z/OSMF User Experience Part 2

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Session **8757**
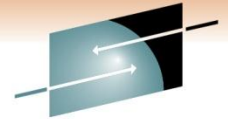
Agenda

- About LabCorp and Myself
- The Target Environments
- Installation
- Configuration
- Issues
- Thoughts and Concerns
- APARs to Know About
- Questions

About LabCorp

- Second largest medical testing company in the US.
- 38 Primary laboratories across the US (except Hawaii)
- 9 Centers of specialty lab services
  - Dianon (anatomic pathology)
  - Esoterix (esoteric services)
  - Monogram (HIV testing)
  - Others
- Over 2,400 patient service centers
- Average of 400,000 samples taken every day
- 28,000 employee's nationwide

About Brad Carson

- 30 Years working with mainframe systems
- Current manager of Mainframe Technical Support for LabCorp
- Not just IBM mainframes but Unisys too.
- Currently working with z/OS, z/VM, RHEL for System z, and OS/2200.
- President of SPARTA (Systems Programmers Association of the Research Triangle Area)
- SHARE attendee for 14 years
- MVSE project member for 5+ years
- Email address: carsonb@labcorp.com

The Target Environments

- RTP, NC
  - z10-EC Model 704
    - With zIIP engine
  - z/OS 1.11 with RACF
  - TECH lpar
  - TECHPLEX monoplex
  - Using SMS managed ZFS file systems in USS

- Burlington, NC
  - z10-BC Model N02
    - Without zIIP engine
    - CBU to Y05 + zIIP
  - z/OS 1.11 with RACF
  - DEVL and CMCK lpars
  - BURPLEX parallel sysplex
    - Primary work done on DEVL
  - Using SMS managed ZFS file systems in USS

Installation

- z/OSMF was installed with the rest of z/OS 1.11
  - Had to make sure that $0 cost feature was included with order on ShopzSeries.
  - Delayed waiting for "entitlement" to be registered by IBM
  - Make sure that you are current on maintenance before starting the configuration process
  - See APAR list at the end of this presentation

Configuration (WAS OEM)

- Started with WASOEM V7
  - Kept with a default installation
    - Changed data set names to match our standards
    - Indicated SMS managed ZFS
  - Used supplied ports (32200 – 32216) for this instance
  - Used RACF ID that had UID=0 and RACF SPECIAL
  - Good thing I used to be a RACF admin in a past life
  - Completed base WAS OEM configuration without an IPL!

Configuration (zOSMF)

- Started on zOSMF
  - Oops, had some scope creep and had to stop
  - Need to setup some other things first instead
    - LOGREC via a logstream
    - OPERLOG
    - Common Event Adapter
    - Common Information Model services

- So started down the detour path for configuring other items

Configuration (LOGREC and OPERLOG)

- Visit CFSizer website to get initial configuration values
  - DASD Only for TECHPLEX
  - CF for BURPLEX
- PARMLIB changes for IEASYSxx and CONSOLxx
- Had to setup IOF OPERLOG support
- Had to alter all EREP jobs on each plex
- Kept SYSLOG running for other purposes

Configuration (CEA & CIM Services)

- For CEA
  - Setup a SYSPLEX dump directory
  - Two model logstreams needed
  - Update CEAPRMxx and BLSCUSER members of PARMLIB
  - Used F CEA,CEA=xx to reload new parms
- For CIM
  - Setup ZFS file system for /var/wbem
  - Run CFZRCUST script from /usr/lpp/wbem/install to correctly populate above file system
  - Used CFZCIM from SYS1.IBM.PROCLIB unmodified

Configuration (zOSMF redux)

- OK, let's try this again
- Ran izusetup script and set options for our naming standards (just like in WASOEM)
- Ran and validated required RACF modifications
  - Again it was a good thing being a past RACF admin
- Primed the zOSMF file system
- Deployed the zOSMF application into WASOEM
- Ran IVP

Success!

Issues

- Had to use TSO OMVS to run setup scripts, couldn't get them to run via direct login to USS (rlogin)
- Scope creep for the initial work, logstreams, CEA and CIM
- Undersized OPERLOG on BURPLEX, had to correct that
- Tripped over IOF issue with "LOG OLD" command
- WASOEM setup script had problems with TSO logon procs that contained # signs
- Izusetup doesn't recognized running CEA setup, always wanted to define/mess with it. Had no problem with CIM

Issues

- Had SMS issue with CEA snapping logrec data and running EREP
  - CEA exec's run under System REXX and are compiled, NO SOURCE provided
- SA for z/OS doesn't provide samples for WAS V7 only V6
  - They behave differently so I had to setup our own definitions

Thoughts and Concerns

- Get to know your security people – *You WILL need them*
- Make sure you are current on maintenance for WAS, CEA, and z/OSMF
- Try to use supplied settings if possible
- WAS really needs a zAAP or zIIP to function
  - Especially during start up!
- Very cumbersome setup
  - Some work done in USS
  - Some work done in TSO
  - Some work done in Batch
- Common sense needed (KISS principle)

Thoughts and Concerns

- More and more to be added to z/OSMF with each release
  - 1.12 adds WLM work
  - 1.13 to add some SMS work
- This is going to become a way of life for z/OS
- OPERLOG keeps recording after JES comes down
- Small shops will have a BIG problem with the WAS OEM footprint!
- SMPE PTF's are quite large (like JAVA), so plan for SMPPTS spill datasets
- Did I mention that you will really want to have a zAAP or zIIP available?

APARs to Know About

OA30361 (CEA) – CEA only processes first 500 entries in sysplex dump directory

OA34709 (CIM) – CIM Server UTF-8 error processing sysplex dump directory

OA32507 (CEA) – Late fixes for z/OS 1.12

PM191166 (WAS) – Upgrade WASOEM to fix pack level 7.0.0.11

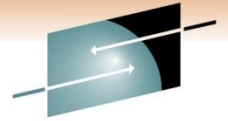PM26448 (WAS) – Upgrade WASOEM to fix pack level 7.0.0.13

PM21357 (z/OSMF) – izusetup.sh –config fails and other problems (1.11 only)

APARs to Know About

PM28675 (z/OSMF) – z/OSMF can't import WLM service definition (1.12 only)

< TBD > (z/OSMF) – User cannot get WLM initial page (administrator works OK) (1.12 only)
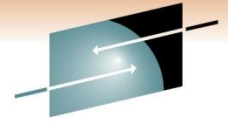
Thanks to Ed Webb from SAS Institute for these

Questions

Thank You