SHARE 2020 VIRTUAL

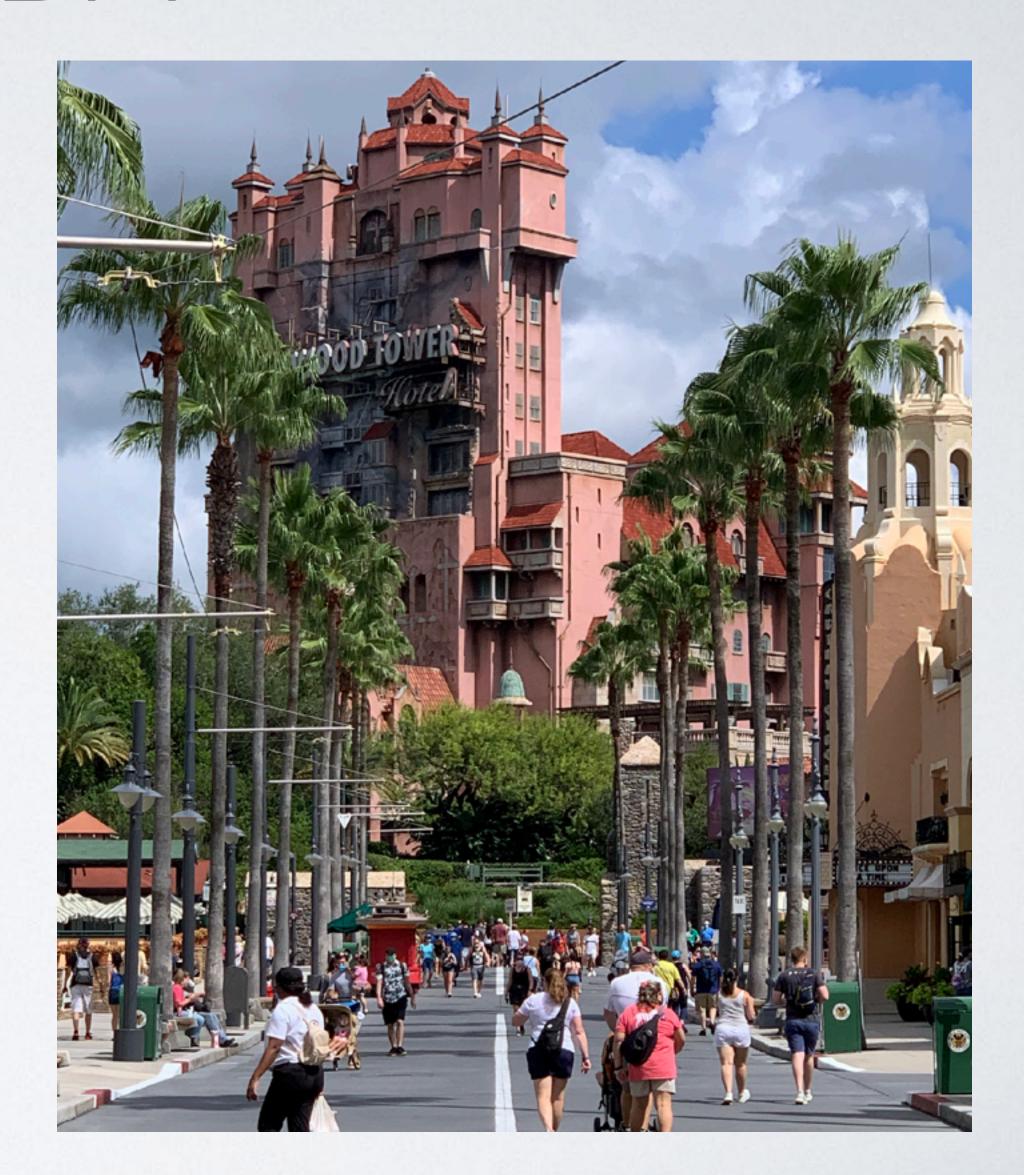## September 22-24, 29-October 1, 2020

By Ed Webb

AGENDA

- Why Go to SHARE?

