system symbol support**

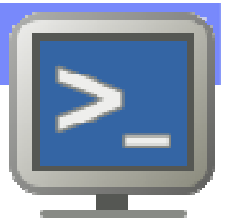
- **BCP: DISPLAY PPT**

- **BCP: BCP parmlib comments**



© 2013 IBM Corporation

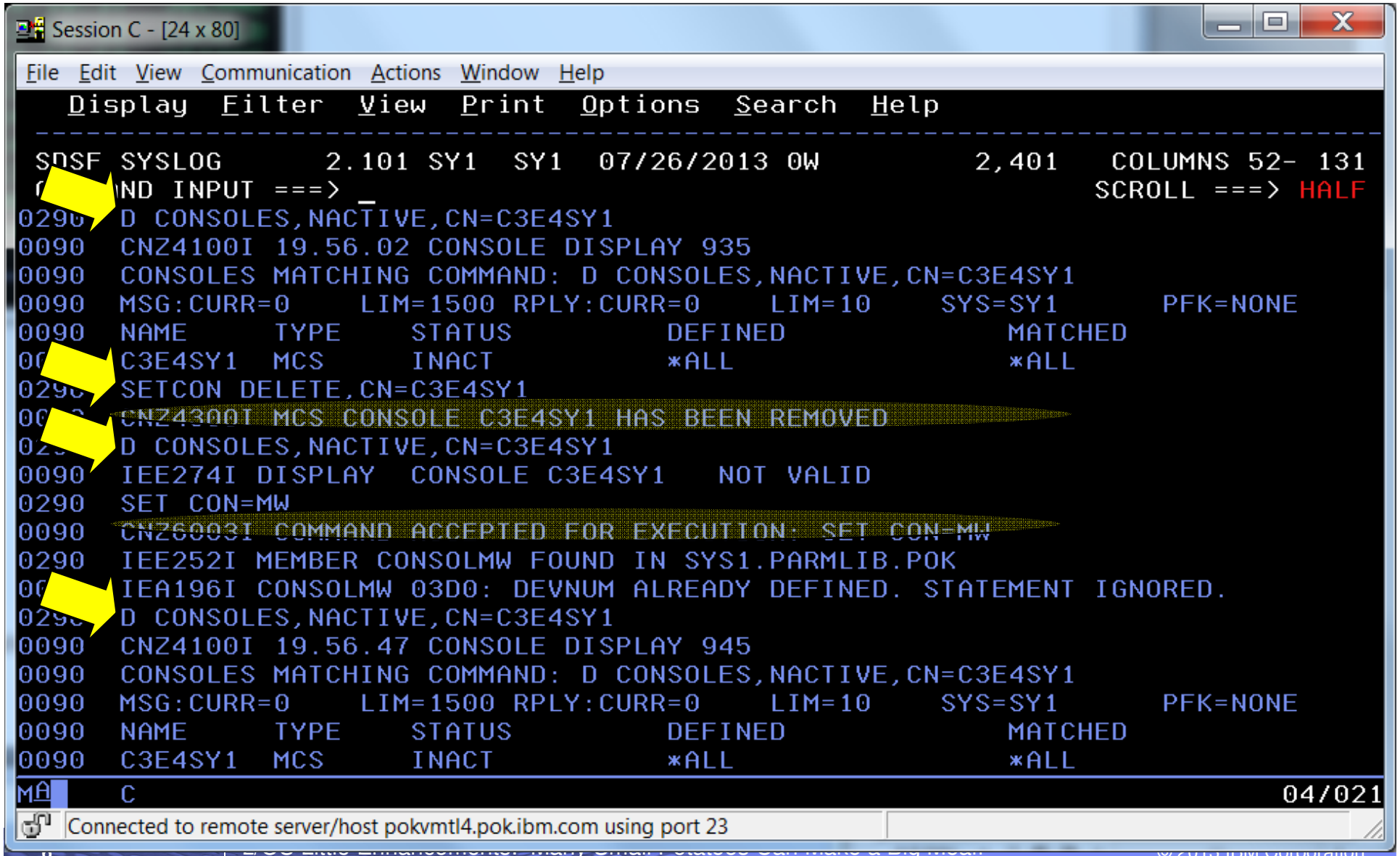
BCP: Add and remove MCS consoles dynamically



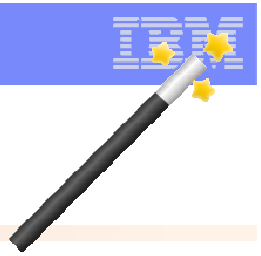
- **What:** The ability to add and delete consoles without an outage using operator commands, *when in Distributed mode*.
- **How to use:**
  - **`SET CON=xx`** processes operational settings and creates new consoles found in that CONSOLxx parmlib member
    - New SMCS or subsystem consoles will be defined 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=nnnnnnn`** 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.

© 2013 IBM Corporation

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



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`:** 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`** 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`** .

© 2013 IBM Corporation

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.

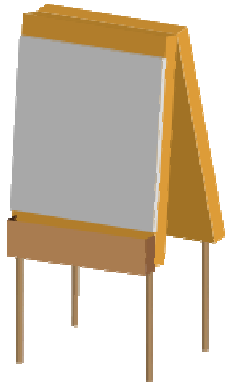
```
00- SY1   d symbols
    SY1   IEA007I STATIC SYSTEM SYMBOL VALUES 840
              &SYSALVL.   = "2"
              &SYSCLONE.  = "Y1"
              &SYSNAME.   = "SY1"
              &SYSOSLVL.  = "Z1020100"
              &SYSPLEX.   = "LOCAL"
              &SYSR1.     = "ZDR21"
```


© 2013 IBM Corporation

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
ADRDSSU   .  .  .  .  .  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
```



© 2013 IBM Corporation

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.
- **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 *******
```


© 2013 IBM Corporation

Small Enhancements of System Programmer Interest

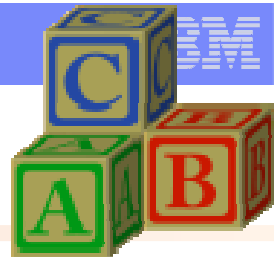
❖**z/OS UNIX:** Prevent Content Overlay during MOUNT

❖**DFSMS:** IEBPDSE Batch Program

❖**SDSF:** Cursor-sensitive Sort

© 2013 IBM Corporation

z/OS UNIX: Prevent Content Overlay during MOUNT



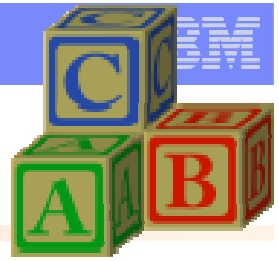
- **What:** Have you ever "lost" updates to files when they've been over-mounted? Do you want the system to let you know when you're mounting over something? Now you can have the system warn or even deny a mount on a mountpoint that is not empty.

- **How to use:** Specify WARN or DENY (default is NOWARN, same as today's behavior) on BPXPRMxx or on SETOMVS NONEMPTYMOUNTPT statement. `D OMVS,OPTIONS` shows current setting.

- **Considerations:** WARN produces a syslog message (not back to user). DENY goes back to the user.
  - Advanced consideration: Nonprivileged User Mount (in R13) must occur on an empty mountpoint (will act like a "DENY").

© 2013 IBM Corporation

z/OS UNIX: Prevent Content Overlay during MOUNT



- **WARN Usage Example:**

```
SETOMVS NONEMPTYMOUNTPT=WARN
BPXO015I THE SETOMVS COMMAND WAS SUCCESSFUL.
BPXO062I NONEMPTYMOUNTPT WAS CHANGED FROM NOWARN TO WARN.
```

Then do a mount:

```
READY

MOUNT FILESYSTEM('IBMUSER.PRODUCT.ZFS')
  MOUNTPOINT('/samples/') TYPE(ZFS)    MODE(RDWR)

READY
```

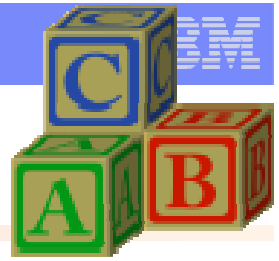
User saw no warning here!

However, in the syslog:

```
0290  BPXF263I FILE SYSTEM 901
0290  IBMUSER.PRODUCT.ZFS
0290  HAS BEEN MOUNTED ON A NONEMPTY DIRECTORY
```


© 2013 IBM Corporation

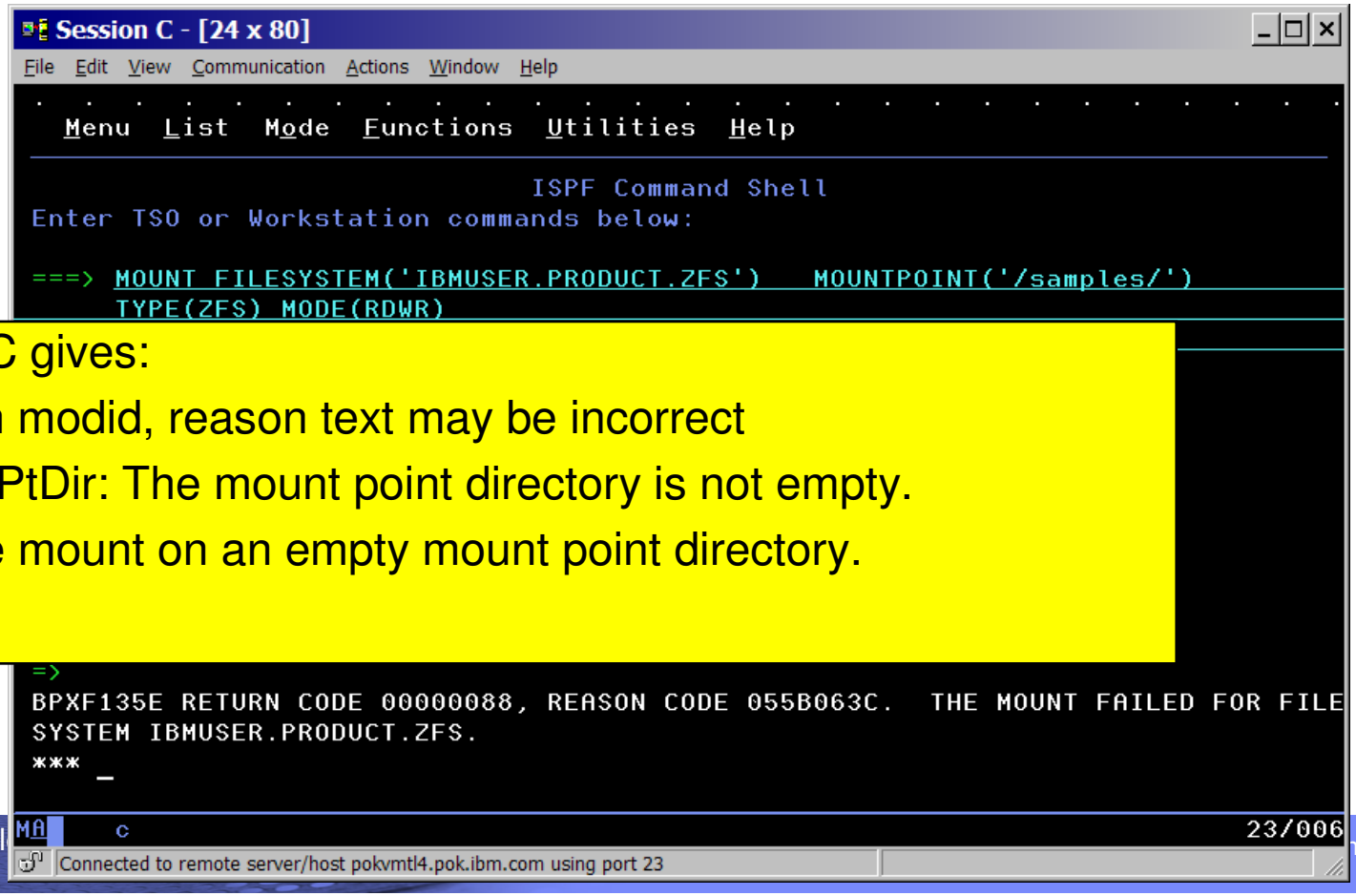
z/OS UNIX: Prevent Content Overlay during MOUNT



