Note: Session Numbers are listed to help find related materials on
      the SHARE web site: http://www.share.org
Note: Membership in SHARE is not required to view any proceedings

Highlights:

  * Attendance Steady in Recent Conferences
  Pittsb Total Attendees=1133 Paid Attendees=912   SHARE companies=261
  Seattl Total Attendees=1004 Paid Attendees=890   SHARE companies=238
  Orland Total Attendees=1062 Paid Attendees=892   SHARE companies=2??
  SanAnt Total Attendees=1203 Paid Attendees=1090 SHARE companies=2??
  SanJos Total Attendees=1??? Paid Attendees=1103 SHARE companies=2??
  Provid Total Attendees=1??? Paid Attendees=1??? SHARE companies=2??

  * Sacramento 5-10Mar2018 is SHARE 130

Sessions attended:

06Aug2017 Sunday

20948 SHARE Volunteer All-Hands Meeting (SHARE 129)

  - SHARE Sacramento CA March 11-16, 2018
  - SHARE St. Louis MO August 12-17, 2018
  - Scheduling Oct. 27-28, 2017
  - Winter 2019 ???
  - Summer 2019 Pittsburgh PA
  - SHARE Association taking over from SHARE Inc.
    - SHARE.org/proxy
    - > $5 million in reserves

  - New Speaker "TLC"
    - first time user speaker get full week conference registration
    - Speaker gateway enhanced

  - SHARE Volunteer Recruitment and Onboarding

    - SHARE website based on Socius which is stabilized, not integrated
      with Comfex scheduler or A2Z app for smart phones

  - SHARE - Lead-IT Project
    - Leadership, Empowerment, Apprenticeship and Diversity in IT
    - Contract between US Dept. of Labor and NC A&T University with
      SHARE and IBM participating
    - IBm and B&BT are actively involved
    - Verify IT-trained credential
    - Registered Apprenticeship
    - LEADIT.org

  - JES3 Letter to Maria Boonie of IBM about deprecation of JES3
    - 16 customers

 => SHARE Select might be a better value?

07Aug2017 Monday

20932 SHARE Live! Driving the future of IBM Z

by IBM Z Mainframe Experts

- Ginni Rometty (IBM Chairman, President and CEO) video

- "unchain the ...frame".com
  - innovation
  -Blockchain

21716 Live! MVS Keynote: Leading in the Trust Economy
     by Ed Jaffe of Phoenix Software and Skip Robinson of SoCalEd

  - z/OS Trends and Directions
    by Scott Engleman, the IBM z/OS Offering Manager,
    and Tarun Chopra, IBM z14 Engineering

    - HMC managed by mobile devices
    - z13 average memory is 2 TB versus 500 GB on z12
=> - Encrypt at I/O driver/Media Manager level
    - zERT tool to watch network encryption
=> - 2.2 data set encryption being released very soon
    - Documentation content online being refreshed weekly instead of
      quarterly

    - SCRT and Liberty in z/OS Base
=> - z/OS 2.3 on z14 has a minimum 8 GB real memory per LPAR
      requirement
    - Payments Pricing Solution price per transaction
    - Container Pricing is method of measuring workload
      - not Docker Containers
    - FIXCAT IBM.Function.PricingInfrastructure
    - 3 Petabytes of all Flash Storage on DS8k
    - CPACF instruction is key to pervasive encryption
      - not Cryto Express card
=> - SMT on zIIP?
    - Global Foundry is IBM's Z chipmaker

21555 MVS Core Technologies Project (MVSE) Opening and WSC Hot Topics
     by Mary Anne Matyaz

  - z/OS 2.3 with Extended Support ends in 2025

  - Critical APARs of Interest by John Shebey of IBM

 => - OA53380 HIPER and PE-fixing
      UA91915/14/UA91857, one is PE
 => - OA52244 HIPER Unix "fork" Copy-On-Write default - fix will
      disable C-O-W

 => - PI842249 Java HIPER affects z/OSMF

    - TechNote coming about sending diagnostic data to IBM in an
      era of pervasive encryption

  - Bob Rogers "Do what you like, you'll do that the best"

