

Title	Synopsis	Presenter	When / Room
GDPS/PPRC CA/DR for Linux on IBM Z Systems / z/VM-Only environment	GDPS is IBM's premier continuous availability and disaster recovery (CA/DR) solution for managing z/OS, z/VM, and Linux on IBM z Systems and their data, both within and across sites. This session will provide a GDPS/PPRC level-set, how GDPS/PPRC has been extended to provide CA/DR for Linux on IBM Z Systems / z/VM environments, an overview of the new GDPS Virtual Appliance that provides CA/DR for z/VM and Linux on IBM z Systems-only environments that do not have z/OS, and provide a demo of the unplanned HyperSwap function. Speaker Bio: Bengt Heijnesson Bengt Heijnesson GDPS / PPRC xDR Developer During his 45+ years with IBM he has worked in a multitude of technical roles, primarily focused on the mainframe platform.	Steven Cook	Thurs 17:30 108
Whatever Happened to Debugging? Rediscovering the Hidden Thrills of Debugging	There was a time when we read DUMPs instead of just shipping to IBM. Instead of opening a PMR we looked at code – even machine code. We opened Diagnosis Reference manuals. In this two part presentation the lost art of debugging in z/VM will be discussed and demonstrated. Dump reading with VMDUMPTL, TRACERED along with real time debugging with TRACE, STORE, and other CP and CMS utilities will be reviewed. Come on in and be involved in the discussion about the philosophy and mind space of debugging at both an abstract and practical level. See some real time debugging in action!	David Kreuter	Friday 09:00 108
Linux on IBM Z Installation and Configuration Hands-On Lab 1 of 3	This hands-on lab will provide an opportunity to install Linux for IBM Z into a z/VM virtual machine, do some basic system administration, and configure commonly used packages such as Apache. There will also be an opportunity to install the docker engine and create some basic images and run those images in containers. The choices for installation will be RedHat 7.4, SUSE SLES 12 SP3, and Ubuntu 16.04 LTS (3 sessions)	Richard Lewis	Friday 09:00 107 (3 sessions)
Introduction to Docker and Mobile with Docker Containers on Linux for IBM Z	In this two-part hands-on lab, students will gain experience installing the contents of the new SLES12 SP1 Containers Module, and then have an opportunity to work with the SUSE provided pre-built SLES12 image, customize that image, and build a new image from that base. There will also be an opportunity to explore docker containers running these images. The second part of this lab will involve deploying and testing a mobile environment and DB2 in docker containers on your SLES12 SP1 system. The second part will emphasize how simple and easy it is to deploy this environment in containers and test using a mobile simulator. (2 sessions)	Richard Lewis	Thurs 16:15 107 (2 sessions)

z/VM 6.4 Installation, Migration, or Upgrade, Hands-on Lab	This hands-on lab provides the opportunity to install z/VM 6.4 into a two member SSI cluster, and configure TCP/IP, DirMaint, and Performance Toolkit. If you are experienced with z/VM 6.4 installation, there are two other choices available: Upgrade a z/VM 6.3 system to z/VM 6.4, or Migrate a non-SSI z/VM 6.4 system to create a single member SSI cluster, then clone that member to create a two member SSI cluster. Each of the options provides a comprehensive lab document which will serve as a useful reference in days to come. (3 sessions)	Richard Lewis	Thurs 11:30 107 (3 sessions
Lessons Learned from Private Cloud on z/VM and zLinux	After developing and deploying a private cloud solution on z for many years, you learn a few lessons. The speaker will first convey the business needs and payback of the "self-service" solution that has been implemented in a large shop, give a description of it, and also give a live demonstration. All along, lessons learned will be interspersed.	Mike Maclsaac	Thurs 13:45 108
How the Open Ecosystem on Linux on IBM Z Exploits Scalability and Pervasive Encryption on IBM z14	There are new functions and ISV solutions in the Linux on Z Ecosystem. With the Open Ecosystem, the IT Optimization and modernization dimensions in a virtualized environment in IBM Z, enable Linux co-location with z/OS using Microservices and Containers, fulfilling the highest security requirements, unmatched on IBM z14. Come and see how you can enable flexibility, and what you need for a highly secured environment.	Wilhelm Mild	Thurs 11:30 209
How to Build an Autonomic Data Storage Hub on Linux on Z using IBM Spectrum Scale	Lift your server to Tier 0 using IBM Spectrum Scale. Linux on IBM Z and LinuxONE enable autonomic storage optimization solutions with massive parallel access, high availability and security in a clustered file system. Come and see how to use IBM Spectrum Scale to have automatic data tiering, life cycle for your data, and automated archiving based on data importance and usage.	Wilhelm Mild	Thurs 15:00 209
Blockchain Demystified	What is Blockchain really? In this session you will get a primer to Blockchain Terminology and practical implementation views. Everyone is hearing about Blockchain but let's get on the same page and lift the cloud of misunderstandings about this new technology, based on today's programming knowledge and operational aspects.	Wilhelm Mild	Fri 09:00 209
Blockchain Integration Capabilities with a System of Record (SoR)	How to integrate existing transactional environments with Blockchain. Come and learn how to integrate Blockchain with your System of Record. Learn the options and steps with the recommendations for integrating with CICS, IMS and other transactional systems.	Wilhelm Mild	Fri 10:15 209