- Odds and Ends

- Quotes of Interest

- Best Sessions

- Other Sessions of Interest

- System Z Strategy

- z/OS 2.4 Upgrade

- SHARE Status

WHY GO TO SHARE?

- z/OS 2.4 Upgrade Planning and User Experience

- Late-breaking z/OS 2.4 and z/OS 2.3 News

- Networking with peers and IBM developers and executives

  - At FW, Spent an hour in a z/OSMF Lab with the z/OS Architect

  - A Story later related to Learning things and Knowing People Through SHARE

- SHARE Requirements Carry More Weight with IBM than RFEs

WHY (DO I STILL) GO TO SHARE?

- Because I'm a Z Person who has attended these conferences since 1979; first GUIDE, then SHARE

- Networking with Friends

- Staying Current and Being Re-energized about z/OS

- SHARE Virtual is Cheap (and I Had Permission)

ODDS AND ENDS

- Hot Topics Still Maintained by IBM Systems Magazine at http://ibmsystemsmag.com/IBM-Z/Hot-Topics

    - Recent Hot Topics include "ServerPac Installation Using IBM z/OS Management Facility", "Enabling TLS 1.3 in System SSL Applications" and "Run Linux on IBM Z Docker Containers Inside z/OS"

- Search for "SHARE Association" to find the SHARE App

    - Note: SHARE App Is NOT Used for SHARE 2020 Virtual

ODDS AND ENDS

- Thursday Sept. 24 Keynote "Greatest Invention of All Time" by Ravi Patil of Broadcom

  - Longitude problem solved by an accurate time (to measure distance from Greenwich)

    - A British carpenter Harrison developed a watch for use at sea (chronometer)

  - 1846 anesthesia

  - Printing Press - 868 A.D. Chinese printed book (500 years before Gutenberg

    - Internet is virtual printing press - printing fomented change as does the internet

ODDS AND ENDS

- Substantial increase in IBM Z Customer on Demand exploitation in 2020 compared with 2019

- z/OS Strategies: Resiliency, Security, Workload Enablement, z/OS Simplification

- z/OS Authorized Code Scanner (previously known as Integrity Scanning Tool) Now Available for z/OS (a Priced Offering)

ODDS AND ENDS

- Curious about some new function that I mention here or you hear about elsewhere, then checkout this website to help you locate details:

  - https://www.ibm.com/support/pages/new-function-apars-zos-platform

- Apple uses IBM HyperProtect tools running Z platforms in the IBM cloud to secure Health Data for customers

QUOTES OF INTEREST

- "z/OSMF is critical to the future of z/OS" - Dave Jeffries, IBM VP z/OS

- "None of my personal acquaintances can afford a mainframe" - unknown survey respondent per IBM's Scott Engleman

- "Sleep is for the weak and feeble" by Mark Wilson of RSM Partners

- Broadcom "is hiring in the triple digits in its mainframe division" - Nicole Fagan of Broadcom

BEST SESSIONS

- **All Recorded Sessions and Files are at https://virtual.share.org/library#**

- **28075 What's New in z/OS 2.4: Virtual Edition [post-FW]** By Gary Puchkoff of IBM

  - See Session 26203 What's New in z/OS 2.4: Cowtown Edition for original z/OS 2.4 functions

  - z/OSMF Software Management Rolling out ServerPac install (CICS in late 2019, Db2 and IMS in August 2020)

  - z/OSMF Security Configuration Assistant available on 2.3 and 2.4

    - originally for individual users, now Security groups can be checked

  - DFRMM plug-in for z/OSMF

  - DFHSM Unix file backup and restore enhancements

  - KC4z upgraded to V2

BEST SESSIONS

- **28075 What's New in z/OS 2.4: Virtual Edition [Post-FW]** continued

  - z/OS Container Extensions Additional Performance and Resiliency

  - DFSort Accelerator (SORTL on z15 only)

  - System Recovery Boost now includes Sysplex Partitioning, CF structure Recovery, CF data sharing member recovery, HyperSwap, RMF Reporting