- **DENY Usage Example:**

```
SETOMVS NONEMPTYMOUNTPT=DENY
BPXO015I THE SETOMVS COMMAND WAS SUCCESSFUL.
BPXO062I NONEMPTYMOUNTPT WAS CHANGED FROM WARN TO DENY.
```

Then do a mount:



A bpxmtext 063C gives:

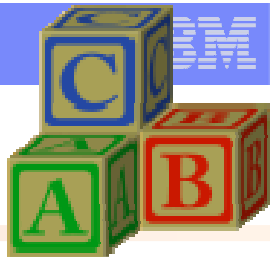
Notice: unknown modid, reason text may be incorrect

JrNonEmptyMntPtDir: The mount point directory is not empty.

Action: Retry the mount on an empty mount point directory.

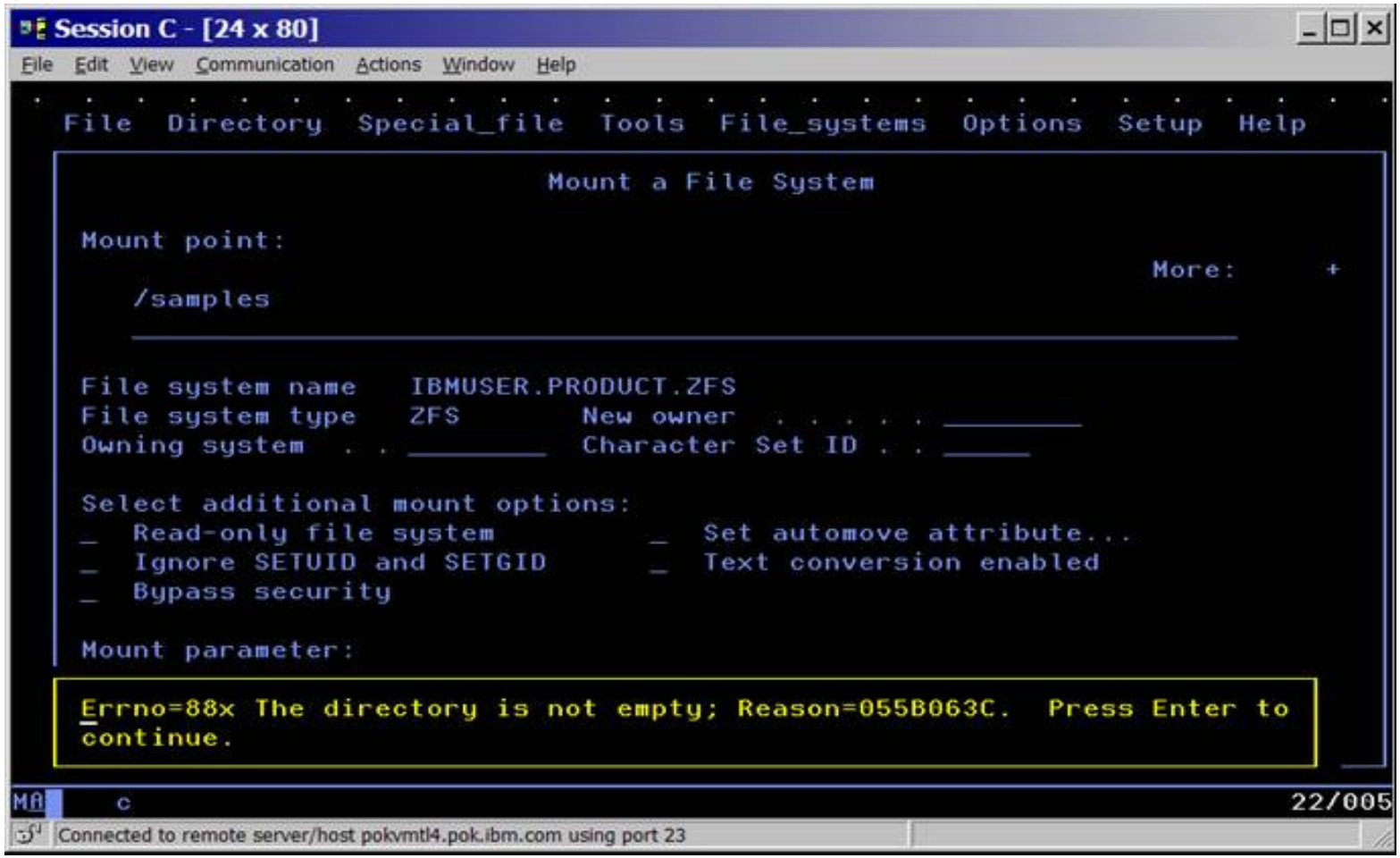
***

z/OS UNIX: Prevent Content Overlay during MOUNT



- **DENY Usage Example:**

Or from ISHELL:



© 2013 IBM Corporation

DFSMS: IEBPDSE Batch Program

- **What:** Want to check the structural integrity of a PDSE? It's a good idea to verify a PDSE's integrity *before* it's deployed, and a problem would be propagated. A new utility can help you do that.
- **How to use:** Invoke PGM=IEBPDSE, with SYSLIB indicating your PDSEs to verify.
- **Considerations:** If the DUMP parameter option is specified, the PDSE validation utility issues an ABEND in the PDSE address space, which results on an SVC dump. Utility output is meant to tell you if the PDSE was valid or not – it does not correct the problem, nor is intended for you to correct the PDSE yourself. A dump would help IBM Service to diagnose the problem.
- **Usage Example:**

```
//STEPCHK EXEC PGM=IEBPDSE,PARM='DUMP'
//SYSPRINT DD SYSOUT=*
//SYSLIB DD DSN=SYS1.SIEALNKE,DISP=SHR
//       DD DSN=MWALLE.UTIL.JOBS,DISP=SHR
```

Successful output:

```
******************************** TOP OF DATA ***
IGW700I PDSE Directory Validation Successful
DSN:SYS1.SIEALNKE
ADPages:36 IXRecords:1054
NDPages:6 IXRecords:315
AD ND Tree Nodes:315
IGW700I PDSE Directory Validation Successful
DSN:MWALLE.UTIL.JOBS
ADPages:65 IXRecords:3985
NDPages:29 IXRecords:1590
AD ND Tree Nodes:1590
******************************** BOTTOM OF DATA *
```


© 2013 IBM Corporation

DFSMS: IEBPDSE Batch Program

- **Usage Example:**
  Unsuccessful output:

```
     ********************************* TOP OF DATA ***
IGW702I PDSE Directory Validation Unsuccessful
DESC:<ND> Structure is corrupted
LTK:
00000000000000000000000000000000000000000000000000000000000000000000*
ERROR NUM:3
DSN:IBMUSER.PDSEVAL.PDSE1
VOLSER:338001
RC:8 RS:01198018 R14:040130A8
RPN:0
VPTVFN:N/A
IGW699I PDSE Directory Validation Unsuccessful
DESC:PDSE structure is corrupted
ERROR NUM:101
DSN:IBMUSER.PDSEVAL.PDSE1
VOLSER:338001
ADPages:1 IXRecords:14
NDPages:0 IXRecords:0
RC:8 RS:01198018
IGW702I PDSE Directory Validation Unsuccessful
DESC:<ND> Structure is corrupted
LTK:
00000000000000000000000000000000000000000000000000000000000000000000*
ERROR NUM:23
DSN:IBMUSER.PDSEVAL.PDSE1
VOLSER:338001
RC:8 RS:01198018 R14:04012F8E
RPN:0
     VPTVFN:N/A
     ********************************* BOTTOM OF DATA *
```


© 2013 IBM Corporation

SDSF: Cursor Sensitive Sort

- **What:** Under ISPF, you now have “point and shoot” support. Meaning, you can sort on a column by tabbing the cursor to the column title and pressing Enter.

- **How to use:**
  - Tab to column title, hit Enter. Easy!
  - Enter toggles through ascending, descending, then original order.

- **Considerations:**
  - Can control it with SDSF command **`SET CSORT OFF`** or **`ON`**.
  - Make sure you have “Tab to point-and-shoot fields” enabled under ISPF Settings in Option 0.

© 2013 IBM Corporation

SDSF: Cursor Sensitive Sort

- **Usage Example:**

Before:

Session C - [24 x 80]

File Edit View Communication Actions Window Help

```
  Display  Filter  View  Print  Options  Search  Help
-------------------------------------------------------------------------------
SDSF HELD OUTPUT DISPLAY ALL CLASSES LINES 5,720,943   LINE 1-13 (13)
COMMAND INPUT ===> _                                    SCROLL ===> HALF
PREFIX=*  DEST=(ALL)  OWNER=MWALLE  SYSNAME=
NP    JOBNAME  JobID    Owner    Prty C ODisp Dest              Tot-Rec  Tot-
      MWALLEAT JOB15623 MWALLE      7 H HOLD  LOCAL               157,727
      MWALLEAT JOB20279 MWALLE      7 H HOLD  LOCAL               157,772
      MWALLEAT JOB18568 MWALLE      7 H HOLD  LOCAL               157,793
      MWALLEAT JOB00102 MWALLE      7 H HOLD  LOCAL               157,768
      MWALLEAT JOB09312 MWALLE      7 H HOLD  LOCAL               157,750
      MWALLEAT JOB21325 MWALLE      7 H HOLD  LOCAL               157,751
      MWALLEAT JOB21530 MWALLE      7 H HOLD  LOCAL               157,807
      MWALLEPD JOB29260 MWALLE      7 H HOLD  LOCAL                    62
      MWALLEPD JOB29281 MWALLE      7 H HOLD  LOCAL                    95
      LISTCSI  JOB31937 MWALLE      7 H HOLD  LOCAL                   264
      MWALLERM JOB31939 MWALLE      7 H HOLD  LOCAL                   119
      MWALLEAM JOB31942 MWALLE      7 H HOLD  LOCAL                    87
      MWALLEAP JOB31958 MWALLE      7 H HOLD  LOCAL             4,615,948
MA    C                                                          04/021
```

Connected to remote server/host plpsc.pok.ibm.com using lu/pool M05TC445 and port

© 2013 IBM Corporation

SDSF: Cursor Sensitive Sort

- **Usage Example:**

First enter (ascending):

Session C - [24 x 80]