  - Gary Puchkoff on IBM on z/OS 2.3

  - z/OSMF Self-provisioning
  - z/OSMF Cloud Provisioning Management (maybe in ADCD)
  - z/OSMF file and data set review and management
  - z/OSMF uses Liberty Embedded (part of z/OS)

```
          - named IZUANG1 (Unix daemon)
      - z/OSMF files and data set browser
          - create, delete, copy, rename
          - archived data set support
          - enqueues
          - attributes read or update
          - editor not for existing ISPF users but for newer users
      - Security
          - authorize to data set and encryption key
      - Liberty (WAS in z/OS)
          - customers can use without support
          - 4 copies of Liberty in a file system
              - Quarterly refreshes - oldest level rolls off
              - symlink to current relase but allows access to older releases
```

21582 z/OS Requirements: Influencing IBM Development
      by Peter Relson and Steve Warren of IBM

```
  - z/OS 2.3 satisfied requirements
      - romount recovery=on as default (was =off)
      - AGGRGrow
      - RMF metrics
      - 8 character userid

      - zFS shrinking (free space)
      - PARMLIB for ICHRDSNT
      - AMASPZAP checksum update
```

21557 Live! What's New in z/OS 2.3 - Ocean State Edition
      by Gary Puchkoff of IBM

```
      - zHyperlink limited to 150 meters
      - z/OS 2.3 on z14 requires 8 GB LPAR minimum
          - Health Check coming soon
      - z14 has true random number generator (TRNG)
      - CF Level 22 for Coupling Facility encryption
      - z/OSMF -
          - new plug-in for Parallel Sysplex Management
              - initially for viewing only, later with change capabilities
          - Console application - timeline style
          - Auto-start during IPL
          - z/OS Cloud - middleware provisioning
              - self-provisioning
          - Notification updates via e-mail and push
          - Improved files and data sets REST API
          - Workflow Engine
              - security
              - REXX and script execution
          - Incident Logs - manual incidents, APAR search
          - Software management
      - RACF PARMLIB for ICHRDSNT
      - https://github.com/IBM/IBM-Z-zOS
          - z/OS 2.3 migration workflows from 2.2 and 2.1
          - Education Assistant modules

      - SMC-D
      - SMF Constraint Relief
          - 2048 Record types
      - WLM
      - DFSort - E15/E35 can handle blocks of records as well as one
        record a time
```

- Runtime diagnostics ENQ and GRS latch contention blockers
=> - JES Static init settings analysis
- IDCAMS ZFS keyword on DEFINE
=> - 8 character TSO/E userid
=> - KC4z "Look At" facility
=> - IBM Resource Link hosts z/OS 2.3 PDFs
=> - JES2 is Strategic
- SMB is not going to be updated - see SOD (Statement of Direction)
- IBM Function Registry for z/OS
- SCRT now a base element of z/OS
=> - DFrmm UXTable simplification
- z/OS LIberty Embedded
- customer usable as "unsupported"
- Security
- CF structure encryption
- Policy-enabled data set encryption
- Extended format BSAM, QSAM, VSAM, RLS, zFS
- JES NJE Security Health Check
- SAF security deployment descriptor
- callable service usable by CA and RACF

- Application Development
- JES2 DLM = supports 18 characters
- JES2 JCL symbols current jobname and job number
- JES2 passphrase support

- New ICSF Crypto release available 14Sep17 as Web downloadable

21552 A Technical Overview of the IBM z14
by Gary Hutchison of IBM

- 1832 MIPS per CP
- 170 processors
- 32 TB maximum memory
- 146000 MIPs max
- Model 3906
- z14 HMC does not have Classic Interface

21609 IBM Product Documentation
by Sue Shumway of IBM

- More curent context - new function and APARs
- Starting with V2R3
- 3 months -> weekly on Knowledge Center
- next day on PDFs if change approved
=> - z/OS V2R3 now at ResourceLink
- subscribe and Select Doc types and get daily e-mail of changes
- z/OS Search Scope Catalog
- element or deliverable level
- MVS messages, Data Areas, others

=> - z/OS Adobe-Indexed PDF Collection download (just z/OS, not CICS
or DB2)