  - zHPF now supports VTOC I/O by CVAF and Fast VTOC/VVDS services

  - Basic, large format, and EXCP enhancements for SMS data sets

z/OS Support Summary

Release	z9 EC z9 BC **WdfM**	z10 EC z10 BC **WdfM**	z196 Z114 **WdfM**	zEC12 zBC12 **WdfM**	z13 Z13s **WdfM**	z14 ZR1	z15	End of Service	Extended Defect Support
z/OS V2.1	X	X	X	X	X	X	X	9/18	$9/21^2$
z/OS V2.2		X	X	X	X	X	X	9/20	$9/23^2$
z/OS V2.3				X	X	X	X	$9/22^1$	$9/25^2$
z/OS V2.4				X	X	X	X	$9/24^1$	$9/27^2$

Notes:

[1] - All statements regarding IBM's plans, directions, and intent are subject to change or withdrawal without notice.

[2] - Extended support dates are projected and are subject to change or withdrawal without notice.

WdfM - Server has been withdrawn from Marketing

Legend

Defect support provided with IBM Software Support Services for z/OS
Generally supported

BEST SESSIONS

- **28071 Upgrade to z/OS 2.4: Technical Actions**

  - By Marna Walle of IBM

- Pre-2.4 Actions

  - BCP defaults changed for CLOCKxx and other PARMLIB members

  - Increase SMS ACDS space - APAR OA52913 and doc OA55563

BEST SESSIONS

- **28071 Upgrade to z/OS 2.4: Technical Actions (continued)**

- Pre-2.4 Actions

  - OA50569 or RACF rule to prevent accidental data set encryption

  - ICSF at HCR77D0 - the CSFPARM must be member of PDS

  - RACF 2.3 included only 3 Certificate Authority digital certificates

    - Clean out old ones (pre-2.3 included 26 CA certificates)

BEST SESSIONS

- **28071 Upgrade to z/OS 2.4: Technical Actions (continued)**

- Pre-2.4 Actions

  - Use Health Check for OpenSSH to see how the upgrade to 7.6p1 in 2.4 affects your shop

  - If BPXPRMxx KERNELSTACKS(BELOW) is specified, change to ABOVE which is only option in 2.4

- CIM Server and RMF (GPMSRVxx) Changed to HTTPS from HTTP

BEST SESSIONS

- **28071 Upgrade to z/OS 2.4: Technical Actions (continued)**

- JES2 Changes

  - If your JES2 exit routines or applications use the IAZDSERV macro with the SSI call 71 or the $DSERV macro, the data area moved to 64-bit from 31-bit storage (or did it?)

  - Is There Time for My Story ?

BEST SESSIONS

- **28076 What's New in z/OSMF V2R4?**

  - By Xiao Zhen Zhu [Joey] of IBM (9 years developing of z/OSMF)

- Ansible collection available to drive z/OSMF REST APIs

- Date created column added to Workflow - yeah!

- Workflow panel toggle to collapse Metadata to increase size of working area - yeah!

- Lite server stage 2 (PH24527) - start only functions you need via z/OSMF UI instead of PARMLIB

  - If using z/OSMF for REST API only, then disable z/OSMF Help to minimize start-up performance

BEST SESSIONS

- **28076 What's New in z/OSMF V2R4? (continued)**

- Compresses transmitted data when reading data set or Unix file

- See APARs for more performance enhancements

  - APAR PH24527, PH12643, PH28267, PI13454

  - Repackaged z/OSMF code in compressed .WAR format to speed Initialization

- SETIZU and SET IZU to change many z/OSMF parameters

- Security Configuration Assistant supports Groups to check and variables

- Diagnostic Assistant - set logging level before collecting data to send to IBM

BEST SESSIONS

- **27273 ISPF is Dead! Long Live ISPF! 2020 Edition**

  - By Tom Conley of Pinnacle Consulting

  - 340 attendees!

