Cheryl's LAST Hot Flashes #28

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Session 11310

SHARE in Anaheim 2012

Agenda

- IBM Education Assistant
- MVS Program Survey
- IPCS
- z/OS 2-Year Cycle
- New Function APARs
- Publications
- Miscellaneous
- This SHARE

IBM Education Assistant (IEA)

- No-charge presentations, demos, tutorials, and links from IBM - www.ibm.com/software/info/education/assistant/index.shtml

- Main categories: Information Management, Lotus software, Rational software, Security software, Tivoli software, WebSphere software, **Systems and servers (and related software)**

- Last category includes z/OS, z/OSMF, Comm Services

- z/OS 1.12 – 6 presentations (4 with audio)

- z/OS 1.13 – Over 120 presentations (3 with audio)

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RMF response time distribution execution velocity goals   349K

RMF GRS supervisor delay monitoring enhancements   2.1M

InfoPrint server V1R13 enhancements   60K

ISPF zOS UNIX directory list enhancements   332K

ISPF editor support for line command macros   342K

ISPF Display JOBname STEPname in Format-9   225K

BCP CSV miscellaneous   45K

BCP capacity provisioning manager customer requirements   636K

BCP SMF IFASMFDL stop reading before end of logstream   43K

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IBM Education Assistant (IEA)

- Survey
  - How many people have used this for z/OS?
  - Would you prefer to have more presentations without audio, or fewer presentations with audio?
  - Would you want an email notice if items added?

MVS Program Survey

- Survey to determine contents of future SHARE conferences
- Started July 26; will end August 17
- Go to www.share.org/mvs and sign up to be an MVS program member; then you'll see the survey
- 50 people have responded so far
- We will post results after survey is complete

- Please complete survey if you haven't already; you can submit it as anonymous

MVS Program Survey

- Next upgrade?
  - 30% - z/OS 1.13 to 2.1
  - 22% - z/OS 1.12 to 1.13

- zArchitecture servers installed?
  - 28% - z196
  - 16% - z114
  - 16% - z10 EC
  - 14 % - z10 BC
  - 12% - z9 BC & EC
  - 7% - z890/z990 (can't support z/OS 2.1)
  - 4% - z800/z900 (can't support z/OS 2.1)

MVS Program Survey

- zIIPs & zAAPs?
  - 24% - Have zAAPs installed
  - 84% - Have zIIPS installed
  - 30% - Use zAAP on zIIP facility

- Capacity Provisioning Manager
  - 34% - Don't see a reason
  - 18% - Didn't know about it

Complete your sessions evaluation online at SHARE.org/AnaheimEval

MVS Program Survey

- What topics do you want to see at SHARE (basic level)?

    - 38% – Common Event Adapter (CEA)
    - 36% – Common Information Model (CIM)
    - 28% – SMF Record Flooding
    - 28% – z/OSMF
    - 26% – z/OS BCPii
    - 26% – Capacity Provisioning Manager (CPM)
    - 24% – System Status Detection Partitioning Protocol
    - 22% – SMF Logger
    - 22% – Predictive Failure Analysis (PFA)
    - 22% – Runtime Diagnostics (RTD)

MVS Program Survey

- What topics do you want to see at SHARE (intermediate)?

    - 36% – z/OS BCPii
    - 28% – Common Event Adapter (CEA)
    - 28% – z/OSMF
    - 26% – Common Information Model (CIM)
    - 26% – Predictive Failure Analysis (PFA)
    - 26% - Runtime Diagnostics (RTD)
    - 24% - Extended Address Volumes (EAVs)
    - 22% - Dynamic VSAM Control Area (CA) Reclaim
    - 22% – SMF Record Flooding

MVS Program Survey

- How long to migrate to a new release?
  - 4% – 1 month or less
  - 12% - Between 3 and 6 months
  - 18% - Between 6 and 12 months
  - 2% - Between 12 and 18 months

- Reasons that HiperDispatch not activated:
  - 2% - No time
  - 20% - Don't see a reason
  - 12% - Hardware doesn't support it
  - Note: WSC Techdoc WP101229 – *z/OS: Planning Considerations for the z10 EC & z10 BC Servers* (13May2011)
  - ➔ **Always turn on HiperDispatch; performance is better**

MVS Program Survey

- Reasons for not implementing z/OSMF:
  - 18% – No time
  - 24% - Don't see a reason
  - 4% - Tried but unsuccessful
- Which z/OSMF features have you tried?
  - 12% - Incident Log
  - 14% - Configuration Assistant
  - 12% - Workload Management
  - 14% - Resource Monitoring & System Status
  - 4% - Software Deployment
  - 6% - Classic ISPF
  - 0% - Capacity Provisioning

