

IBM System z Technical Conference Abstracts

May 5-9, 2008 Dresden, Germany

(As of 16 April 2008 - content subject to change)

Key to session prefix:

G - System z Technology and the SOA Data Center
Z - z/OS and Parallel Sysplex Implementation
ZP - z/OS Performance
ZW - z/OS Transactions, Data Base, Networking, Security
V - z/VM and Virtualization
L - Linux on System z9 and zSeries
E - z/VSE
TS- System Storage and Storage Networking
P - ISV (Vendor) Sessions

Keynote Session

K01 The Future Runs on System z (Jim Porell, IBM)

Bigger, faster, better...the System z10 has been built for the traditional transaction processing and large scale database environment, but has also included the ability to run a wide variety of "open technologies". When considering that most "new workloads" tend to get deployed more like physical appliances, the System z is capable of running multiple workloads simultaneously and while doing that, enabling the new workloads to inherit its operational superiority, such as Business Resilience, Security, Storage management and Capacity management. The System z has been the backbone of many customer consolidation efforts across the globe, while continuing to collaborate with other Linux, Unix and Windows servers in a business.

System z Technology and the SOA Data Center

On February 26, 2008, IBM announced the newest mainframe server,
IBM System z10 Enterprise Class
http://www-03.ibm.com/systems/z/news/announcement/20080226_annnc.html

G01 IBM System z10 Technical Overview (Parwez Hamid , IBM)

This session provides an overview of the recently announced IBM System z10 EC. The Speaker will discuss the latest hardware functions and features for the z10. Topics covered will be the new levels of granularity and the latest I/O capabilities with the intro of Industry standard technologies for high speed I/O and Coupling link technology. Additional enhancements include provision of function enabling pre-planning of configuration avoiding the need to plan for scheduled outages.

G02 IBM System Capacity on Demand Offerings (Parwez Hamid, IBM)

During this session the Speaker will discuss the enhancements to the Capacity on Demand offerings for recently announced System z10. The z10 EC introduces just-in-time deployment of capacity resources designed to provide more flexibility to dynamically change capacity when business requirements change. You can now have multiple configurations active at once and the configurations themselves are flexible so you can activate only what is needed from your defined configuration. As long as your total z10 EC infrastructure can support the maximums that are defined, they can be delivered. A significant change is the ability to add permanent capacity to the server when you are in a temporary state. The combination of these updates can change the way you think about on demand capacity.

G03 System z10 FICON Express4 Update and Performance Benchmarks to Satisfy Your SOA (Connie Beuselinck, IBM)

This is an overview of the newest generation of FICON/FCP features available on System z10 EC. We'll cover the latest functions introduced - performance enhancements for FCP + new support to help reduce the cost of remote mirroring over FICON for z/OS Global Mirror (XRC). We'll update you on the latest interoperability testing performed with switches/directors supporting FICON and FCP. We'll share with you our latest performance benchmarks. The latest features and functions may help you to better achieve your Service Level Agreements.

G04 The System z10 I/O Subsystem: Optimizing Physical Resources for Enhanced Virtualization (Connie Beuselinck, IBM)

There's a new mainframe host bus, InfiniBand, that has been introduced with z10 EC. It is an integral component of the I/O subsystem helping to avoid bandwidth bottlenecks. With a unique set of physical resources supporting Parallel Sysplex, Security, Storage Area Networks, and Local Area Networks your enterprise has the flexibility to configure your system for maximum availability to facilitate virtualization and satisfy your Service Level Agreements. We'll show you what's new and what is strategic to your enterprise. We have new capabilities for FICON, FCP, coupling, and the local area network. My magic bag has been "enhanced".

G05 System z10 High Performance Interfaces for Connectivity to the LAN (Connie Beuselinck, IBM)

This session includes the newest features and functions for the mainframe to provide connectivity to the Local Area Network (LAN) using the Open Systems Adapter (OSA). We'll introduce the latest generation of hardware and the newest functions offered in the z/OS, z/VM, z/VSE, z/TPF, and Linux on System z environments. We'll discuss the results of our latest performance benchmarks and what is different about OSA-Express3. We'll help to identify where does OSA fits in this "marriage of evolution and revolution".

G06 System z10 Extended Distance Solutions for Business Resilience (Connie Beuselinck, IBM)

This session will address the protocols tested by the System z interoperability laboratory in Poughkeepsie, NY - ESCON, FICON, Sysplex Timer, STP, and Coupling links in support of GDPS Metro Mirror and z/OS Global Mirror. We'll cover the extended distances for FICON/FCP directors from Cisco and Brocade in support of Storage Area Networks (SANs). We'll cover extended distance testing with Dense Wavelength Division Multiplexers (WDM) vendors – Nortel, Cisco, ADVA, and Ciena in support of GDPS solutions. We will also discuss use of multimode fiber versus single mode fiber based upon a white paper co-authored by the presenter. We'll discuss use of OM3 50 micron fiber optic cabling for infrastructure resilience. I'll have topology examples to share with you. I'll bring along sample cables and connectors so you can see and touch the "real thing". We'll also discuss what role InfiniBand plays in support of extended distance solutions.