What Does Today's Buyer Think about Mainframes? Study Results from the Open Mainframe Project	I constantly hear the mainframers' frustration with those who don't understand the power and capabilities the mainframe offers. IT departments around the globe are increasingly turning to distributed cloud-based architectures but is it done with the full knowledge of what a mainframe platform could provide? In this talk, we will explore the results of a study commissioned by the Open Mainframe Project of the Linux Foundation. This study participants were from both the mainframe community and those with little or misinformed knowledge of the platform. It will suggest where this platform should evolve to solve the needs of enterprise business.	Len Santalucia	Thurs 13:45 209
IBM LinuxONE and IBM Z Server Technology Update	IBM continues technology and IBM Z server innovation. Come to this session to hear the latest news on the hardware front. What has IBM done to make the world's best Enterprise Linux Server even better in 2018?	John McLemore	Fri 13:45 209
z/VSE Strategy, Business, and News	Want some PIE that helps you grow... grow your business? Then find out what this PIE is all about and how has been helping our z/VSE, Linux on Z, and z/VM customers all these years! We will also review the announcements that came out since the last VMWorkshop.	Gonzalo Muelas Muelas Serrano	Thurs 11:30 210
Exploit now the synergy of z/VSE, Linux on Z, and z/VM for sCAC	Never heard about sCAC - this is the reason why you need to be at this session. It is about secured Container, Analytics, Cloud - sCAC - with concepts that will decide if your business is well positioned for flexibility, security, and future business requirements. Come and see how you can implement sCAC to take advantage of these concepts.	Wilhelm Mild	Fri 15:00 108
z/VSE Pricing	How much does z/VSE cost? That is clear: "Call us for quote" and "It depends". In this session we will go through pricing over the years and what you can do to optimize it.	Gonzalo Muelas Muelas Serrano	Thurs 16:15 210
Exploiting z/VSE's OpenSSL Support	This session will show how to exploit z/VSE Security and Crypto features and especially the new OpenSSL support. We will discuss recent technology news such as Diffie-Hellman key exchange and Elliptic Curve cryptography, and how they can be used with z/VSE. In addition, IBM mainframe cryptographic technology, including Crypto Express and CP Assist for Cryptographic Function (CPACF) are discussed and how they are used with OpenSSL. We will also discuss the new EZA Multiplexer and EZA OpenSSL support that you can use with your applications to exploit OpenSSL.	Ingo Franzki	Fri 10:15 210

