

z/OSMF User Experience Part 2

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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
- 9 Centers of specialty lab services
 - Dianon (anatomic pathology)
 - Esoterix (esoteric services)
 - Monogram (HIV testing)
 - Genzime Genetics
 - Others
- Over 2,600 patient service centers
- Average of 475,000 samples taken every day
- 30,000 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 Ipar
 - 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 Ipars
 - 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 (z/OSMF)

- 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
 - ServerPac does supply these jobs, we didn't run them though
 - 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

Maintenance

WAS OEM and z/OSMF are SMP/E maintained

- To pick up maintenance you **MUST** do post APPLY work!
 - Do the WAS OEM checks/work first
 - This **WILL** take some time on a low powered system
 - You will need to check the logs in USS to verify
 - Then shutdown WAS OEM
 - For z/OSMF you will need to redeploy the “ear” file
 - Hold doc has an example of the command, but you **MUST** use your configuration file from the initial setup
 - Two words for everyone “*Have Patience*”

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, and software deployment
- 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