G07 What is IT Service Management and ITIL? (Annette Miller , IBM)

Is your organization talking about ITIL, or IT Service Management? Do you know what Service Management is? ITIL is the IT Infrastructure Library and using a set of best practices, is the most widely accepted approach to IT service management in the world. This session will provide an introduction to ITIL. In addition, the session will introduce IBM Service Management and the role of the products in a service management implementation. While the design is comprehensive, IBM Service Management is built with an adaptive, modular approach for pragmatic implementations by customers based on their business needs and priorities. With the service management platform, best-of-breed operational management products, automated process management, as well as best practices and services, IBM Service Management brings people, processes, information and technology together for businesses to deliver service excellence and innovation. This session will focus on the service management platform and the operational management products.

G08 Data Centers of the Future: An IBM View (Annette Miller, IBM)

Customers have been asking IBM for guidance as they begin to plan the future of their data centers. Bringing together customer requirements, industry trends, and technology innovations, IBM has introduced a view of the future, the New Enterprise Data Center. Bringing along advice and guidance for determining a strategy and getting started today, the goal is to help customers transform their data centers. Data centers need to evolve into business innovation centers which can deliver data, applications and services across other data centers and networks.

IBM's vision for the new enterprise data center provides for a new approach to IT service delivery, building on three stages of adoption: simplified, shared and dynamic. This session will introduce the IBM view and entry points where customers can begin to leverage technology to take them to the next step.

G09 System z HMC - Using the New (Tree-Style) User Interface (Michael Grossmann , IBM)

This session describes the new Hardware Management Console (HMC) Tree-Style User Interface introduced with the System z servers. Our main topics will include:

- discuss the differences between the HMC version 2.9.n/2.10.n and the previous HMC supported configurations
- working with the HMC configuration task

Other topics to be covered include:

Identify HMC/SE configurations for the System z

- Creating/Modifying and Assigning Authority to User IDs
- Describe the new HMC version 2.9.n/2.10.n server support and navigation changes
- Identify the remote connectivity options
- Identify the new HMC task support functions added for the System z servers

Please see Session G10, a lab session for using the HMC Tree-Style UI for daily operations.

G10 System z HMC - Using the New (Tree-Style) User Interface for Daily Operations (Hands-on Lab) (Michael Grossmann, IBM)

In this lab session you will learn to use new Hardware Management Console (HMC) Tree-Style User Interface introduced with the System z servers. You will learn how to navigate and use the HMC tasks for daily operations. Each group will have access via HMC Web Browser Interface to a "shared" real HMC for lab exercises. Activities will include:

- use the Tree-Style UI to monitor your objects and groups
- work with userids (Create, Customize)
- use daily tasks like LOAD, Activity
- monitor unacceptable status conditions, hardware and operating system messages
- work with activation profiles

Please see Session G09 for an additional theory session. There will be a seat limitation: max. 15 students.

G11 SOA and z/OS, The Perfect Match (Vesna Eibel, IBM)

Service Oriented Architecture (SOA) helps customers increase the flexibility of their business processes, strengthen their underlying IT infrastructure and retain and reuse their existing assets. z/OS is THE platform of choice where the main enterprise assets reside. This session will define the basics of SOA and will highlight the solution available under z/OS.

G12 Enterprise Modernization: The Transformation of Application Development for System z (Susann Thomas , IBM)

Businesses need to change to stay viable, and the IT with all these applications must enable this flexibility. That includes also changes and further development in application development on System z. Enterprise Modernization means in this context f. e. to consider common problem scenarios, to establish a roadmap for how problems may be resolved, to recognize that any road has multiple entry and exit points, to find the right "on ramp" for your organization, to discover and gain control over application relationships and structures, to manage application complexity by making dependencies visible, to extract business rules currently embedded in code and to identify assets for reuse in a Service Oriented Architecture. The session shows some new aspects of Enterprise Modernization on System z like assets, architectures, processes and tools, skills, and investment. You will get a better understanding of Application Modernization with features in Enterprise COBOL, Enterprise PL/I, C/C++ and Java on System z and how you can integrate new technologies like XML and Web Services.

G13 Two Girls and Big Iron: Young Experiences in the Mainframe World (Martina Schmidt and Isabel Arnold, IBM)

"Mainframes are pretty cool." How old do you think was the person we got this quote from? Younger than 60 years? Younger than 50 or even 40 years? We got this from a student younger than 25 years attending mainframe education on one of Germany's 20 universities participating in the IBM Academic Initiative for the Mainframe. This student just heard about the traditional strengths of System z and he was even more enthusiastic after hearing about all the new stuff possible on a platform he did not know it existed before. Martina Schmidt and Isabel Arnold, both working in Technical PreSales for System z (and both not older than 25) are reporting about their efforts and experiences in getting students crazy for the host. They also talk about possibilities to bring a fresh breeze to System z customers by new topics like Java or Web Services.