File Edit View Communication Actions Window Help

```
  Display  Filter  View  Print  Options  Search  Help
-------------------------------------------------------------------------------
SDSF HELD OUTPUT DISPLAY ALL CLASSES LINES 5,720,943   LINE 1-13 (13)
COMMAND INPUT ===> _                                    SCROLL ===> HALF
PREFIX=*  DEST=(ALL)  OWNER=MWALLE  SORT=Tot-Rec/A  SYSNAME=
NP    JOBNAME  JobID    Owner    Prty C ODisp Dest              Tot-Rec  Tot-
      MWALLEPD JOB29260 MWALLE      7 H HOLD  LOCAL                   62
      MWALLEAM JOB31942 MWALLE      7 H HOLD  LOCAL                   87
      MWALLEPD JOB29281 MWALLE      7 H HOLD  LOCAL                   95
      MWALLERM JOB31939 MWALLE      7 H HOLD  LOCAL                  119
      LISTCSI  JOB31937 MWALLE      7 H HOLD  LOCAL                  264
      MWALLEAT JOB15623 MWALLE      7 H HOLD  LOCAL              157,727
      MWALLEAT JOB09312 MWALLE      7 H HOLD  LOCAL              157,750
      MWALLEAT JOB21325 MWALLE      7 H HOLD  LOCAL              157,751
      MWALLEAT JOB00102 MWALLE      7 H HOLD  LOCAL              157,768
      MWALLEAT JOB20279 MWALLE      7 H HOLD  LOCAL              157,772
      MWALLEAT JOB18568 MWALLE      7 H HOLD  LOCAL              157,793
      MWALLEAT JOB21530 MWALLE      7 H HOLD  LOCAL              157,807
      MWALLEAP JOB31958 MWALLE      7 H HOLD  LOCAL            4,615,948
MA    C                                                          04/021
```

Connected to remote server/host plpsc.pok.ibm.com using lu/pool M05TC445 and port

© 2013 IBM Corporation

SDSF: Cursor Sensitive Sort

- **Usage Example:**

Second enter (descending):

Session C - [24 x 80]

File Edit View Communication Actions Window Help

```
  Display  Filter  View  Print  Options  Search  Help
-------------------------------------------------------------------------------
SDSF HELD OUTPUT DISPLAY ALL CLASSES LINES 5,720,943   LINE 1-13 (13)
COMMAND INPUT ===> _                                    SCROLL ===> HALF
PREFIX=*  DEST=(ALL)  OWNER=MWALLE  SORT=Tot-Rec/D  SYSNAME=
NP    JOBNAME  JobID    Owner    Prty C ODisp Dest              Tot-Rec  Tot-
      MWALLEAP JOB31958 MWALLE      7 H HOLD  LOCAL           4,615,948
      MWALLEAT JOB21530 MWALLE      7 H HOLD  LOCAL             157,807
      MWALLEAT JOB18568 MWALLE      7 H HOLD  LOCAL             157,793
      MWALLEAT JOB20279 MWALLE      7 H HOLD  LOCAL             157,772
      MWALLEAT JOB00102 MWALLE      7 H HOLD  LOCAL             157,768
      MWALLEAT JOB21325 MWALLE      7 H HOLD  LOCAL             157,751
      MWALLEAT JOB09312 MWALLE      7 H HOLD  LOCAL             157,750
      MWALLEAT JOB15623 MWALLE      7 H HOLD  LOCAL             157,727
      LISTCSI  JOB31937 MWALLE      7 H HOLD  LOCAL                 264
      MWALLERM JOB31939 MWALLE      7 H HOLD  LOCAL                 119
      MWALLEPD JOB29281 MWALLE      7 H HOLD  LOCAL                  95
      MWALLEAM JOB31942 MWALLE      7 H HOLD  LOCAL                  87
      MWALLEPD JOB29260 MWALLE      7 H HOLD  LOCAL                  62
MA      C                                                       04/021
```

Connected to remote server/host plpsc.pok.ibm.com using lu/pool M05TC445 and port

© 2013 IBM Corporation

SDSF: Cursor Sensitive Sort

- **Usage Example:**

Third enter (original):

Session C - [24 x 80]

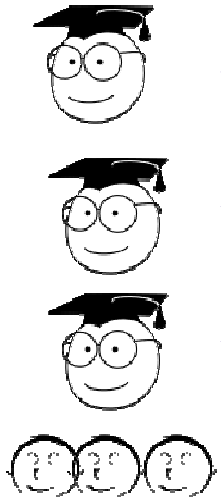
File Edit View Communication Actions Window Help

```
  Display  Filter  View  Print  Options  Search  Help
-------------------------------------------------------------------------------
SDSF HELD OUTPUT DISPLAY ALL CLASSES LINES 5,720,943   LINE 1-13 (13)
COMMAND INPUT ===> _                                    SCROLL ===   ALF
PREFIX=*  DEST=(ALL)  OWNER=MWALLE  SYSNAME=
NP    JOBNAME  JobID    Owner    Prty C ODisp Dest              Tot-Rec  Tot-
      MWALLEAT JOB15623 MWALLE      7 H HOLD  LOCAL             157,727
      MWALLEAT JOB20279 MWALLE      7 H HOLD  LOCAL             157,772
      MWALLEAT JOB18568 MWALLE      7 H HOLD  LOCAL             157,793
      MWALLEAT JOB00102 MWALLE      7 H HOLD  LOCAL             157,768
      MWALLEAT JOB09312 MWALLE      7 H HOLD  LOCAL             157,750
      MWALLEAT JOB21325 MWALLE      7 H HOLD  LOCAL             157,751
      MWALLEAT JOB21530 MWALLE      7 H HOLD  LOCAL             157,807
      MWALLEPD JOB29260 MWALLE      7 H HOLD  LOCAL                  62
      MWALLEPD JOB29281 MWALLE      7 H HOLD  LOCAL                  95
      LISTCSI  JOB31937 MWALLE      7 H HOLD  LOCAL                 264
      MWALLERM JOB31939 MWALLE      7 H HOLD  LOCAL                 119
      MWALLEAM JOB31942 MWALLE      7 H HOLD  LOCAL                  87
      MWALLEAP JOB31958 MWALLE      7 H HOLD  LOCAL           4,615,948
MA    C                                                       04/021
```

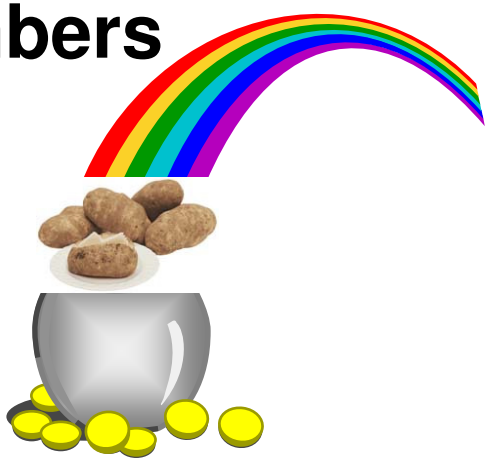
Connected to remote server/host plpsc.pok.ibm.com using lu/pool M05TC445 and port

© 2013 IBM Corporation

Small Enhancements of System Programmer Interest

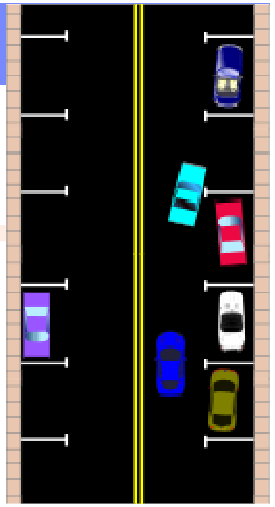


- **BCP: IEFSSNxx BEGINPARALLEL**
- **BCP: Timed Event Data Report**
- **BCP: Some PROGxx Goodies (in handout only)**
- **DFSMS: IDCAMS DELETE Members**



© 2013 IBM Corporation

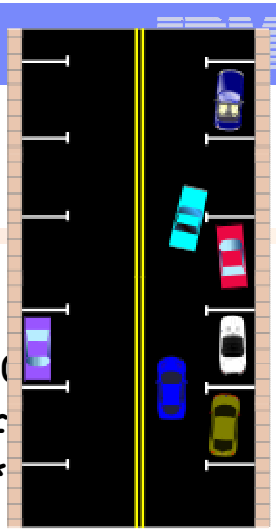
BCP: BEGINPARALLEL in IEFSSNxx



- **What:** In order to help with Mean Time To Recovery (MTTR), we want to reduce initialization paths where possible. With this in mind, you can specify that Subsystem Initialization Routines be run in parallel.
- **How to use:** Code **BEGINPARALLEL** in IEFSSNxx at the point in which you would like the SSI routines to be executed in parallel. Everything before **BEGINPARALLEL** will be executed serially, as before.
- **Considerations:**
  - The order that the parallelized initialization routines are run is now unpredictable. Therefore, the routines must have not any execution order dependencies.
  - SMS should be started before the BEGINPARALLEL statement. Also, Communications Server's VMCF and TNF subsystems should be specified before BEGINPARALLEL. Check with the subsystem product documentation to see if it should be placed before or after BEGINPARALLEL.
  - How much benefit you get will depend on how many initialization routines you have, the complexity of the routines, serialization requirements of routines, and available CPs. If a subsystem doesn't specify an initialization routine, then there is **no** effect on that subsystem.
  - Duplicate specifications of BEGINPARALLEL (within multiple concatenated IEFSSNxx members, for instance) result in subsequent specifications being rejected.

© 2013 IBM Corporation

BCP: BEGINPARALLEL in IEFSSNxx



- **Usage Example*:**

```
BROWSE     SYS1.PARMLIB(IEFSSNS2) - 01.25                Line 000
 Command ===>                                                Scr
******************************** Top of Data ****************
SUBSYS SUBNAME(JES2) PRIMARY(YES) START(NO)
SUBSYS SUBNAME(SMS)  INITRTN(IGDSSIIN)
  INITPARM('ID=99,PROMPT=DISPLAY')
SUBSYS SUBNAME(BFL)  INITRTN(BFLSSI)
SUBSYS SUBNAME(JESA)
SUBSYS SUBNAME(JESB)
SUBSYS SUBNAME(TNF)  INITRTN(MVPTSSI)
SUBSYS SUBNAME(VMCF) INITRTN(MVPXSSI)  INITPARM(&SYSNAME.EIP)
BEGINPARALLEL
SUBSYS SUBNAME(CSQB) INITRTN(CSQ3INI) INITPARM('CSQ3EPX,!MQSB0,S')
SUBSYS SUBNAME(CSQD) INITRTN(CSQ3INI) INITPARM('CSQ3EPX,!MQSD0,S')
SUBSYS SUBNAME(CSQF) INITRTN(CSQ3INI) INITPARM('CSQ3EPX,!MQSF0,S')
SUBSYS SUBNAME(CSQH) INITRTN(CSQ3INI) INITPARM('CSQ3EPX,!MQSH0,S')
```

* on nine of our test systems in Poughkeepsie, we start 108 subsystem initialization routines in parallel each week!