=> - IBM Doc Buddy app for smartphones
=> - KC4z: LookAt facility
- z/OS Internet LIbrary
=> - Hot Topics now digital-only
=> - z/OS Workflows are now on Github

- Solutions and beyond

- APAR-style (all info in one doc. or just links to pages in "books")
- BookManager -> 1403 format
- HMC (and z/OSMF) going to wizard-style interface

08Aug2017 Tuesday

20933 Live! Keynote: Security
- Compliance
  - if external directive, just heading in the right way
  - affects others in your industry
  - represents minimums

- Leadership is meeting and exceeding requirements

- Violating security of BCP
- "The essence of control is comparison to a standard"
- Run your own compliance checks, don't wait on auditors

- 20461 TFA session for mainframe

- encryption, MFA, monitoring (use a SIEM)
- baseline for every configuration and check against them
- "auditors aren't that good, someone found the issues earlier"

21561 z/OS 2.3 JES2 Product Update and Latest Status
       by Tom Wasik of IBM (wasik@us.ibm.com)

- Are JESXCF services uses exits or macros
- JES3 is not going away but is not going to be enhanced,
  - for example, not encrypting SPOOL
- EMAIL= on JOB or JOBGROUP statemnet
  - address should be in apostrophes (case sensitive)
  - address must be associated with userid WAEMAIL in RACF WORKATTR
- PASSWORD= now supports Pass Phrase
  - 1-8 is a password, 9-100 is a pass phrase
  - use apostophes if blanks, special characters or continued,
    mixed case
- NOTIFY (JES2 2.3 only) statement - only for end of execution
  notification
  - email processing requires z/OSMF
  - z/OSMF must be active and configured for email
  - see JES2 Initialization and Tuning
  - independent of NOTIFY on JOB statement
  - JES2 2.3 in MASPLEX then input on 2.3 and run on 2.2 works
    - input on JES2 2.2 gets a JCL error
  - JOBDEF NFY_SUBJECT
- Dynamic scheduling - BEFORE, AFTER, SCHEDULE

=> Does our JES2 Exit propagate USER from TSO submit?

  - Resliiency - Tracking Resiurce Usage
    - SPOOL trkgrps (TGs)
    - JQEs
    - JOEs
    - BERTs
    - Better tracking
    - Track Consumption rates
    - Project time to exhaustion $D LIMITS
    - Init Deck checker - very basic and simple
    - Added a "JES3" SMF record to JES2 to provide history

- Privilege spaces - reserved spaces to deal with resource
  exhaustion
    - privileged JOBs, STC, TSO Logons
    - "HASP" emergency subsystem
    - secondary subsystem on TSO Logon
    - RACF FACILITY JES.EMERGENCY.ssname
    - LOGON SUBSYS(xxx)

=>   - Does it affect our TSO Logon Exit?

  - Resiliency - Init Deck Checker
    - PGM=HASJESCK in batch or STC
    - not authorized
    - recommended values
    - SMF Type 84
  - JECL Tracker
  - JCL simplify
    - &SYSEMAIL
    - &SYSJOBNM
    - &SYSJOBID

  - DESC keyword on JOBCLASS(xxx) statement
=> - OA48299 for JES2 2.2 and 2.1 co-existence
=> - OA52614 Lost execution time after OA50551
     (if $PJ with AGE is used)

21553 HMC 2.14.0 Security Enhancements
      by Brian Valentine of IBM

  - see Brian Valentine sessions from previous SHARE to setup HMC
    Security

  - Biggies - MFA and BCPii, Secure Console-to-Console communications

  - 2.14.0 available Sept. with z14 Availability
    - see chart in presentation
  - MFA (Multi-Factor Authentication)
    - Shared secret key - unique to each user
  - Firmware Integrity Monitoring
    - today validate code on HMC at delivery to HMC
    - 2.14... boot validates HMC instead
    - signature/hash verification continuously
    - via call home, sent to IBM ResourceLink for additional checking
    - Monitor, or Monitor and Protect
      - IBM recommends Monitor only
      - SE on z14 always
      - HMC on new build - feature 82 or 83
  - Any task can use FTP, FTPS, or SFTP
  - BCPii Security Control