z/VSE Connectors Introduction, Use Cases, and News	z/VSE offers a huge set of connectors and tools that allow z/VSE to participate in a distributed application environment. The session gives a technical overview of the z/VSE Connectors and discusses typical use cases. This session focuses more on the transitional Connectors, such as Java-based Connector, VSAM Redirector, VSE Script Server, Database Connector, etc.	Ingo Franzki	Thurs 15:00 210
z/VSE Connectors with focus on CICS Connectivity and WebServices	z/VSE offers a huge set of connectors and tools that allow z/VSE to participate in a distributed application environment. This session gives an overview about the z/VSE Connectors with a focus on CICS Connectivity options. This includes CICS Web Support, CICS Transaction Gateway, SOAP-Support, and RESTful Web Services.	Ingo Franzki	Sat 10:15 210
Using RESTful web services with z/VSE, including Live Demo	This session provides a deep dive into RESTful web services. It explains what REST is all about, some basics around the HTTP protocol, as well as how to use or provide RESTful web services with z/VSE. The session also contains a live demo showing how to provide a RESTful web service with z/VSE.	Ingo Franzki	Fri 13:45 210
Pervasive Encryption for Linux on IBM Z and LinuxONE	This session gives an overview about the crypto stack of Linux on IBM Z and LinuxONE, and how it exploits IBM Z crypto hardware such as Crypto Express and CP Assist for Cryptographic Function (CPACF). It also discusses the differences between secure key encryption and clear key encryption. Finally it shows how to use dm-crypt to encrypt disk partitions or logical volumes using secure keys.	Ingo Franzki	Fri 16:15 209
z/VSE HW Update	This session provides some detail about z/VSE's hardware support. It covers the latest IBM Z processors, IBM Storage, such as ECKD and SCSI disks, tape solutions, and z/VSE's exploitation.	Ingolf Salm	Thurs 10:15 210
z/VSE 6.2 Technical Update	This session will give some details about the new z/VSE 6.2 release, such as hardware exploitation, the content of the new CICS TS release, ease of use functionality, new security, and network capabilities. It also covers details about latest z/VSE related announcements and functional enhancements.	Ingolf Salm	Fri 09:00 210
Migration and Hints & Tips with z/VSE 6.2	This session covers hints and tips about the z/VSE administration and operation. It will also provide considerations about the migration to new hardware and z/VSE V6.	Ingolf Salm	Thurs 17:30 210
Security with z/VSE	This session describes the security functionality that comes with z/VSE. It covers the Basic Security Manager (BSM), online and batch security as well as security provided by the TCP/IP stacks. It also summarizes the cryptography capabilities of z/VSE.	Ingolf Salm	Thurs 13:34 210
IBM z14 Technical Deep Dive	This technical session will cover the IBM z14 technology with emphasis on implementation, migration implications, and advanced feature exploitation.	John McLemore	Fri 15:00 209

Powerful yet Easy to Use Cloud Management for Linux on IBM Z	In this session hear about a powerful yet easy to use cloud management tool for z/VM. If you are a z/VM system administrator, wouldn't you like to free up more of your time to focus on other tasks? Have you been given the responsibility to manage Linux on Z but don't yet have the skills to do it all really well? zPRO from Velocity Software has been developed for system admins and end-users alike to enable them to build and manage Linux on Z servers quickly and easily. You will hear how fast you can install and set up zPRO and how it can be used on any z/VM system, with or without a directory or security manager. See a live demo of some of the functions that zPRO has to offer - and bring your own laptop to try it yourself!	James Vincent	Sat 10:15 209
IBM's Academic Initiative Update and Sharing "IT's Best Kept Secret"	This session will start with a brief update of IBM's Academic Initiative program for z Systems, followed by a summary of a presentation that can shared with high school and college students to make them aware of mainframe career opportunities. IT's Best Kept Secret presentation covers what is a mainframe, who uses today's mainframe, and what career opportunities will I see if I pursue education around IBM's z System.	Marc I Smith	Sat 10:15 108
Migrating to IPv6/VSE	Moving to IPv6/VSE is easier than you think. Jeff Barnard of Barnard Software, Inc. will discuss migrating to IPv6/VSE and present a real world user experience of the process.	Jeff Barnard	Fir 11:30 210
Intro to Performance Analysis and Case Studies	Analyzing performance problems is usually not fun if you have ten managers looking over your back and your users are complaining. Learning a strategy and following a straight forward flowchart to solve your performance problems BEFORE you have a problem is not a bad idea. This presentation will show a strategy, and a flow chart to analyze Linux on z/VM performance problems using that strategy. zVPS will be used for all analysis.	Barton Robinson	Thurs 11:30 108
Performance Analysis Technology	The Linux on Z platform is growing worldwide, and as it grows, has become more complex. There is always new hardware, new microcode updates that impact performance, and new capabilities for understanding performance. This presentation will help with understanding how to evaluate the benefits of the z14, how to understand the impact of security patches, and what has recently become available to enhance our ability to understand larger and more complex Linux on Z systems.	Barton Robinson	Thurs 16:15 108