© 2013 IBM Corporation

BCP: Timed Event Data Report

- **What:** A new authorized service, Timed Event Data Service (IEATEDS), allows a program to record events to a Timed Event Data Table: **`REQUEST=REGISTER` and `REQUEST=RECORD`.** (Hint: use and document a good description on your event!)
- IBM-supplied REXX exec, IEAVFTED, can be used to produce a Timed Event Data Report from the Timed Event Data Table in either a TSO or IPCS environment.
- As of z/OS R12, some components (XCF, GRS, JES2, and others) use the IEATEDS service. This should help you gather some Mean Time To Recovery statistics during IPL (such as the benefit of using the BEGINPARALLEL statement in IEFSSNxx).
  - –Other methods still help with gathering IPL statistics.

- **How to use:** IEAVFTED is compiled REXX, and requires the full REXX compiler run-time libraries (from the REXX Library product).

  - –Note that the REXX Alternate Runtime Library incorporated into the z/OS product is *not* sufficient!
- Several options on IEAVFTED, but most common may be the simple invocation from TSO/E of ===> **`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)*

© 2013 IBM Corporation

BCP: Timed Event Data Report

- **Considerations:** The IEAVFTED-produced report has two sections with headers: formatted entries, and spreadsheet data.
  - You can use the spreadsheet portion to import in a spreadsheet program. That makes it easy to sort on data – such as quickly finding out which events took the longest time.
  - Once you have the report downloaded:
    a) Delete everything in the top half (the formatted entries)
    b) Import to the spreadsheet program, indicating that the delimiter was a semicolon (or other delimiter that you indicated you wanted used when you created the report).

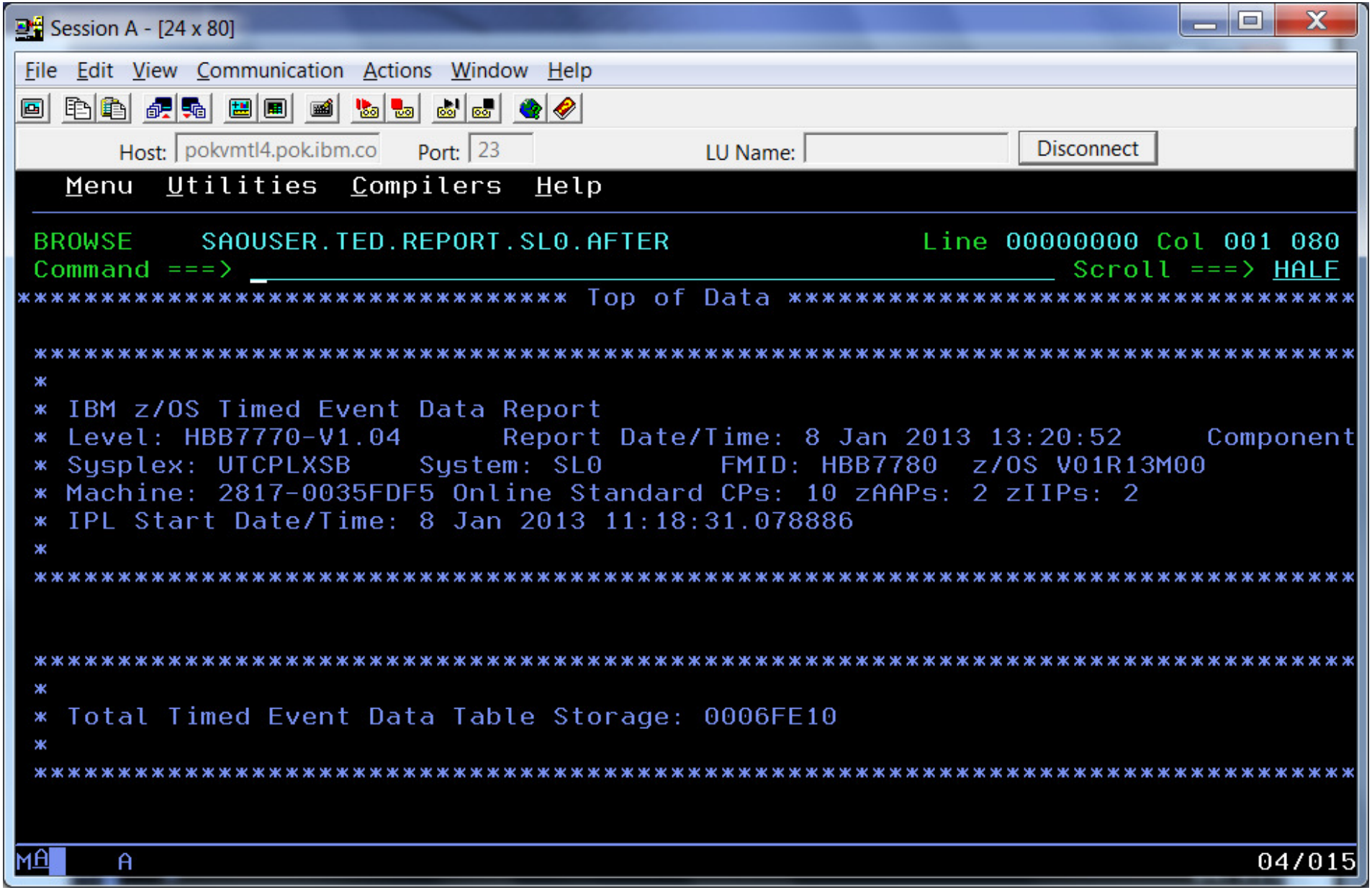
- **Usage Example:**
  1. Before using IEFSSNxx, from TSO: `===> IEAVFTED DA('SAOUSER.TED.REPORT.SL0.BEFORE')`

```
IEAVFTED Processing Started

IEAVFTED Processing Complete
***
```

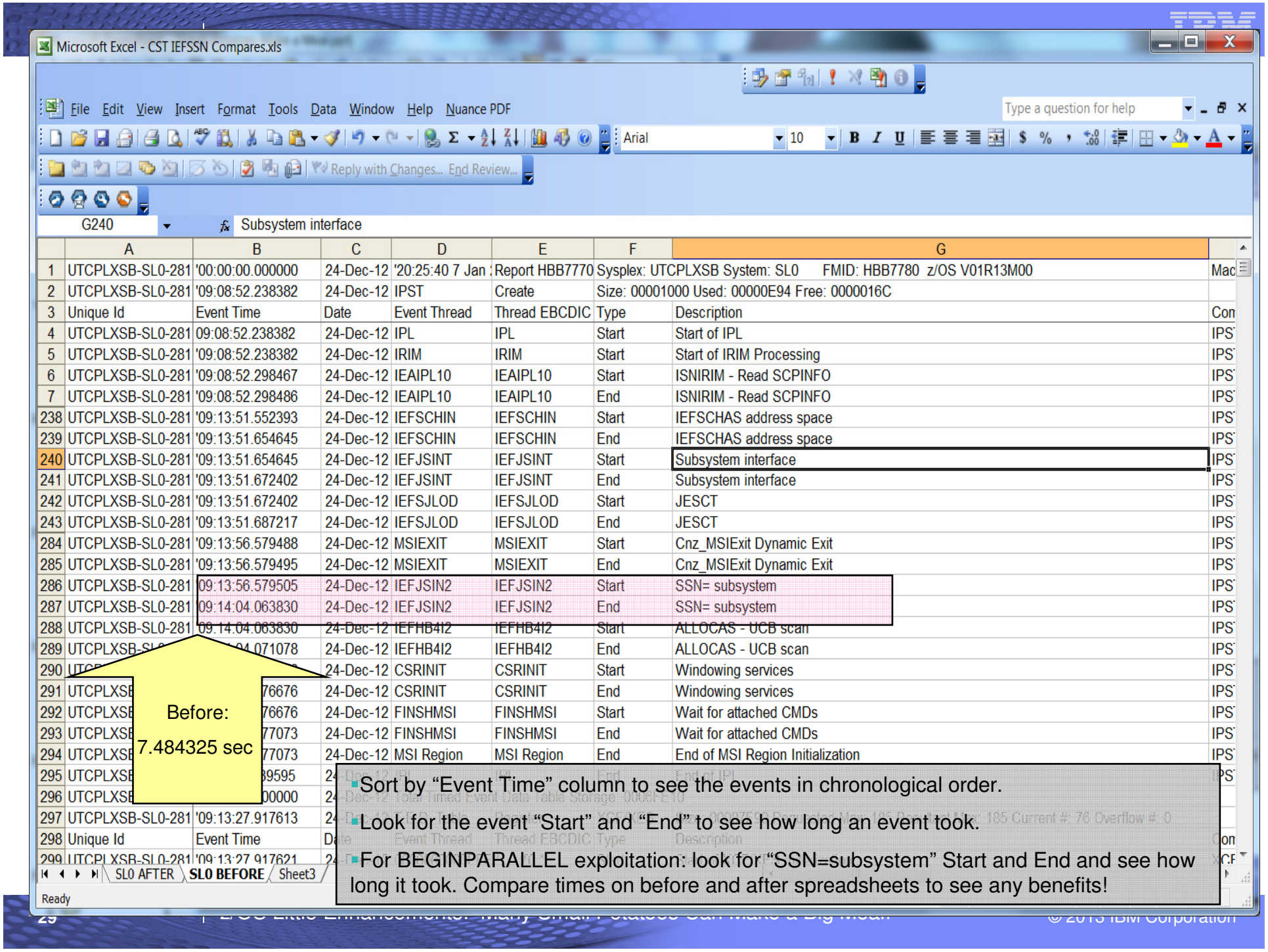
  2. Incorporate BEGINPARALLEL in IEFSSNxx, and IPL at the next scheduled window
  3. After using IEFSSNxx, from TSO: `===> IEAVFTED DA('SAOUSER.TED.REPORT.SL0.AFTER')`

```
IEAVFTED Processing Started

IEAVFTED Processing Complete
***
```