MVS Program Survey

- Reasons for not implementing WLM Initiators:
  - 28% - Don't see a reason

- Reasons for not implementing Enhanced Catalog Sharing:
  - 12% - No time
  - 14% - Don't see a reason
  - 6% - Tried but unsuccessful
  - 6% - Didn't know about it

Complete your sessions evaluation online at SHARE.org/AnaheimEval

MVS Program Survey

- Which facilities provided the most benefit?
  - 20% - IBM Health Checker
  - 18% - HyperPAV
  - 16% - zIIPs and zAAPs
  - 14% - zFS
  - 10% - BCPii; zHPF
  - 8% - HiperDispatch; z/OSMF; EAVs; AutoIPL
  - 6% - Operlog/syslog; JES2 Dynamic PROCLIBs; WLM Initiators; Enhanced Catalog Sharing (ECS); Catalog Extended Alias Support
  - 4% - Infiniband; PFA; CPU MF; Sysplex DAE; System Detection
  - 2% - SMF Logger; VSAM CA Reclaim; WLM Enclave Management; Message Flooding; Auto Reply; ICKDSF new functions; Sysplex Failure Management; CEA; TVS; RLS

MVS Program Survey

- Redbooks – SG24-7816-00 – Mean Time to Recovery
  - 50% - have implemented some of the recommendations
  - 20% - didn't know about it

- Redbooks – SG24-7328-00 – z/OS Planned Outage Avoidance Checklist
  - 58% - have implemented some of the recommendations
  - 14% - didn't know about it

MVS Program Survey

- Redbooks
  - See SHARE sessions from Frank Kyne who provides updates to these Redbooks
  - 2012 SHARE in Anaheim:
    - 11806 – *Recent z/OS Enhancements You Can Use to Reduce Down Time* (z/OS BCPii, System Status Detection Partitioning Protocol, AutoIPL, JES2 Dynamic Proclib)
    - 11722 – *z/OS Planned Outages – Control them, instead of the other way around*
  - 2010 SHARE in Seattle
    - 2235 – *z/OS Mean Time to Recovery Improvements*

IPCS Undocumented Functions

- Command to get list of all Work Element Blocks (WEBs) requested in SHARE MVSE requirement SSMVSE12017

- Peter Relson, IBM, posted a note on the discussion area about an undocumented and unsupported function:

- IPCS IEAVWEBI
-        prompts with
-
- PLEASE SPECIFY EITHER ''ALL'' OR ''WUQ'' OR ''TCB ASID(XXXX)'' OR ''SRB ASID(XXXX)'' OR ''ASID(XXXX):'' OR ''EXIT''
-
- ALL - Displays high level statistics about WEBs within the system.
- WUQ - Displays all WEBs known within the system that are on a WUQ.
- TCB ASID(xxxx) - Displays TCB WEBs for that ASID using ASCBTAWQ.
- SRB ASID(xxxx) - Displays SRB WEBs for that ASID using ASCBSAWQ.
- ASID(xxxx) - Displays all WEBs for that ASID.

IPCS Function 2.6I Level 2 Toolkit Menu

```
------------------- IPCS MVS LEVEL 2 TOOLKIT ----------------------------
Level 2 toolkit functions are intended to be used as directed by service
Personnel.
S Name      Exec      Abstract_____
_ DATAINFO BLSXDINF List and Where in storage addresses
_ DISPINFO IEAVDISP Dispatchability and lock contention information
_ DUMPINFO IEAVDUMP General and environment information about the dump
_ FRRSDATA IEAVFRRS Validity check FRR stacks
_ IOSBLKS  IOSFSMGB Information about IOS blocks
_ IPLPARMS BLSXIPLP Values used during system initialization (IPL)
_ LOCKSTAT IEAVLOCK Information about locks held at time of dump
_ LOGDATAS IEAVLOGD One line summary of input LOGREC Dataset or LOGDATA
_ SAVEAREA BLSXSAVA Maps standard savearea chain. Input save area addr
. . .
```

IPCS Function 2.6I Level 2 Toolkit Menu

```
------------------- IPCS MVS LEVEL 2 TOOLKIT ----------------------------
Level 2 toolkit functions are intended to be used as directed by service
Personnel.
S Name      Exec      Abstract_____
_ SCTSIOT   IEFDDSUM Displays all DDs and DSNs in a job
_ SHOWVCM   IEAVSVCM Displays HiperDispatch information
_ SIOTPLUS  IEFSIOTP Maps some fields in SIOT, EDL, DDWA, VOLUNIT, etc.
_ SLIPDATA  IEAVSLIP Display SLIP control block data
_ SLOTCNT   ILRSLOTC Auxiliary slot usage information
_ SUMTRACE  BLSXSUMT CPU usage information based on entries in SYSTRACE
_ SVC99RB   IEFSVC99 Maps dynamic allocation request block and text units
_ TCBMAP    IEAVTCBM Picture of TCB structure of the default ASID
_ VSMINFO   IGVVSMIN Map of Virtual Storage boundaries
_ WJSIPAMT  BPXWAMT  Displays the automount rules set for this system
_ WEBINFO   IEAVWEBI Overview of work (ie. WEBs)
***************************** END OF LIST *****************************
```