21547 Live! Migrating to z/OS 2.3: 1 of 2
      by Marna Walle of IBM

  - z/OS Liberty Profile is base element of z/OS
    - FMID HWLPEM0
  - z/OSMF requires Java 8 64-bit unless you explicitly bypass the
    requirement
  - Java 7.0 and 7.1 are End-of-Service 9/2019
  - z14 and z/OS 2.3 requires 8 GB minimum LPAR
    - 2G for z/VM guest machines
=> - z/OSMF autostart - prepare now

```
=> - Use Feedback tab (for comments and suggestions for Workflow)
=> - ServerPac Default JOB LINES= changed
```

21548 Live! Migrating to z/OS 2.3: 2 of 2
         by Marna Walle of IBM

```
     - Workflow and Migration book are at -30 level
     - Migration activity before IPL
=>     - IEASYSxx REAL defaults to 0 instead of 76 KB
       - on 2.3, code old default and Generic Tracker shows V=R users
       - SDSF Generic Tracker Panel
       - HZR now started in IEACMD00
=>       - remove from COMMNDxx
=>       - SYSSTC Service Class
         - see z/OS Probelm Management book for HZR info
     - D XCF,C,TYPE=LOGR
       - many customers have HBB6603 and should move to HBB7705
     - Logstream Offload and Staging in IXGCNFxx in PARMLIB

     - Comm Server actions
       - mostly security recommendations
       - FTP ANONYMOUS FILETYPEJES=
         - Not used at SAS so new default works
=> - DFP - prevent data set encryption until every image is at OA50569
     level
       - STGADMIN.SMS.ALLOW.DATASET.ENCRYPT
         - UACC NONE
         - If RACF FIELD is Active, set DATASET.DFP... in FIELD to
           UACC NONE
=> - DFP zFS version default to 5 instead of 4
       - format -aggrversion

     - z/OSMF
       - IZUPRMxx - AUTOSTART (LOCAL) or (CONNECT)
       - AUTOSTART_GROUP
       - Java 8 64-bit minimum of 4 GB memory
         - zIIP
=>     - LOCAL on DEVT, CONNECT on DEVx in same AUTOSTART_GROUP
=> - add /global to /shared
```

09Aug2017 Wednesday

21607 JES2 E-Mail
         by Tom Wasik of IBM
```
     - See handout
     - RACF WAEMAIL in WORKATTR segment
       - email address is case sensitive and Unique
     - JES2 EMAIL= n JOB and JOBGROUP
       - address in apostrophes
       - &SYSEMAIL set to email address
     - JES2 PASSWORD= now supports pass phrase
=>     - Password blanking rules changed
       - not in NJE headers
       - Pass phrase is only used in JES input, discarded afterwards
     - NOTIFY JCL statement - notify once in the life of a JOB
       - z/OSMF active and configured for e-mail
       - e-mail does not have to be known to security

=> - userid for JES2EDS STC with keyring named to match JES2EDS
       address space name
       - certificate (personal) created and added to keyring
```

 - userid configured as z/OSMF user and userid authorized to z/OSMF
   e-mail

21583 z/OS 2.3 Client Web Enablement Toolkit
        by Steve Warren of IBM

 - HTTPS connections - AT-TLS, System SSL
 - HTTPS Services - SSL Options or use AT-TLS
 - z/OS 2.3 host command environment built-in

=> - zFS IOEFSPRM format_aggrversion default to 5 instead of 4

21556 SDSF 2.3
        by Rocket Software

 - PROC
 - SRCH
 - SYS   System Info Panel
 - also in z/OSMF SDSF UI

=> - Set Display On (leave on)
=> - Set Action On for Help for Panel Commands
=> - SRCH a dslist from PROC or PARM, etc.

