SHARE MARCH 2018

MARCH 11-16, 2018
SACRAMENTO, CA

AGENDA

- Why Go to SHARE?
- Odds and Ends
- Best Sessions
- Sessions of Interest
- z/OS Service Status
- SHARE Status

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WHY GO TO SHARE?

- IBM review of z14 and z/OS 2.3 functions and late-breaking news

- SHARE Requirements Carry More Weight with IBM than an individual RFE

- IBM's committed to satisfy 20% of SHARE Core Technology Top 80 Requirements in z/OS 2.3
  - Delivered 5, Rejected 6, Planned 4 of Top 82

- Networking with peers and IBM developers and executives re-energizes your z work back home

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ODDS AND ENDS

- SHARE Requirements now connects to IBM Development via the IBM RFE system
  - Since June 2016

- Request for Enhancements (RFE) for new suggestions or requirements to IBM
  - http://www.ibm.com/developerworks/rfe/

- IBM z14 HMC Does Not Have Classic Interface
  - Order It Now for your z13 HMCs

ODDS AND ENDS

- August 2017 Hot Topics #31 magazine is a Great Reference for z/OS V2R2 Topics
  - http://www-03.ibm.com/systems/z/os/zos/library/hot-topics/hot-topics.html

- Now Maintained by IBM Systems Magazine
- http://ibmsystemsmag.com/mainframe/hot-topics/

BEST SESSIONS THAT I ATTENDED

- **21916 Live! Keynote: Mainframe Security: Hacking Hearts and Minds**

- Phil Young and Chad Rikansrud are asking the tough questions
- Building Tools to do penetration testing
- https://youtu.be/8C5U3HrBv0E?t=1795

- Pervasive Encryption :
  - "Encryption of data at rest and in-flight with no changes to applications" - IBM
- Ransomware and Pervasive Encryption are the same
  - key management

- Multi-Factor Authentication is Required

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BEST SESSIONS THAT I ATTENDED

- **21795 What's New in z/OS 2.3 – Golden State Edition**
  - By Gary Puchkoff of IBM

- z/OS 2.3 Requires z12 or later Z System
- 8 character TSO userid support
- ICSF Browser for Key Control Data Set (HCR77C1)
- KC4Z configuration uses z/OSMF Workflow
- KC4z upgrade with message lookup support
- SCRT Java version shipped in z/OS 2.3

BEST SESSIONS THAT I ATTENDED

- **21795 What's New in z/OS 2.3 – Golden State Edition (continued)**

- Non-executable memory
- SAF security deployment descriptors for RACF, CA Top Secret, and CA ACF2
- RACF and BPXPRMxx SUPERUSER sync
- 10 Font products added to z/OS Font Collection
- z/OSMF 2.3 Migration Workflows via z/OS Download page

BEST SESSIONS THAT I ATTENDED

- **22295 Top 10 Things to Secure Your z/OS System (2018 Edition)**
  - by Tom Conley of Pinnacle Consulting Group
  -
- Send email to pinncons@rochester.rr.com and ask for a copy of the presentation which is not on the SHARE site

- Document your reasons for settings
  - Privileged users, Critical data sets, Security exits
- PCI/DSS TN3270 TLS 1.1 by June 2018
- U.S. DoD CyberSecurity Mainframe Standards

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- **22295 Top 10 Things to Secure Your z/OS System (2018 Edition) (continued)**

  - 11. Remove WARNING mode and use profile instead
  - 10. Remove Obsolete User with documented process
    - RACF IRRRID00
    - URVK RACF ICETOOL
  - 9. Remove Obsolete Profiles and Rules
  - 8. TSO User Brute Force Enumeration
    - LOGON PASSWORDPROMPT(ON) in IKJTSOxx
  - 7. Remove Unsecure Certificates and Ciphers
    - AES256 SHA384 as a minimum for TLS 1.2
    - RSA1024 change to RSA2048 ASAP (needs CPACF)
    - SHA256

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BEST SESSIONS THAT I ATTENDED

- **22295 Top 10 Things to Secure Your z/OS System (2018 Edition) (continued)**

  - 6. Secure Internal Network
    - AT-TLS YES is the correct answer
    - Autolog PAGENT in TCPIP profile
    - /etc/pagent.conf and /etc/pagent-TTLS.conf (see samples)
    - PAGENT as UID(0) may not be needed
  - 5. Review Users with elevated authority
  - 4. z/OS Unix Security
    - RACF UNIXPRIV Class (see presentation by Robert Hansel)
    - Eliminate UID(0) and use BPX.SUPERUSER
  - 3. RACF Database Profiles with UACC(NONE)