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```
****************************** TOP OF DATA **********************************
IEAVWEBI VERSION HBB7770 OPTION:  TCB ASID(0002)


DETAILED INFORMATION FOR WEBS ON ASCB WEB QUEUE:
-------------------- DATA FROM WEB ----------------------------||-- ASCB DATA
----+----1----+----2----+----3----+----4----+----5----+----6----+---7----+----
|  WEB@  |TYPE| WEB DPH|  WUQ@  |CLAS| ASCB@  |  WU@   |PROMOTE ||JOBNAME|ASID
|--------|----|--------|--------|----|--------|--------|--------||-------|----
|022D5300|TCB |00FF00FF|0261E200| CP |00FC7000|007FF890|00000000||PCAUTH |0002
|022D5280|TCB |00FF00FF|0261E200| CP |00FC7000|007FD0C0|00000000||PCAUTH |0002
|022D5200|TCB |00FF04FF|0261E200| CP |00FC7000|007FE040|00000000||PCAUTH |0002
-----------------------------------------------------------------------------


PROMOTION | MAP
------------------------------------------------------------
0X04000000| LOCAL LOCK HELD, HD=YES
0X02000000| LOCAL LOCK HELD, SRB PROMOTION CONTENTION
0X01000000| FLOOD OF SRB PROMOTION
0X00FF0000| COUNT OF TIMESLICES FOR TEMPORARY PROMOTION
0X00000200| DEFERRED SWITCH FROM ZAAP IN EFFECT
0X00000100| TRICKLE PROMOTION
------------------------------------------------------------
```

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WEBINFO ASID(0002) – Page 2