- OA59267 available to Define Extended GDG Using ISPF

- Open RFEs and SHARE Requirements to get IBM to add or update support for basic z/OS functions - maybe some will happen

- ISPF Cabal - Tom Conley, Lionel Dyck, several others - trying to keep ISPF relevant for several more years

BEST SESSIONS

- **27273 ISPF is Dead! Long Live ISPF! 2020 Edition (continued)**

- CBT USERMOD Collection of ISPF (CUCI [pronounced "kookie"])

  - See File967 for ISPF install

  - 16Nov2017 - V1R0 ISPCMDS table entries with abbreviated commands

  - 24Dec2018 - V1R1 see details in slides

  - 28Jan2019 - V1R2 lots of Edit highlighting for a number of languages; prefix unix path for some ISPF functions

  - 12Jul2020 - V1R3 (total RFEs delivered 23 to date)

    - edit highlighting for GO (google language)

    - PDSE V2 allocated via ISPF

    - see Tom's presentation for other items

BEST SESSIONS

- **27273 ISPF is Dead! Long Live ISPF! 2020 Edition (continued)**

- USRCCONF to set more and different defaults than in ISPCCONF configuration dialog

    - column arrangements for mount table and directory list, etc.

    - calendar coloring

    - lots of other great stuff you can standardize for all new users

- UDLIST Searchfor and then sort message to see hits at top

OTHER SESSIONS OF INTEREST

- **28173 z/OS Keynote ... :   What Are Those Folks in z/OS Development Really Thinking?**

- With Dave Jeffries of IBM, z/OS Development VP

- August 4 Hurricane Isaias passed near POK

- September 22 repeated his session

OTHER SESSIONS OF INTEREST

- **27518 Bit Bucket x'3C'**

- ACEECHK Yourself Before You Wreck Yourself

  - By Tom Conley of Pinnacle Consulting

- ACEE is RACF control block defining user and their privileges

- OA53441, OA55163 added support for a new RACF class ACEECHK

- ACEECHK detects changes to ACEE that raise privilege

- Prevents "magic SVC" or other authorized code from gaining system privileges to circumvent security controls

OTHER SESSIONS OF INTEREST

- **27518 Bit Bucket x'3C'**

- Before enabling ACEECHK class, apply the following maintenance:

  - DFHSM OA54740, OA55295

  - DFRMM OA57418

  - RACF OA57421

OTHER SESSIONS OF INTEREST

- **27518 Bit Bucket x'3C'**

- Before enabling ACEECHK class, Update ISV Products (not a complete list) as well:

  - BMC Mainview for DB2

  - FDR/ABR

  - CA-Disk

MAJOR Z/OS STRATEGY

IBM and major ISVs have been working on the Common Installation Strategy for years.

- IBM has been solidly positioning for installation of ServerPac with z/OSMF:
- Enhanced installation assistance: ServerPac Installation Content Solution on the web.
- Trial package for installation "at home": to verify setup and validate security requirements.
- Consistent conference, seminar, and web casts z/OSMF and z/OSMF installation topics
- Stressed importance of z/OSMF for years.
- Repeated encouragement to get z/OSMF on least a driving system sandbox.

MAJOR Z/OS STRATEGY

IBM and major ISVs and the Common Installation Strategy

- Focus on simplification for z/OSMF set up:
  - Setup via z/OS ServerPac since z/OS V2.2.
  - z/OSMF Lite setup documentation and samples.
  - z/OSMF Security Configuration Assistant
- Announcements with continual advertisement of enhanced functions to show z/OSMF value.
- Rollback of z/OSMF Software Management functions to all supported releases.
- z/OS V2.3 autostarted at IPL, V2 3 is the minimum supported release as of Sept 2020.
- Customized Offerings Driver (COD) will start z/OSMF at IPL.
- IBM and ISVs have been moving aggressively on packaging products into the z/OSMF Software Management Portable Software Instances.