© 2013 IBM Corporation

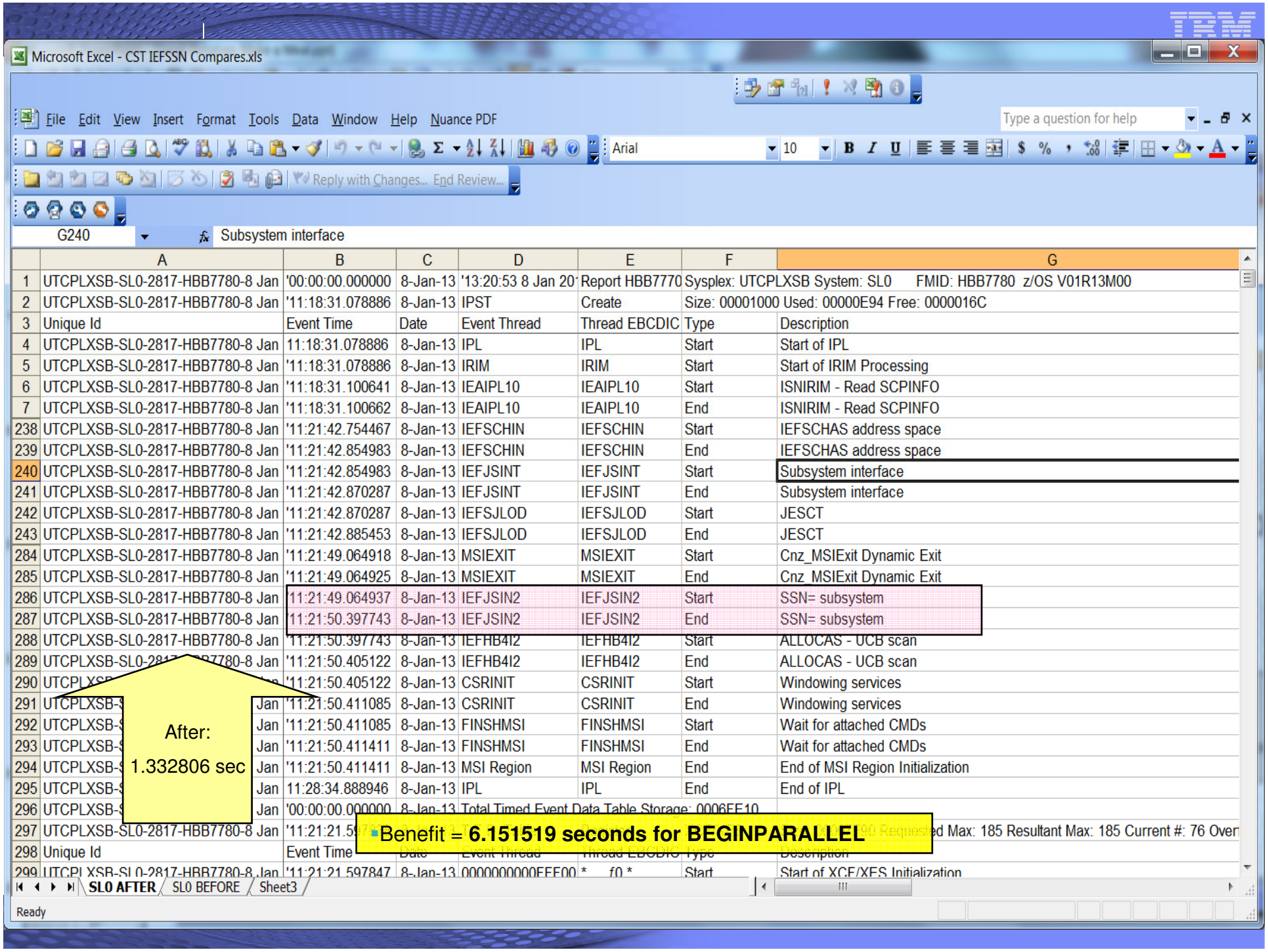


© 2013 IBM Corporation



	A	B	C	D	E	F	G	
1	UTCPLXSB-SL0-281	'00:00:00.000000	24-Dec-12	'20:25:40 7 Jan	Report HBB7770	Sysplex: UTCPLXSB System: SL0	FMID: HBB7780 z/OS V01R13M00	Mac
2	UTCPLXSB-SL0-281	'09:08:52.238382	24-Dec-12	IPST	Create	Size: 00001000 Used: 00000E94 Free: 0000016C		
3	Unique Id	Event Time	Date	Event Thread	Thread EBCDIC	Type	Description	Con
4	UTCPLXSB-SL0-281	09:08:52.238382	24-Dec-12	IPL	IPL	Start	Start of IPL	IPS
5	UTCPLXSB-SL0-281	'09:08:52.238382	24-Dec-12	IRIM	IRIM	Start	Start of IRIM Processing	IPS
6	UTCPLXSB-SL0-281	'09:08:52.298467	24-Dec-12	IEAIPL10	IEAIPL10	Start	ISNIRIM - Read SCPINFO	IPS
7	UTCPLXSB-SL0-281	'09:08:52.298486	24-Dec-12	IEAIPL10	IEAIPL10	End	ISNIRIM - Read SCPINFO	IPS
238	UTCPLXSB-SL0-281	'09:13:51.552393	24-Dec-12	IEFSCHIN	IEFSCHIN	Start	IEFSCHAS address space	IPS
239	UTCPLXSB-SL0-281	'09:13:51.654645	24-Dec-12	IEFSCHIN	IEFSCHIN	End	IEFSCHAS address space	IPS
240	UTCPLXSB-SL0-281	'09:13:51.654645	24-Dec-12	IEFJSINT	IEFJSINT	Start	Subsystem interface	IPS
241	UTCPLXSB-SL0-281	'09:13:51.672402	24-Dec-12	IEFJSINT	IEFJSINT	End	Subsystem interface	IPS
242	UTCPLXSB-SL0-281	'09:13:51.672402	24-Dec-12	IEFSJLOD	IEFSJLOD	Start	JESCT	IPS
243	UTCPLXSB-SL0-281	'09:13:51.687217	24-Dec-12	IEFSJLOD	IEFSJLOD	End	JESCT	IPS
284	UTCPLXSB-SL0-281	'09:13:56.579488	24-Dec-12	MSIEXIT	MSIEXIT	Start	Cnz_MSIExit Dynamic Exit	IPS
285	UTCPLXSB-SL0-281	'09:13:56.579495	24-Dec-12	MSIEXIT	MSIEXIT	End	Cnz_MSIExit Dynamic Exit	IPS
286	UTCPLXSB-SL0-281	09:13:56.579505	24-Dec-12	IEFJSIN2	IEFJSIN2	Start	SSN= subsystem	IPS
287	UTCPLXSB-SL0-281	09:14:04.063830	24-Dec-12	IEFJSIN2	IEFJSIN2	End	SSN= subsystem	IPS
288	UTCPLXSB-SL0-281	09:14:04.063830	24-Dec-12	IEFHB4I2	IEFHB4I2	Start	ALLOCAS - UCB scan	IPS
289	UTCPLXSB-SL0-281	04.071078	24-Dec-12	IEFHB4I2	IEFHB4I2	End	ALLOCAS - UCB scan	IPS
290	UTCPLXSB-SL0-281		24-Dec-12	CSRINIT	CSRINIT	Start	Windowing services	IPS
291	UTCPLXSB-SL0-281	76676	24-Dec-12	CSRINIT	CSRINIT	End	Windowing services	IPS
292	UTCPLXSB-SL0-281	76676	24-Dec-12	FINSHMSI	FINSHMSI	Start	Wait for attached CMDs	IPS
293	UTCPLXSB-SL0-281	77073	24-Dec-12	FINSHMSI	FINSHMSI	End	Wait for attached CMDs	IPS
294	UTCPLXSB-SL0-281	77073	24-Dec-12	MSI Region	MSI Region	End	End of MSI Region Initialization	IPS
295	UTCPLXSB-SL0-281	89595	24			End	End of IPL	IPS
296	UTCPLXSB-SL0-281	00000	24					
297	UTCPLXSB-SL0-281	'09:13:27.917613	24					
298	Unique Id	Event Time	Da					
299	UTCPLXSB-SL0-281	'09:13:27.917621	24					

© 2013 IBM Corporation



	A	B	C	D	E	F	G
1	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'00:00:00.000000	8-Jan-13	'13:20:53 8 Jan 20'	Report HBB7770	Sysplex: UTCPLXSB System: SL0	FMID: HBB7780 z/OS V01R13M00
2	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:18:31.078886	8-Jan-13	IPST	Create	Size: 00001000 Used: 00000E94 Free: 0000016C	
3	Unique Id	Event Time	Date	Event Thread	Thread EBCDIC	Type	Description
4	UTCPLXSB-SL0-2817-HBB7780-8 Jan	11:18:31.078886	8-Jan-13	IPL	IPL	Start	Start of IPL
5	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:18:31.078886	8-Jan-13	IRIM	IRIM	Start	Start of IRIM Processing
6	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:18:31.100641	8-Jan-13	IEAIPL10	IEAIPL10	Start	ISNIRIM - Read SCPINFO
7	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:18:31.100662	8-Jan-13	IEAIPL10	IEAIPL10	End	ISNIRIM - Read SCPINFO
238	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:42.754467	8-Jan-13	IEFSCHIN	IEFSCHIN	Start	IEFSCHAS address space
239	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:42.854983	8-Jan-13	IEFSCHIN	IEFSCHIN	End	IEFSCHAS address space
240	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:42.854983	8-Jan-13	IEFJSINT	IEFJSINT	Start	Subsystem interface
241	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:42.870287	8-Jan-13	IEFJSINT	IEFJSINT	End	Subsystem interface
242	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:42.870287	8-Jan-13	IEFSJLOD	IEFSJLOD	Start	JESCT
243	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:42.885453	8-Jan-13	IEFSJLOD	IEFSJLOD	End	JESCT
284	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:49.064918	8-Jan-13	MSIEXIT	MSIEXIT	Start	Cnz_MSIExit Dynamic Exit
285	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:49.064925	8-Jan-13	MSIEXIT	MSIEXIT	End	Cnz_MSIExit Dynamic Exit
286	UTCPLXSB-SL0-2817-HBB7780-8 Jan	11:21:49.064937	8-Jan-13	IEFJSIN2	IEFJSIN2	Start	SSN= subsystem
287	UTCPLXSB-SL0-2817-HBB7780-8 Jan	11:21:50.397743	8-Jan-13	IEFJSIN2	IEFJSIN2	End	SSN= subsystem
288	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:50.397743	8-Jan-13	IEFHB4I2	IEFHB4I2	Start	ALLOCAS - UCB scan
289	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:50.405122	8-Jan-13	IEFHB4I2	IEFHB4I2	End	ALLOCAS - UCB scan
290	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:50.405122	8-Jan-13	CSRINIT	CSRINIT	Start	Windowing services
291	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:50.411085	8-Jan-13	CSRINIT	CSRINIT	End	Windowing services
292	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:50.411085	8-Jan-13	FINSHMSI	FINSHMSI	Start	Wait for attached CMDs
293	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:50.411411	8-Jan-13	FINSHMSI	FINSHMSI	End	Wait for attached CMDs
294	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:50.411411	8-Jan-13	MSI Region	MSI Region	End	End of MSI Region Initialization
295	UTCPLXSB-SL0-2817-HBB7780-8 Jan	11:28:34.888946	8-Jan-13	IPL	IPL	End	End of IPL
296	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'00:00:00.000000	8-Jan-13	Total Timed Event Data Table Storage: 0006EE10			
297	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:21.5					ed Max: 185 Resultant Max: 185 Current #: 76 Over
298	Unique Id	Event Time					
299	UTCPLXSB-SL0-2817-HBB7780-8 Jan	'11:21:21.597847	8-Jan-13	0000000000EEE00	* f0 *	Start	Start of XCF/XES Initialization

BCP: Some PROGxx Goodies

- **What:** Prior to z/OS R12, when you did an LPA ADD you had to also remember to include all the aliases for the module. As of z/OS R12, you can use ADDLIAS (not the default) to automatically include the aliases.
- **Usage Example:**
  - **SETPROG LPA,ADD,MODNAME=(CNMCNETV),DSNAME=MWALLE.MY.LPAMODS,ADDALIAS**
  - **Output:**

```
CSV551I 10.42.50 LPA ADD 925
SUCCESSFUL: 2  UNSUCCESSFUL: 0  NOT PROCESSED: 0
MODULE     RESULT
CNMCNETV   SUCCESSFUL
CNMNETV    SUCCESSFUL
```