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- **22295 Top 10 Things to Secure Your z/OS System (2018 Edition) (continued)**

  - 2. Secure Passwords
    - Force Password to 8 characters
    - Implement KDFAES, easy fallback if needed
    - Convert NOINTERVAL userids manually so they are encrypted

  - 1. APF data set controls
    - Set SUCCESSES (UPDATE)
    - Use generic, fully qualified dsname for each APF data set

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22370 LAB: Pervasive Encryption: Let's Encrypt Some Data Sets

- Backup keys
- Extended format and SMS-managed data sets
- HCR77C1 provides browse of CKDS keys
- See Lab Handout for easy to follow steps to encrypt a data set

BEST SESSIONS THAT I ATTENDED

- **22600 Being Aware of z/OS 2.3 Changes Sooner...**
  - by Shigeki Kimura of IBM Japan
- DISPLAY ALLOC,OPTIONS is also D ALLOC,O
- PI90075 HLASM adds Alias IEV90 (UI53046)
- GTZPRMxx PERSIST(SMF) also available via SETGTZ
  - see presentation for SMF Exits to GTZ and IRR
- Why CNZ4105I date removed from D A,L response?
  - Need SHARE Requirement to Add yyyy.ddd or mm.dd.yyyy.ddd
- OA53450 JES2 $DJ/S/Tnnn,XEQHOURS (XEQH)
- DCOLLECT LRECL changed (see slide 26)
- APAR OA54009 restores Last Volume Indicator for new data sets created by ISPF

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BEST SESSIONS THAT I ATTENDED

- **22310 IBM Skunkworks Projects for z/OS**
  - by Steve Warren of IBM
- z Advanced Technical Team
  - prototypes, incubator for projects
- z/OS Cloud Data Access Now in z/OS Development
  - set of APIs to get, write, delete, and list objects in "cloud"
  - Cloud Provider frameworks for AWS, Microsoft, Google, etc.
- PGP encryption => Enterprise PGP
- zidea@us.ibm.com   Ideas for the team to explore

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- **22310 IBM Skunkworks Projects for z/OS**
  - by Steve Warren of IBM

- Data Gravity - application is more efficient nearer the data
  - more computation is cheaper than moving the data
- Time Value of Data is important
- Security of Data - located in fewer places

SESSIONS OF INTEREST

- **22638 MVS Program Opening and Mainframe Strategy Update**
  - by Ed Jaffe of Phoenix Software and Skip Robinson of SoCalEd

- Mainframe OS and Hardware Strategies
- by Jeff Magdall, IBM Z Planning
  -
  - Z-as-a-Service (ZaaS) "Cloud" - IBM, AWS, etc.
  - New Markets, Clients, Workloads
  - Ecosystem - skills, recruiting, developer relations
  - Modernization - "cloudify"
  - Hardware and Operating Systems

SESSIONS OF INTEREST

- **22638 MVS Program Opening and Mainframe Strategy Update (continued)**
- Mainframe OS and Hardware Strategies
  - ZaaS
    - Blockchain - Enterprise-based, not Cryptocurrency
    - IBM Cloud is Z-based
    - Security is built into Cloud
  - Hardware and OS are much more Integrated by Design than ever
    - compression and encryption in hardware
  - Container Pricing is method of measuring workload
    - not Docker Containers
  - 3.5x installed MIPs over 10 years, 50% on Specialty Processors such as IFLs and zIIPs

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SESSIONS OF INTEREST

- **22638 MVS Program Opening and Mainframe Strategy Update (continued)**

  - **Z14 and the Next Z**
    - By Tina Tarquinio of IBM

  - Z Next is a single frame in a Standard 19" Rack
    - Before June 30, 2018

  - Desire is to deliver Enterprise and Business Class platforms at
  - the same time

SESSIONS OF INTEREST

- **21798 MVS Core Technologies Project**
  - by Scott Engleman of IBM

- z/OS Directions
  - Container Pricing for Z Applications
  - z/OS 2.3 ESP Client Experience
    - 47% in Production before General Availability (end of Sept. 2017)
    - 88% satisfied
    - 82 defects found