Using Your Performance Monitor to Watch z/VM and Linux on IBM Z	Sometimes bad things happen to good systems. Your environments run all day, every day, and trouble can creep up if they are not monitored. Systems Programmers and Linux Admins have a lot to do without watching system monitor screens all day. See how to proactively monitor your z/VM and Linux on Z environments with tools available in zVPS.	Rich Smrcina	Fri 13:45 108
z/VM Platform Update	There was a preview announcement for z/VM Version 7 Release 1 on April 10th that may have left you with a few questions. We'll answer them here. Why a new version? What does the z/VM continuous delivery model look like? What enhancements have gone out for z/VM since the last workshop? Who cuts Bill's hair? All these, and more, will be answered in this session.	Bill Bitner	Thurs 10:15 108 repeats Sat 11:30
A Bit of a Talk with Customers	Join us in this session as Bill Bitner sits down with a few of our customers to hear their stories. Find out how they got into the z/VM space, what surprises they found, and learn how they run their z/VM systems. When we tell our stories and we listen to others tell their stories, we often learn that we're not alone. We're much better together.	Bill Bitner	Sat 09:00 108
Leveraging the Newest Capability in z/VM	While z/VM 6.4 became generally available in November 2016, a lot of new function has been made available in the service stream as small programming enhancements (SPEs). The z/VM Platform Update session spoke to the value of these enhancements. This session will give hints and tips to implement these enhancements to get that value. These include things such as EAV support for minidisks, encrypted paging, HiperDispatch parking enhancements, and more.	Bill Bitner	Fri 16:15 108
VTAPE and the little zVSE shop	Hear how we moved (over the years) from Real to Virtual, and from 3420 to IBM VTAPE. From tape to appliance to VTAPE. From no tape manager to a simple commercial tape manager/appliance to VTAPE and home grown tape manager in Rexx. We are a small shop, and over the years our tape needs have changed, from input and backup to just backup. Follow our journey from a real IBM tape shop to VTAPE and from 4300 to z13s. We will describe our environment with a focus on how we implemented our VTAPE solution.	Mike Robertson	Fri 15:00 210
Good Practices and Lessons Learned for z/VM and Linux on Z	How to create a stable, manageable, high-performance environment. • "Good practices" based on experience, lab testing, development recommendations, and customer experiences for Making z/VM and Linux Guests "Production Ready" • Design and Configuration Planning Considerations • Installation/Configuration Recommendations • Basics for Monitoring, Troubleshooting, Performance	Paul Novák	Thurs 17:30 209

Monitoring and finding performance problems using zVIEW	zVIEW is the browser based graphical interface to the Velocity Performance Suite (zVPS). This session will show you how to use zVIEW to monitor the performance of your system and how to more easily identify performance problems. Basic zVIEW operation will be discussed along with cross system monitoring, setting thresholds and creating views and capacity graphs.	Tim Kessler	Fri 11:30 209
z/VM Dynamic Memory Management	The flexibility to reassign (add and remove) system resources is critical to customers. Today's workloads are not static. With Dynamic Memory Downgrade on the IBM z14, a system administrator can take real memory offline from a z/VM partition, making it available to other partitions on the CEC. The removal will be dynamic; no reIPL of the z/VM image is required to accomplish a change in the memory configuration. This session will describe these new capabilities, give some guidance on use, and walk through some examples	Stephanie Rivero	Fri 11:30 108
z/VM Encrypted Paging: Deep Dive	With the z14 and APAR VM65993, encrypted paging was introduced to z/VM 6.4 in December 2017. This allows encryption of user and vdisk pages. z/VM uses the CPACF feature to accomplish this. This presentation covers how it works and how to use it.	Stephanie Rivero	Thurs 15:00 108
Watch and Learn: Introduction to CMS Pipelines	I'm not a master plumber, but I play one at the VM Workshops. This session has three objectives: show you the power of pipelines, show you the usefulness of pipelines, and have fun. This session is for those new to the pipelines programming framework in z/VM. We'll explain a little background and then start off with working examples. You'll be welcome to play along if you'd like. We'll demonstrate the use with some real world examples	Bill Bitner	Fri 10:15 108
Managing and Orchestrating Docker Containers with OpenShift	If you have experimented with Docker or even put some containers into your DevOps environment, it quickly becomes clear that there is a need to simplify the build, deploy, and promote process. OpenShift Origin is the community version of the RedHat OpenShift commercial offerings. Built around a core of Docker container packaging and Kubernetes container cluster management, Origin is augmented by application lifecycle management functionality and DevOps tooling. Origin provides an open source application container platform.	Neale Ferguson	Fri 11:30 211