- **What:** Prior to z/OS R12, when you wanted to replace a Dynamic Exit routine, you had to do a DELETE and then an ADD. This meant for some period of time that exit routine was not available on the system. As of z/OS R12, you can use REPLACE so that the exit routine is not unavailable for that period of time.
- **Considerations:** You can't REPLACE an exit routine that hadn't been ADD'd. In other words, make sure the exit routine has been ADD'd before trying to do a REPLACE.
- **Usage Example:**
  - **SETPROG EXIT,REPLACE,EXITNAME=IRREVX01,MODNAME=IRREVX1A,DSNAME=COMMON.LOOKFEEL.LINKLIB**
  - **Output:**

```
CSV420I MODUL IRREVX1A HAS BEEN REPLACED FOR EXIT IRREVX01
```


© 2013 IBM Corporation

BCP: Some PROGxx Goodies

- **What:** Prior to z/OS R12, it was easy to make common mistakes on Dynamic LPA and LNKLST in PROGxx and SETPROG, and the DISPLAY PROG,EXIT command. As of z/OS R12, you can use the DEFAULTS statement in PROGxx to make it less error-prone.
- **Considerations:** `D PROG,DEFAULTS` shows what you currently have
- **Usage Example:**
  - **To your PROGxx member add your preferences:**

```
DEFAULTS LPA     ADDALIAS
DEFAULTS LNKLST  REQCOPYFROM COPYFROMCUR
DEFAULTS EXIT    EXITTYPE(INSTALLATION)                    (or ALL, NOTPROGRAM)
```

  - **SETPROG LPA,ADD,MODNAME=(CNMCNETV),DSNAME=MWALLE.MY.LPAMODS**
    - **Output:**

```
CSV551I 10.42.50 LPA ADD 925
SUCCESSFUL: 2  UNSUCCESSFUL: 0  NOT PROCESSED: 0
MODULE     RESULT
CNMCNETV   SUCCESSFUL
CNMNETV    SUCCESSFUL
```

  - **SETPROG LNKLST DEFINE NAME(MARNALL)**
    - **Output: the MARNALL LNKLST set was copied from the current LNKLST.**
  - **D PROG,EXIT**
    - **Output: same as the D PROG,EXIT,INSTALLATION output.**

© 2013 IBM Corporation

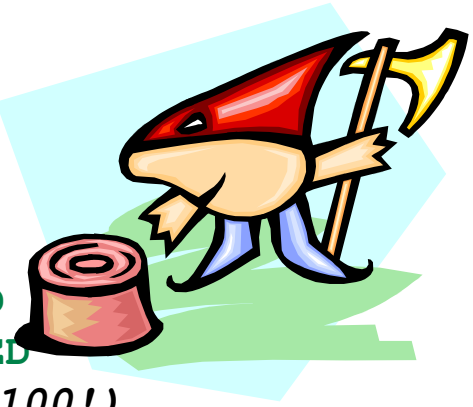
DFSMS: IDCAMS DELETE MASK

- **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
```


© 2013 IBM Corporation

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
```

© 2013 IBM Corporation

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                          Current Allocation
 Volume serial . . . . : ZDI18         Allocated blocks  . : 16
 Device type . . . . . : 3390          Allocated extents . : 16
 Organization  . . . . : PO            Maximum dir. blocks : 1
 Record format . . . . : FB
 Record length . . . . : 90
 Block size  . . . . . : 32760        Current Utilization
 1st extent blocks . . : 1             Used blocks . . . . : 16
 Secondary blocks  . . : 1             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
```


© 2013 IBM Corporation

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                          Current Allocation
 Volume serial . . . : ZDI18           Allocated blocks  . : 16
 Device type . . . . : 3390            Allocated extents . : 16
 Organization  . . . : PO              Maximum dir. blocks : 1
 Record format . . . : FB
 Record length . . . : 90
 Block size  . . . . : 32760          Current Utilization
 1st extent blocks . : 1               Used blocks . . . . : 1
 Secondary 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
```


© 2013 IBM Corporation

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
```


© 2013 IBM Corporation

Small Enhancements of System Programmer Interest

- **TSO/E: LOGONHERE reconnect support**

- **BCP: D ALLOC and SETALLOC commands**

© 2013 IBM Corporation

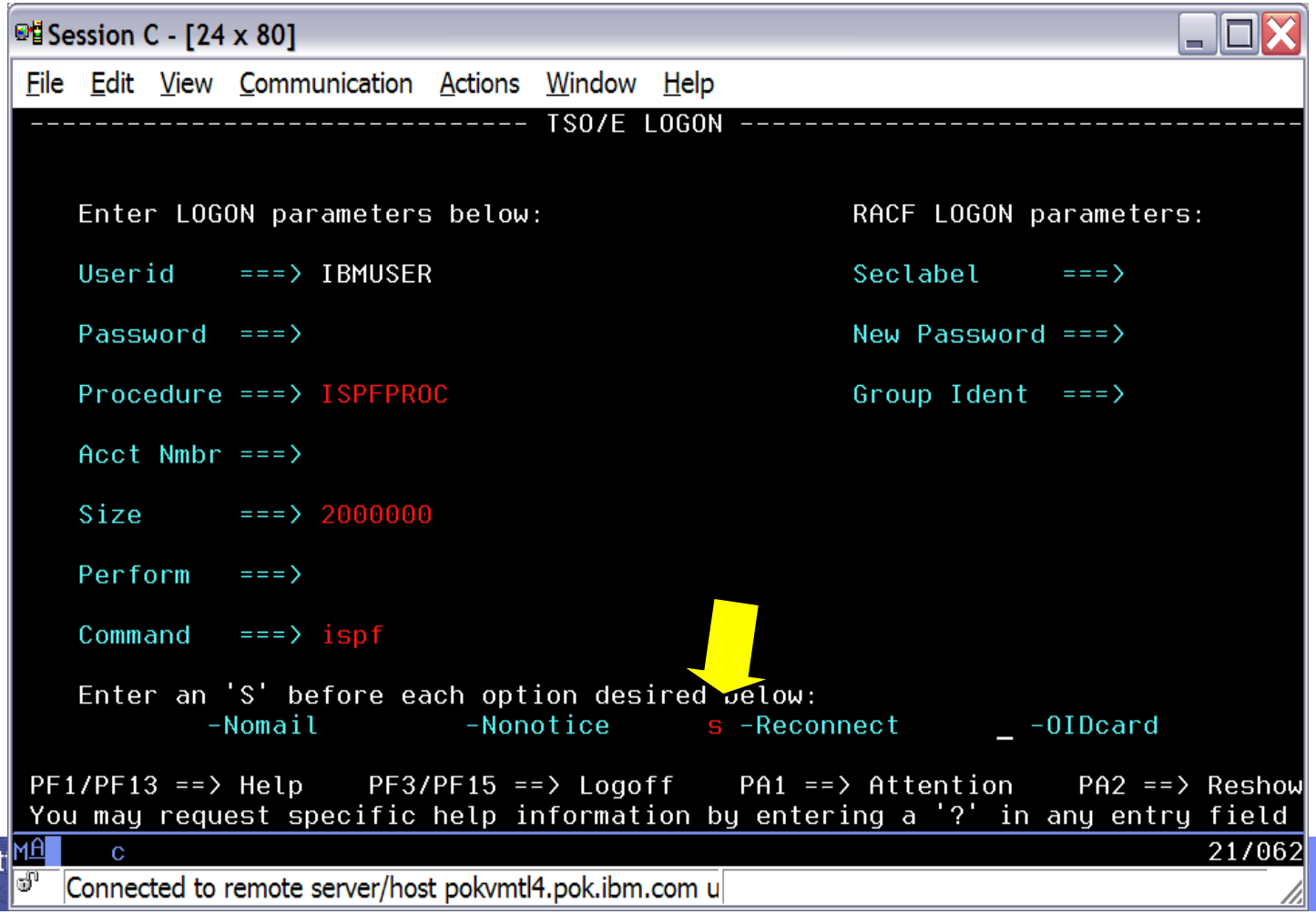
TSO/E: LOGONHERE reconnect support

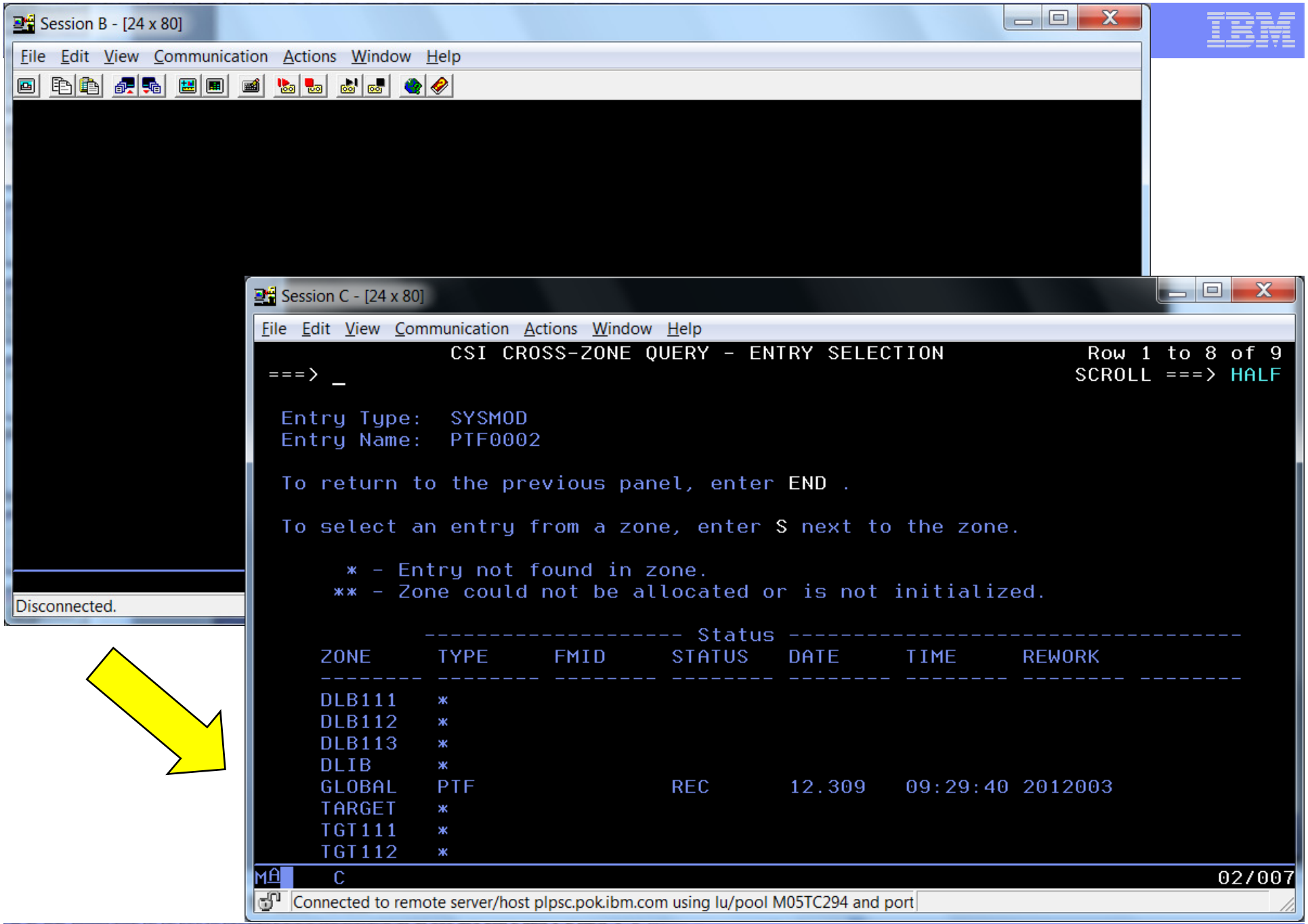
- **What:** Support for VTAM unconditional reconnect.
  - Allows you to reconnect to your session even if no disconnection has been detected. You “resume” right were you were before.
  - So easy to switch from one computer to another now! Hopefully should reduce the number of times that operators have to cancel TSO/E user IDs.
- **How to use:**
  - Support is turned on by default, but you can turn it off:
    - IKTSOxx LOGON statement **`LOGONHERE(OFF)`** **then** **`SET IKJTSO=xx`**, **or**
    - TSO/E **`PARMLIB UPDATE(xx)`** command
  - **`D IKJTSO,LOGON`** can tell you what you currently have
- **Considerations:** Verify your TSOKEYxx RECONLIM= setting to make sure it is non-zero. (Zero means a zero wait reconnection time, or reconnection is not possible.) RECONLIM default is 3 minutes**.**

© 2013 IBM Corporation

TSO/E: LOGONHERE reconnect support

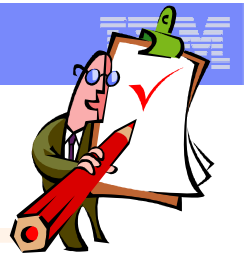
- **Usage Example:**
  - Verify that TSOKEYxx RECONLIM isn't zero, then logon selecting "-Reconnect".





© 2013 IBM Corporation

BCP: D ALLOC and SETALLOC commands

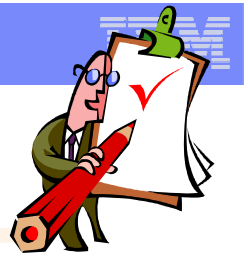


- **What:** You can now see your current ALLOCxx settings with a command, and change most of them dynamically. This is great for availability, since you don't need an IPL to change the settings.
  - Exception: policy for 2 digits years (2DGT_EXPDT)
- **How to use: `SETALLOC` *`options`* and `D ALLOC,OPTIONS`**
  - The ***`options`*** statement on the command is different than the parmlib syntax. For example command syntax: **`SYSTEM,IEFBR14_DELMIGDS=NORECALL` vs. parmlib syntax: `SYSTEM IEFBR14_DELMIGDS(NORECALL)`**
- **Considerations:** Note this is for changing specific settings, not the whole ALLOCxx parmlib member. It is not SET ALLOCxx!

  - The more dynamics we use, the more we need to ensure that we harden the newly desired values!

© 2013 IBM Corporation

BCP: D ALLOC and SETALLOC commands



- **Usage Example:**