SESSIONS OF INTEREST

- **21788 Bit Bucket x'37'**
  - by a host of characters
- OSA ICC TLS by Mary Anne Matyaz
  - see Bit Bucket presentation
- Moral Support by Ed Jaffe
  - Granular APAR search for Z
- Go with the Flow by Ed Jaffe
  - !CDATA to add Styling (fonts, etc.) to Workflow Text
- Tighten Up by Tom Conley
  - See Joel Tilton's KDFAES Walkabout
  - II14765 performance APARs for KDFAES
- Highway S722 by Skip Robinson
  - SPOOL files to 100% is a problem
  - z/OS 2.3 JES2 Privileged Space helps

Z/OS SERVICE STATUS

- z/OS 1.9   End of Service was Sept. 30, 2010
- z/OS 1.10 End of Service was Sept. 30, 2011
  - Two more years (until Sept. 2013) for a fee
- z/OS 1.11 End of Service was Sept. 30, 2012
  - Two more years (until Sept. 2014) for a fee
- z/OS 1.12 End of Service was Sept. 30, 2014
- z/OS 1.13 End of Service was Sept. 30, 2016

- z/OS 2.1   End of Service is Sept. 30, 2018
- z/OS 2.2   End of Service is Sept. 30, 2020
- z/OS 2.3   End of Service is Sept. 30, 2022

- z/OS V2 has 5 years of Support plus 3 more years of fee-based Support

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STATUS OF SHARE

SHARE STATUS

- SHARE Attendance Trending Upward

- SHARE Live! Recorded 30+ Sessions in Sacramento
  - 140+ registered by week's end (New Record! Again!)

- SHARE Execuforum Suspended
  - Not Delivering the Numbers
  - Under Evaluation
- Messenger Bags Given Away for Sacramento

- SHARE 130 was March 11-16, 2018 in Sacramento

SHARE STATUS

- SHARE Affiliate Rate is $99 Per Year (no voting)

- SHARE Select Membership (Annual Corporate) includes SHARE Live! and Archived Sessions

- SHARE Monthly Webinars between Conferences
  - Registration required but free
  - Some vendor sponsored

- SHARE "Day" 8:30-5:15 (most breaks 15 min.)

SHARE STATUS

- [SHARE Mobile App](#) for iOS and Android
  - Earlier Availability
  - Sharing between devices still needs work

- Submit [Your Proposal](#) to Speak at SHARE in St. Louis by Friday, April 6, 2018

- SHARE Proceedings Access Needs SHARE Userid (free)
  - Go to www.share.org

SHARE SACRAMENTO EXHIBITORS

Seattle (2015)	Orlando (2015)	San Antonio (2016)	Atlanta (2016)	San Jose (2017)	Providence (2017)	Sacramento (2018)
47	52	54	54	49	52	50

7 New Exhibitors in Sacramento:

4 brand new to SHARE

- Computer Management Sciences
  - Model9
- RSM Partners
- SVA Software

3 returning after a few years

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SHARE SACRAMENTO RESULTS

Number of People Onsite

Seattle (2015)	Orlando (2015)	San Antonio (2016)	Atlanta (2016)	San Jose (2017)	Providence (2017)	Sacramento (2018)
1,004	1,106	1,300	1,133	1,222	1,252	1,268

Number of Attendees (excludes exhibitors, compensated speakers, press, and staff)

Seattle (2015)	Orlando (2015)	San Antonio (2016)	Atlanta (2016)	San Jose (2017)	Providence (2017)	Sacramento (2018)
830	892	928	750	888	876	908

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Number of Companies Represented

Seattle (2015)	Orlando (2015)	San Antonio (2016)	Atlanta (2016)	San Jose (2017)	Providence (2017)	Sacramento (2018)
290	314	358	545	259	236	259

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SHARE SACRAMENTO RESULTS

First-time Attendees

Seattle (2015)	Orlando (2015)	San Antonio (2016)	Atlanta (2016)	San Jose (2017)	Providence (2017)	Sacramento (2018)
174	266	268	205	214	208	276

As a Percentage of Total Attendance

Seattle (2015)	Orlando (2015)	San Antonio (2016)	Atlanta (2016)	San Jose (2017)	Providence (2017)	Sacramento (2018)
17.33%	24.05%	20.6%	18.18%	17.5%	16.6%	27.8%

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FUTURE SHARE LOCATIONS

SHARE St. Louis
       August 12-17, 2018
       America's Center Convention Complex
       St. Louis, MO

SHARE Phoenix
       March 10-15, 2019
       Phoenix Convention Center
       Phoenix, AZ