 - 2.3 scrollable main panel (SDSF Table)
   - sort by name
   - select by action character
   - GT (Generic Tracker)
   - SMSG and SMSV

 - VMAP
 - Network Activity Panel
 - UI90064 z/OS 2.3 Toleration

 - Main Panel Toleration
   - dummy DD to revert panel - see presentation
 - SDSF RACF Class active and RACLIST in Z/OS 2.3 can be bypassed
   - ISFPRMxx - CONNECT AUXSAF(NOFAIL RC4)

21586 z/OS 2.3 User Experience
        by Ed Jaffe of Phoenix Software

=> - AMASPZAP PARM=PRECHECK
=> - zFS - DEFINE CLUSTER ZFS CYL(4)

 - F HZSPROC,ADD,PARMLIB=....,CHECK
 - HZSPRM POLICY system filter
 - 8 Character USERIDs
   - in z/OS, March 1995 in MVS/ESA 4.2

 - z/OSMF Auto-start
 - OA52987 and OA53205 for SCRT

=> PMR 38269,756 IFAPRDxx Disabled
=> Shopz order U01872290 ESP Products

21597 What's New in z/OSMF?
        by Zhi Li of IBM

 - History - see presentation
 - Firefox plug-in

- Liberty 17.0.0.1 in base z/OS 2.3 at G.A.
  - named Angel must be IZUANG1

=> - ISPF 2.3 - Use Eight Character layout..=2 to see 8 all the time

10Aug2017 Thursday

21554 Cloud Provisioning in z/OSMF
       by Hiren Shah of IBM

   - MWaaS - MiddleWare as a Service
   - UI46543 later Cloud Provisioning on z/OSMF enhancement for V2R2
=> - .../features/zosmf/cloud/ to get Workflows, PTFs, etc.

=> - DB2 V12 PTF UI45573 (PI73492) are CP Workflow
=> - ZMFCLOUD resource class in RACF OA50130
     - see IZUSEC and IZUCASEC, IZUWMSEC in SAMPLIB for Cloud
       Provisioning
     - IZUPRMxx CLOUD_SAF_PREFIX
=> - Create LANDLORD by RACF PERMIT command
     - see more Cloud Provisioning Actions
     - Domain admin. does most initial setup
     - Network admin. (Resourece admin.), others
   - /systems/z/resources/ztrial

21312 Adventures in Porting (to AMODE 64)
       by Ray Mullins of Phoenix Software

   - (E)JES wants to be leading edge but not bleeding edge
     - SLGR to clear registers
     - GF 64-bit target, 32-bit source
     - LLGT(R) - Load Logical Grande 31bits Register
     - Goal was Relieve Storage Constraints below the 2 GB bar
     - SYSSTATE 64

20910 Dynamic Deployment of z/OS TCPIP Resources at the speed of Cloud
       by Gus Kassimis of IBM

 => - IBM CLoud Provisioning Redbook
   - Net Admin sets up "cloud" by network resource pools before
     provisioning
   - z/OSMF Configuration Assistant
   - Stack Properites use 2 PDSEs
     - include in TCPIP configuration or in JCL

21550 OSA-HMC Centralized Management for Next Gen Network/Host
       Connectivity
         by Stephen Valley of IBM
   - valley@us.ibm.com OSA designer

   - OSA/SF - "sunsetting" z/OS Application
     - moving function to HMC/SE
   - See handout for creating a OSASF role (user)
     - Role and then a User
   - OSA-E management by OSA/SF
   - See OSA Advanced Facilties task
     - Port Parameters View includes statistics
     - OSA ICC and OSASF on HMC are similar
     - RC 1-999 are Warnings, >999 block...
     - Validate panel values
   - OSA-D QDIO

- HMC - no pop-ups on z14, tabs instead

21598 z/OSMF Advanced Programming
        by Zhi Li of IBM z/OSMF

=> - z/OSMF Configuration Wrokflow
=> - Use JOB service to check IEBEDIT-submitted jobs? Jobname and id?
     - results in JSON document format
=> - use restfiles/ds/-(volser)/<dsname>
=> - use TSO/E Address Space service
     - see z/OSMF Programming Guide
     - httpRequester plug-in for Firefox to drive GET/PUT/POST for
       testing
     - see session 21508 LAB Creat Workflow

21581 IBM Skunkworks Project for z/OS
        by Steve Warren and Marie Buzzetti
     - z/OS Advanced Technology Team (zATT)