```
–SETALLOC SYSTEM,IEFBR14_DELMIGDS=NORECALL,TAPELIB_PREF=BYDEVICES
  IEFA010I SETALLOC COMMAND SUCCESSFUL 829
  IEFBR14_DELMIGDS SET TO NORECALL.
  TAPELIB_PREF SET TO BYDEVICES.

–D ALLOC,OPTIONS
IEFA003I 16.16.38 ALLOC OPTIONS 832
…
SYSTEM          IEFBR14_DELMIGDS: NORECALL
                TAPELIB_PREF:     BYDEVICES
                REMIND_INTV:      90
                VERIFY_UNCAT:     FAIL
```


© 2013 IBM Corporation

Older than dirt on potatoes…

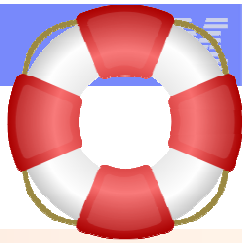
Small Enhancements of System Programmer Interest

- **DFSMS: STGADMIN.DPDSRN.*oldname***

- **ISPF: Member search**

© 2013 IBM Corporation

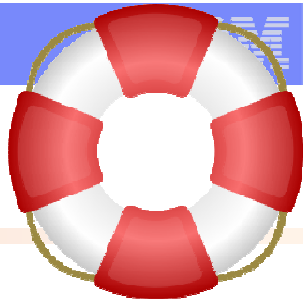
Older than dirt on potatoes:
DFSMS: STGADMIN.DPDSRN.*oldname*



- **What:** Provided by the operating system, a way to rename a non-SMS data set whose name is in use by another address space. (That is, to rename a duplicately named data set.) *This support carries inherent risks that must be understood and used wisely.*
  - Data sets that are currently in use on the driving system, while you are maintaining a target system, are good examples of those data sets that are duplicately named that you may want to rename.
  - System-Specific Aliases (SSAs) is the way that ServerPac gets around this problem during system replace installs.
  - There are probably many “home grown” tools to do this already, as the need has been around forever.
- **How to use:**
  1. Create **`FACILITY`** class profile **`STGADMIN.DPDSNRN.`*`oldname`*** for the data set you want to rename. Obtain READ access to this profile.
  2. Rename the data using ISPF PDF, after understanding consequences.
  - You could write your own program as well, using the correct CAMLIST macro expansion and authorization check.
  - SMF type 18 record written for successful duplicately-named renames: "So let it be written, so let it be done"
- **Considerations:** **`STGADMIN.DPDSNRN.*`** wildcarding of the profile name is strongly not recommended, as it could cover more data sets than intended. IDCAMS and IEHPROGM do not exploit **`STGADMIN.DPDSNRN.`**

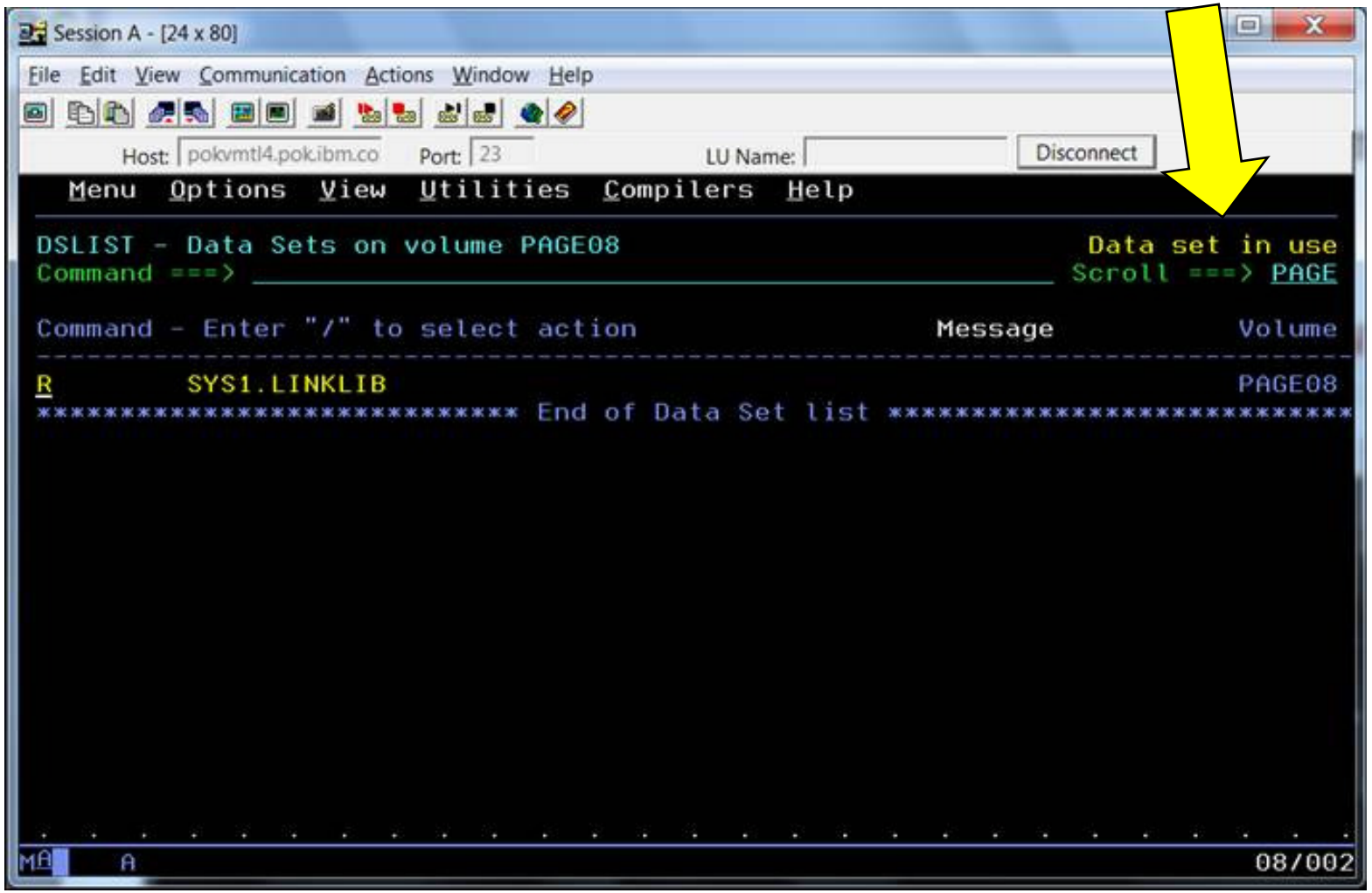
© 2013 IBM Corporation

Older than dirt on potatoes:
DFSMS: STGADMIN.DPDSRN.*oldname*



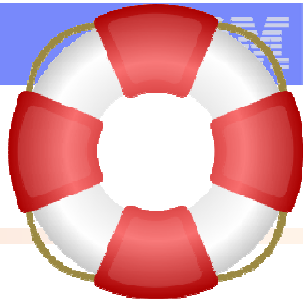
- **User Example:**

Before:



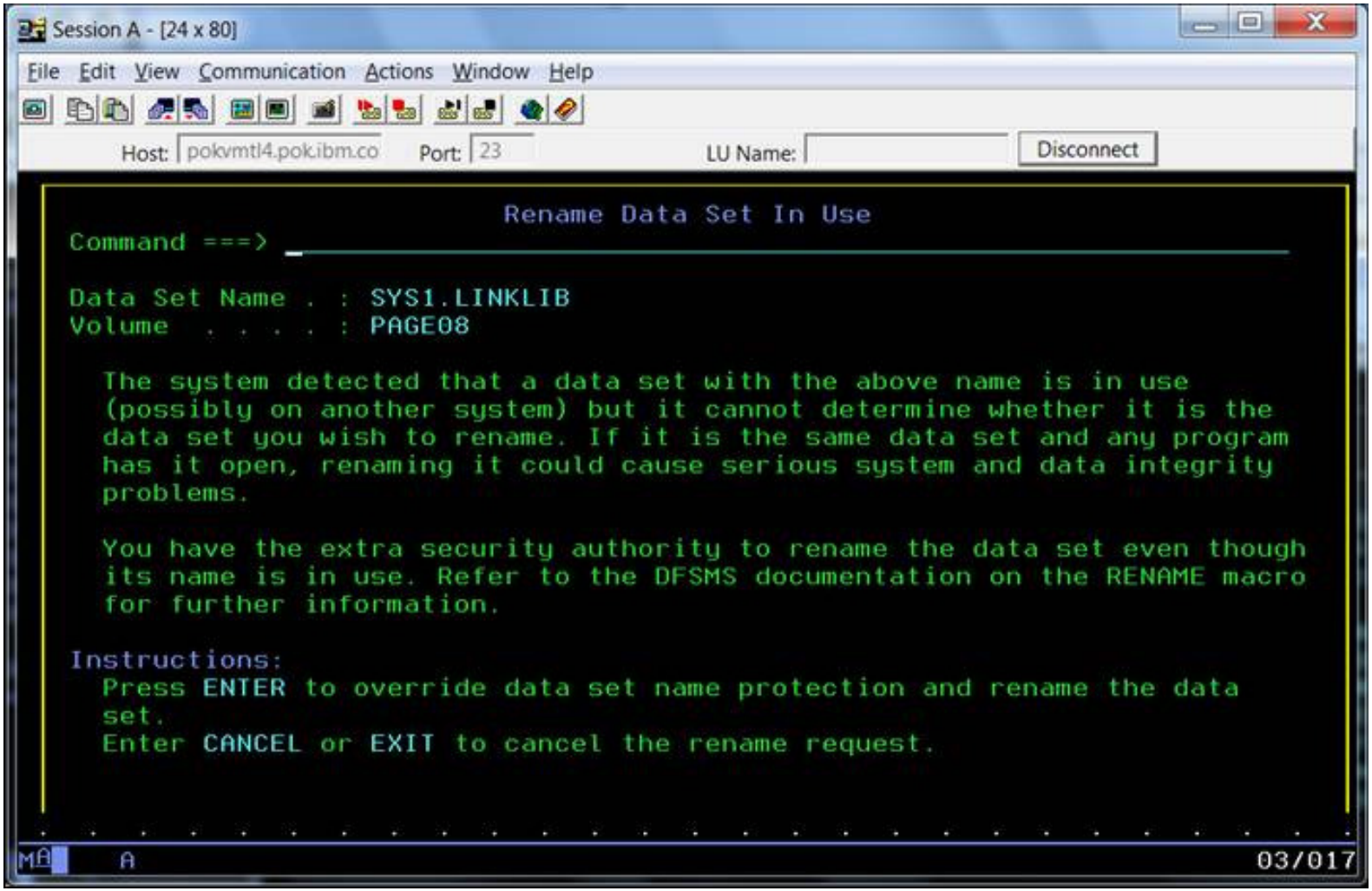
© 2013 IBM Corporation

Older than dirt on potatoes:
DFSMS: STGADMIN.DPDSRN.*oldname*



- **User Example:**

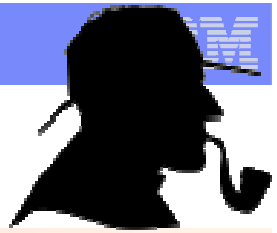
After:



© 2013 IBM Corporation

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.

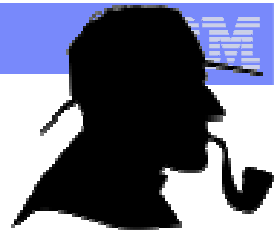
- **How to use:** On the DSLIST command line:
  - → **`MEMBER`** ***`name`*** (or **`MEM`** ***`name`*** or **`M`** ***`name`***)
  - –Options you can specify are:
    - –**`X or EX`**: search only excluded
    - –**`NX`**: search only not excluded data sets
    - –**`RECALL1`**: Also, search data sets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

- **Considerations:** Easy as pie!

© 2013 IBM Corporation

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

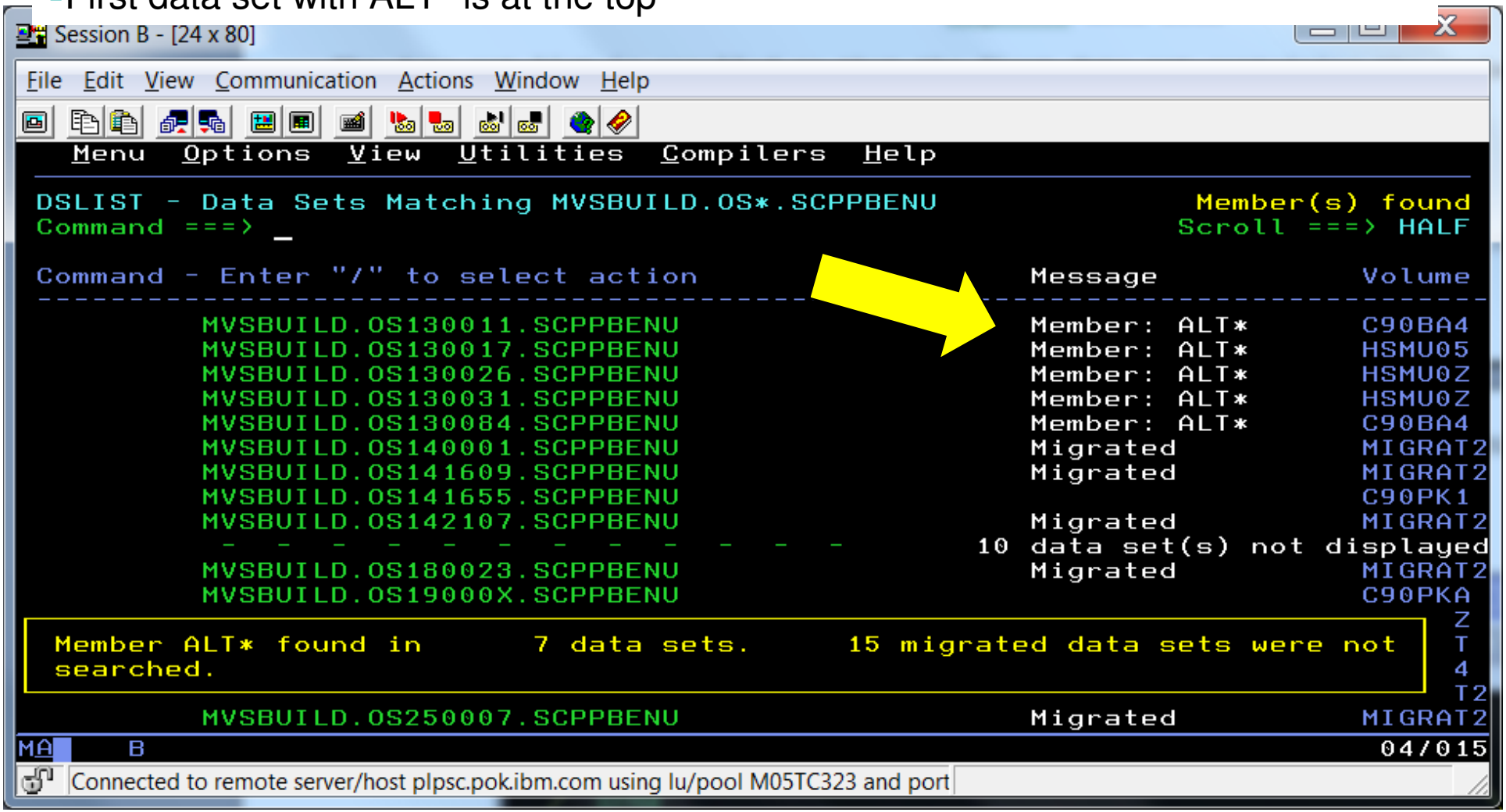
- One of them is migrated to DASD, so I'll use RECALL1.
- I've excluded 10 data sets I don't care about, so I'll use NX