```
WEBTYPE|  HEX#|WEB REPRESENTS A:
-----------------------------------------------------------
ERROR  |    0 |WEB IN ERROR
SRB    |    4 |SRB
MSRB   |    8 |MANAGED SRB, CREATED BY IEAMSCHD. IF
       |      |FULLXM, THEN IT IS MSRB
SSRB   |    C |SSRB
ESRB   |   10 |ENCLAVE SRB. ENCLAVE DETERMINES PRIORITY.
       |      |PREEMTABLE
PSRB   |   14 |PREEMPTABLE SRB. ALL ARE PREEMPTABLE
FSRB   |   18 |SRB SCHEDULED W/FULLXM. IF ALSO
       |      |PREEMTABLE, CLIENT OR ENCLAVED, THAT TYPE
       |      |IS USED INSTEAD OF FSRB
TCB    |   1C |TCB
EXIT   |   20 |AN ASYNC EXIT
CMLP   |   24 |CML PROMOTION
WUQH   |   28 |WUQ HEADER
FREE   |   2C |WEB IS FREE
RSRB   |   30 |PREV EXECUTING SRB, SUSPENDED BY SUSPEND
       |      |W/ TOKEN OR BY PAUSE OR TRANSFER
CSRB   |   34 |CLIENT SRB. PRIORITY DERIVED FROM ASID
       |      |OTHER THAN HOME. PREEMPTABLE
ETCB   |   38 |ENCLAVE TCB. ENCLAVE DETERMINES PRIORITY.
CMSP   |   3C |CMS PRMOTION, AS OF HBB7709
BAD    |   XX |WHERE XX IS NONE OF THE ABOVE
-----------------------------------------------------------
```

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Two-year z/OS Release Considerations

- IBM response of FIN (Fix it In a Next or future release) to an APAR. It used to take a year to provide, but now it might be two years. Reconsider whether you are willing to wait that long.

- Documentation updates are now refreshed once about six months after the release. Will we need to wait a year before a refresh? Keep an eye on doc updates.

- Reviewing and applying New Function APARs is even more important than before.

Two-year z/OS Release Considerations

- Here's how I view SHARE content:
  - z/OS 1.13 – GA 9/2011
    - Summer 2011 – Maximum detail on z/OS 1.13
    - Winter 2012 – User experiences on z/OS 1.13
    - Summer 2012 – New content, more user experiences on z/OS 1.13, pick up missed sessions – See MVSE opening session 11712 for new content sessions

  - z/OS 2.1 – GA 2H2013
    - Winter 2012 (San Francisco) – Preview of z/OS 2.1
    - Summer 2013 – Maximum detail on z/OS 2.1
    - Winter 2014 – User experiences on z/OS 2.1
    - Summer 2014 – New content, more user experiences on z/OS 2.1, pick up missed sessions

New Function APARs

- OA37957 / OA37505 / OA39175 (z/OS & DFSMS 1.13, 11 Apr2012) – *New Function to Allow Management of Verbose Message Lines for Multi-Line Messages.* DFSMS changed about 400 cryptic IEC error messages to include more information.

- II14681 (24May2012) – *List of APARs Associated with CA VSAM Reclaim.*

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New Function APARs

- OA35914 (z/OS 1.11-1.13, 20Apr2012) – *Enhance PDSE to Report Possible Contention on the LICB_ASRBASCBHASHTABLE Hash Table.* Anything that improves PDSE performance is good.

- OA36895 / PM41849 / PM57110 (DFSMS 1.12-1.13, 1May2012) – *CA Reclaim JRNAD Exit Calls.* Provides CA reclaim support for IMS.

- OA37164 (z/OS 1.12-1.13, 25Apr2012) – **New Function: RACF Health & Migration Checks**.

Publications

- WSC TD105949 (24Apr2012) – *How to Collect CPU Measurement Facility Data for z/VM*

- WSC PRS1381 (31Jul2012) – *Getting Started with zPCR*. This contains zPCR 7.9b – important enhancement. Note: You must rerun zPCR studies after applying the update.

- WSC TD105963 (30May2012) – *The z/OS System Cloning Process*. How to close a z/OS system for running under z/VM.

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Publications

- WSC PRS4922 (7May2012) – *z/OS CPU MF Enablement Education*. Replay of 77-minute webinar by **Kathy Walsh** and **John Burg** explains the history, methodology, and importance of the SMF type 113 records.

- IBM Redbooks
  - SG24-6898-01 (29Mar2012) – *System Programmer's Guide to: z/OS System Logger*

  - REDP-4850-00 (30Mar2012) – *IBM CICS Performance Series: CICS TS V4.2 and Java Performance*

Publications

- NewEra Software (creator of Image FOCUS & The Control Editor) is creating some eBooks that are available at http://www.newera-info.com/Links.html.
  - The most recent contains my biography, extracts from my first Tuning Letter, and an article on z/OSMF that I wrote (*Cheryl Watson – Ahead of the Performance Curve)*.
  - A very useful paper – *What's New in z/OS V1R12 & V1R13*
  - Also see *zAuditing Essentials – Vol. 1 – zEnterprise Hardware – An Introduction for Auditors* (requires registering)
  - Free Tools – z/OS IPLCheck and StepOne

Miscellaneous

- After we talked about Big Data in a Tuning Letter, Tom found this great link to show big and small things in our world - http://htwins.net/scale2/scale2.swf?bordercolor=white.

- **Kristine Harper** posts in zNextGen Facebook:
  - "Always code as if the guy who ends up maintaining your code will be a violent psychopath who knows where you live." – Martin Golding
  - "Walking on water and developing software from a specification are easy if both are frozen." – Edward V Berard

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Miscellaneous

- New LinkedIn Forums on mainframes
  - Capacity Planning & Performance Management
  - Capacity Planning & Performance Evaluation
  - IBM Cloud Computing
  - IBM MAINFRAME Group
  - Mainframe Assembler Professionals
  - Mainframe Experts Network
  - Mainframe Performance & Optimization
  - Mainframes R Us
  - MainframeZone
  - Program Management Forum

Miscellaneous

- New LinkedIn Forums on mainframes (cont.)
  - SHARE
  - System z Advocates
  - TIVOLI OMEGAMON Specialists
  - z/OS

- How many people here are allowed to access LinkedIn or Facebook during office hours?
- How many can access the SHARE website?
- Did you know about our new MVS Program Forum?
  - www.share.org/mvs - Please join

This SHARE

- z/OSMF expects to have an upgrade before z/OS 2.1
  - See session 11697, *z/OSMF Software Deployment Application – User Experience* – IBM, by **Greg Daynes**; user session by **Mary Ann Matyaz** is also very useful
  - New Software Management Task, see slides 23-26
  - This will be popular!

- Session 11581, *A Different Way to Perform z/OS Maintenance*, by **Ed Webb**
  - PTFs to Super C allow volume serial numbers to be displayed or printed. See APARs OA38467 (21Jan2012) and PM38213 (21Dec2011).

This SHARE

- Session 11463, *z/OS Performance HOT Topics*, by **Kathy Walsh**
  - Contains important performance considerations – don't miss!

- Session 11756, *JES2 Performance Considerations,* by **Tom Wasik**.
  - First time given in several years.
  - The notes are fantastic! Thanks, Tom!

Complete your sessions evaluation online at SHARE.org/AnaheimEval

See You in San Francisco!

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