MAJOR Z/OS STRATEGY

IBM and major ISVs and the Common Installation Strategy

- Implement z/OSMF Software Management plug-in

  - ServerPac PSI install

    - Test with CICS or recently available Db2 or IMS

  - Software Update for PTFs and RSUs

MAJOR Z/OS STRATEGY

- **[Fort Worth] 27009 Install ServerPac Using z/OSMF Software Management**

  - By Kurt Quackenbush

- ServerPac in z/OSMF Software Management is the goal, CICS is first, ISVs also involved

- Software Instance is collection of related software data sets and related files

- Portable Software Instance (PSI) paxes a Software Instance into a /Archive_Directory with several files

- Provider supplies an instance that can be downloaded to PC or z/OS with info from Shopz or vendor site

MAJOR Z/OS STRATEGY

- **[Fort Worth] 27009 Install ServerPac Using z/OSMF ... (continued)**

- Install PSI by deploying

  - Configure - "draw the picture" of the new environment

    - Model on existing or use shipped model

  - Use direct or Indirect cataloging

  - PSI laid out after 3 jobs run

  - Perform Workflows

MAJOR Z/OS STRATEGY

- **[Fort Worth] 27009 Install ServerPac Using z/OSMF ... (continued)**

- Post-Install Perform Workflows

  - Setup and configure

  - Verify configuration Post Install actions

- Remote system access requires only z/OSMF nucleus and core and Software Management plug-in on remote systems, that is, Sysplexes

MAJOR Z/OS STRATEGY

- **[Fort Worth] 27043 Applying PTFs using z/OSMF Software Update**

  - By Kurt Quackenbush of IBM and Dawn DaMore of Broadcom

- Software Update is "new" - currently a work in progress

- Part of Software management plug-in

- SMP/E managed software only

- Collaboration between Broadcom and IBM

- Broadcom MSM re-written to provide function under z/OSMF

MAJOR Z/OS STRATEGY

- **[Fort Worth] 27043 Applying PTFs using z/OSMF Software Update (continued)**

  - 3 uses - fix problem, recommended by vendor, and required for new hardware or software or functions

  - Different look and feel

  - Deliver corrective updates in Software Update first (August SHARE maybe) for V2.4 and V2.3

  - Install Updates - enter fix ids (PTFs)

MAJOR Z/OS STRATEGY

- **[Fort Worth] 27043 Applying PTFs using z/OSMF Software Update (continued)**

  - Verifies fixes are ready to install

  - Preparing updates - apply check, stops at holds (shop can resolve, postpone until after install, or exclude)

  - Run apply check with bypass (running in TSO address space)

MAJOR Z/OS STRATEGY

- **[Fort Worth] 27043 Applying PTFs using z/OSMF Software Update (continued)**

  - Summary of actions to come

  - APPLY

  - Review post-APPLY output and HOLD files kept in zosmf data directory

  - Eventually ACCEPT will be supported

Z/OS V2R4 UPGRADE

- Challenges

  - No Migration Book

  - User Key 8 Common Usage

  - zCX File System Size

  - Open SSH Upgrade

  - SMB to NFS Migration

Z/OS V2R4 UPGRADE

- Open SSH Upgrade

  - OA57724 Health Check on V2.3 looks for obsolete features that may be used (not available yet)

  - Copy new version of moduli file to /etc

  - Look at current /etc/ssh ... Configuration files and look for manually changed values

Z/OS V2R4 UPGRADE

- SMB to NFS Migration (see Earlier Slide for Session Link)

- JES2 Policy Processing Implementation Limited Because of SPOOL Encryption Priority at IBM

- JES2 SPOOL Encryption (OA57466) Now Available as of Sept. 2020

- Other Security Changes (CIM, RMF, etc.) with HTTPS required

SHARE STRATEGIES

- Digital Badging

- Women in IT

- zNextGen

- Partner Program

- Strategic Partners - In 2019, added Broadcom (a.k.a. CA Technologies)

- Year-Round Education and Training - more Webinars

SHARE STATUS

- Oct 27, 2020 Virtual Status of SHARE online meeting

- See You at SHARE 2021 Virtual in March 2021 - watch SHARE.org

- See You in Cleveland, Ohio - August 8-13, 2021