```
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



© 2013 IBM Corporation

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

System Programmer & User Items:

- **SDSF:** Cursor-sensitive Sort
- **DFSMS:** IDCAMS DELETE Members
- **TSO/E:** LOGONHERE reconnect support
- **ISPF:** Member search

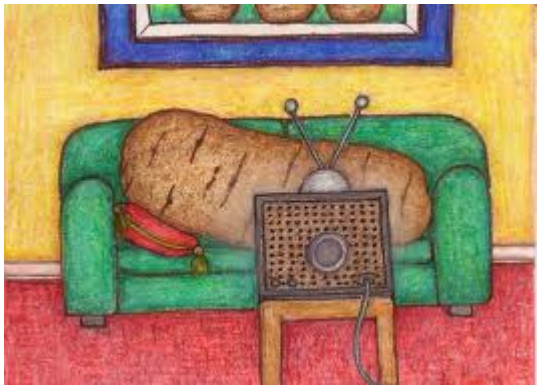
System Programmers Items:

- **BCP:** Add and remove MCS consoles dynamically
- **BCP:** Dynamic System Symbol Support
- **BCP:** DISPLAY PPT
- **BCP:** BCP Parmlib Comments
- **z/OS UNIX:** Prevent Content Overlay during MOUNT
- **DFSMS:** IEBPDSE Batch Program
- **BCP:** IEFSSNxx BEGINPARALLEL
- **BCP:** Timed Event Data Report
- **BCP:** Some PROGxx Goodies
- **BCP:** D ALLOC and SETALLOC commands
- **DFSMS:** STGADMIN.DPDSRN.*oldname*

© 2013 IBM Corporation

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

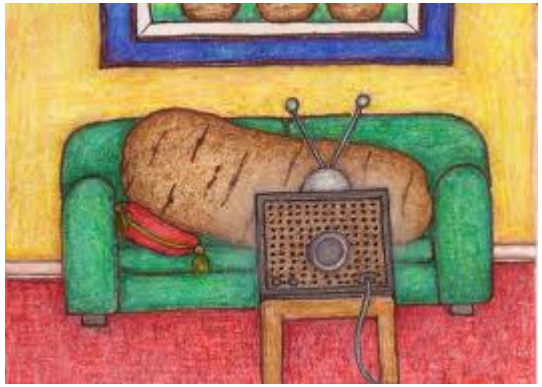
- **z/OS V2.1:**
  - **BCP: Add and remove MCS consoles dynamically**
    - A
  - **BCP: Dynamic system symbol support**
    - A supported way to change system symbols. Understand considerations.
  - **BCP: DISPLAY PPT**
    - N
  - **BCP: Parmlib comments (in handout only)**
    - Help document parmlib members with comments.



- **z/OS V1.13:**
  - **z/OS UNIX: Prevent Content Overlay during MOUNT**
    - Good to protect from overmounts.
  - **DFSMS: IEBPDSE Batch Program**
    - Helpful to see if your PDSEs are structurally sound.
  - **SDSF: Cursor-sensitive Sort**
    - Easy to use, and can be helpful when looking for something.

© 2013 IBM Corporation

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



- **z/OS V1.12:**
  - **BCP: IEFSSNxx BEGINPARALLEL**
    - A time saver that is easy to implement.
  - **BCP: Timed Event Data Report**
    - Data proof of where time is spent.
  - **BCP: Some PROGxx Goodies**
    - Nice defaults to set up.
  - **DFSMS: IDCAMS DELETE Members**
    - Something long desired!
- **z/OS V1.11:**
  - **TSO/E: LOGONHERE reconnect support**
    - It really works.
  - **BCP: D ALLOC and SETALLOC commands**
    - An availability aid.
- **Older than dirt on potatoes:**
  - **DFSMS: STGADMIN.DPDSRN.*oldname***
    - Nice to have this option, but beware of using it.
  - **ISPF: Member search**
    - Find members across many data sets very quickly.

© 2013 IBM Corporation

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

August 16, 2013

© 2013 IBM Corporation