Patching Linux VMs - Why and How	Once you deploy your Linux VM's and clone them to create others, how do you know if they are subject to vulnerabilities? And once you know that, how can you remedy it? This was a question brought more to light earlier this year with the highly visible Spectre and Meltdown issues. SUSE Manager can run as a System z VM, and manage BOTH SUSE and Red Hat VM's. It knows about patches and packages, and gives you ways to control and automate the patching process.	Don Vosburg	Fri 16:15 211
An intro to CP Dump Reading	When someone argues '.. but you don't have an artistic profession ..' my claim is that programming is a highly artistic activity. Even more when reading a dump, where you have to imagine what the machine was doing to get in a state like this." - Sir Rob the Plumber. Come and learn how to read dumps. Embrace your inner artist and never work another day in your life.	Perry Ruiter	Fri 15:00 107
Modern Mainframe: Exploring Mainframe Data Integration for z/VM	What happens on the mainframe doesn't stay on the mainframe anymore. Enterprise-wide operations today are increasingly finding a need to securely share mainframe data. Whether for standard file transfer or data analytics, TCP/IP approaches are often inadequate. Join us for an interactive discussion to share your current requirements, obstacles or challenges and explore how to adopt a FICON based z/OS Mainframe Data Integration solution for z/VM.	Paul Massengill	Sat 09:00 211
Experiences with a new Open Source Application on Linux on Z	Are open source applications being implemented on z Linux? Hear one customer's decision to choose IBM z for their open source analytics application. This session will include the architecture considerations, implementation planning and the application roll out.	Marianne Eggett	Sat 10:15 211
To Preserve and Protect - Transforming Education to create Masters of Technology	This presentation covers what I've been doing the last few years to protect the knowledge base relevant to large systems environments. Will discuss the challenges of higher education to teach practical IT skills relevant to enterprise computing, and provide an overview of my new education initiative designed to attract future generations to pursue career paths in IT	Bill Carico	Sat 09:00 209



## COBOL Business Rules

Many organizations are looking for ways to leverage critical business rules that are buried in large applications now that machine learning and digital process automation have pushed deeper into the enterprise. This can be a difficult task as business rules are often complex sets of interacting decisions that cross program boundaries. In our presentation, we will explore different techniques to discover, validate, and forward engineer business rules into áLow Codeá structures like decision tables and process models. We will work through a practical example of discovering the business rules in a typical mainframe COBOL application, then demonstrate how to represent these rules in open source tools. We will also discuss how to validate rules by using test automation.

Roger Hammer

Thurs 17:30  
211

## zPDT & zDT Technology Presentation & Fact Finding

: Mainframe emulation is common today and heavily used for application development but what are the limitations and capabilities? Learn about the different packages and options from IBM and how to use them effectively to achieve mainframe quality application development. Live demo of zPDT and zDT using zVSE, zVM and zOS with active discussion about technical limitations

Stan H. King

Fir 13:45  
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## Addressing the Mainframe Skills Shortage: What happens when all the Boomers retire?

Pick up any trade magazine or read any website and you'll find articles about the mainframe skills shortage. There are no shortage of pundits on the subject but not many offer real solutions to prepare their workforce after the Baby Boomer generation is no longer around to support it. Learn from ProTech experts with over thirty years of experience in mainframe skills development about what other organizations are doing to address the shortage and insight into what your company can do to address this looming issue.

Scott McFall

Sat 11:30  
211