     - z/OS Cloud Data Access
       - free download to use with CLoud Providers such as amazon or
         azure
       - github
     - Enterprise PGP (EPGP)
       - Cloud-based security solution
       - Consolidates keys in one location
         - z Crypto Express card
       - Cognitive DB on z/OS

11Aug2017 Friday

21319 Live! Thin Provisoning for z/OS
        by Covey Smerton and Nick Clayton of IBM

     - New DS8k uses Small Extents (21 Cyl) with 53 per Large Extents
     - Metadata stored on DS8k as well (0.5% of space)
     - ORL (over-Provisioning Ratio)=virtual/real storage
     - with Large Extents, DS8k 8M extents with 8 Petabytes of capacity
       for Fixed Block and 7.4 PB for CKD
     - DS8k (DS8880) added CKD Extent Space Efficient volumes in 8.1 in
       2016
     - In Transaction Processing, Large volumes are better
     - 8.3 coming in next few weeks
       - can enforce ORLimit
       - allow remaining extent alert

     - When extent is freed, a background format is done to erase residul
       data
       - shows up as write activity in RMF reports

21689 ISPF Tools and Teips
        by Lionel Dyck and Tom Conley

=> - CBT files 312-314 or lbdsoftware.com
=> - CMT ISPF Edit Macro
     - simplify entering comments
     - language sensitive
   - EMAC ISPF Edit macro
     - Table of all Edit macros that are documented
     - all panels, etc. are embedded in the REXX exec
=> - OMVSMAN

              - Display ISFP Table list of all available OMVS man pages
              - man -K .
          - ZTSOHELP
              - Display ISPF Table of all available TSO commands in SYS1.HELP
    => - STEMEDIT on CBT tape file 183/895
         - PDSEGEN
              - To Exploit PDSE Member Generations
         - PLPISPF Product Launch Point
    => - REXXFORM ISPF Edit macro reformats REXX code
         - RUNC ISPF Edit macro
         - SPELLC ISPF Edit macro
            - dictionary of 7K words
         - TRYIT to test REXX exec

    => - J line command to submit a member
    => - T line command to issue a TSO command
    ==> - SETUNDO KEEP
            - ISPF Config to enable SETUNDO and storage
            - by user, SETUNDO KEEP

20844 Bit Bucket x'36'
         by Ed Jaffe, TomConley, Mary Anne Matyaz, Sam Knutson, Skip
         Robinson

    - SHARE 129 Providence

    - German Engineering by Ed Jaffe
         - ISPFSFTP from ITSO in Germany
    =>   - redbooks/SG24-7035 additional files
            - also see Dovetail Tech CO.z free but unsupported

    - Master the Mainframe by Ed Jaffe
         - CBT 377 Exits and zap to support Second Subsystem
           via LOGON command
         - z/OS 2.3 SUBSYS on LOGON command
            - only need zap to enable LOGON to MSTR

    - Prevent z/OSMF Autostart by Ed Jaffe
         - IZUPRMxx defaults to AUTOSTART(LOCAL)
         - change to AUTOSTART(CONNECT)

    - Trust but Verify by Tom Conley
         - IBM z/OS CommServer TCP/IP V4 Security Redbook
         - PORTMAP DELAYSTART TTLS in TCPIP Config
         - RSA (2048) on CERTs?
         - pagent.conf TTLSConfig twice

    - Who Let the z/OSMF Dog Out? by Tom Conley
         - z/OSMF V2R2 big enhancement but ....
            - IZUSVR1 very slow start up
    =>   - java.config changes may help response time
    =>   - ZAPPZIIP=YES

    - Effects of Symbolism by Mary Anne Matyaz
         - SETLOAD IPL,IEASYM

    - Bounce It! by Mary Anne Matyaz
         - SDSF SYSMSU and AVGMSU
         - bounced SDSFAUX after Set Capactiy Changed

    - Stuck on DevOps Looking for MainFrame Fun by San Knutson

- redbubble.com/shop/stickies and mainframe
- cafepress.com/ +mainframe+stickies
- teespring/@e/store...mainframe

- Distributed Console by Skip Robinson

=>- Hold that PTF! by Skip Robinson
  - USER HOLD - see presentation for syntax ++HOLD
  - ++ RELEASE when ready USER