This presentation will show how traditional strength and new possibilities attract young students to the mainframe. Furthermore it will provide a deep dive into the new world of Java-based applications.

- Learn how to attract young students to the mainframe
- Get to know the "new world" including Java, Java Batch, Java EE and Web Services

G14 A Rookie's Guide to the Mainframe (Isabel Arnold, IBM)

Have you ever had a new colleague starting to learn about the mainframe? Or maybe you are new to this subject yourself? Then you probably know about the many initial problems people can experience coming usually from a workstation-based, mouse-friendly world, for example when they accidentally cancel their first TSO session or lock their terminal screen. This session demonstrates the mainframe from another point of view, showing how administration and programming can be eased by using new tools and techniques you will recognize from your PC like drag & drop. Follow the speaker on a demonstration of some common traps she fell into herself when she was still a Java programmer and new to the mainframe and see how much easier it can be today.

G15 System z "End-to-End" Connectivity Initiative (Iain Neville, IBM)

This session will introduce IBM's focus on end to end System z connectivity solutions. We introduce new initiatives and concepts to demonstrate a single end to end architecture across the large portfolio of components which exist within it (server / operating system / SAN / cabling / network / peripherals). We discuss connectivity ownership, interoperability, architecture exploitation and systems management as one "end to end" solution.

G16 System Automation Application Manager

(Dr. Norbert Lenz, IBM)

How can you automate the operations of your heterogeneous business applications running on z/OS, AIX, Linux, Windows, SUN Solaris? With IBM Tivoli System Automation Application Manager (the next version of System Automation for Multiplatforms End to End Automation) you can automate the availability of your business applications end to end from a single point of control, managing cross cluster dependencies. The functionality and platform coverage of System Automation Application Manager is extended to include coordinated disaster recovery scenarios covering z/OS and distributed platforms.

G17 GDPS/PPRC Multi Platform Resiliency for System z (Cross Platform Disaster Recovery)

(Dr. Norbert Lenz, IBM)

If you are using Linux on System z together with z/OS for your critical business applications, how can you provide coordinated high availability and disaster recovery? With GDPS/PPRC Multi Platform Resiliency for System z and IBM Tivoli System Automation you can manage the Linux and z/OS systems and their data in a coordinated way, supporting planned and unplanned restart of systems in place, HyperSwap and site takeover. These functions are available for Linux systems running under z/VM and in LPARs on System z.

G18 Business Continuity Process Manager

(Dr. Norbert Lenz, IBM)

Today's businesses heavily rely on IT operations. Situations impacting this business must be resolved quickly and reliably. Improper handling of IT problem situations could result in costly outages, impact the availability of a critical business application, or create noncompliance with operation standard requirements. IBM Tivoli Business Continuity Process Manager provides you with a set of customizable IT Infrastructure Library (ITIL)-aligned processes to plan, test, and execute IT service continuity activities and tasks. These processes are integrated with existing Tivoli solutions such as IBM System Automation for z/OS, Geographically Dispersed Parallel Sysplex, and IBM Tivoli Application Dependency Discovery Manager, to help users perform operational tasks, monitor status of the tasks, and verify completion of each of the tasks. Business Continuity Process Manager is a part of IBM Service Management. It is a key part of a Business Continuity solution, closing the gap between the technology management and the IT management processes like Incident, Problem and Change.

G19 A Green Data Center of the Future Experience at the PSSC Montpellier

(Dr. Jean-Michel Rodriguez, IBM)

During this presentation, the speaker will cover the concepts and issues regarding current Data Centers. Dr. Rodriguez will explain how IBM can, through existing STG, SWG, GTS solutions, answer to customers concerns. He will focus on the Green aspects of the System z and why System z is the more appropriate server for Energy Efficiency. Finally, the speaker will present the PSSC Green Data Center of the Future project and invite the audience to an unusual virtual tour of the PSSC Data Center already "built" in Second Life.

G20 Managing and Monitoring Your System z Workloads (Scott Drummond, IBM)

This session will review managing and monitoring your system z workloads and storage facilities. We'll have a update on ITCAM , Omegamon XE for Storage and a quick view of the z Storage Management strategy. We'll also have a look at the new Service Management Center for System z.

G21 Managing Virtualized Batch Workloads on System z with Tivoli Workload Automation (Warren Gill, IBM)

By enabling you to automate both event-based and batch scheduling, the Tivoli Workload Automation portfolio lets you take the first step toward a fully automated service-driven environment — where workloads and workflows are proactively managed in accordance with business policies and fully aligned to your business priorities. The IBM Tivoli® Workload Automation portfolio delivers service-based workload automation, enabling you to centrally manage mixed IT and business workloads that have complex dependencies spanning multiple applications, systems and business units — including mainframe and distributed computing environments. You can dynamically schedule and route workloads to the best available resources, responding in real time to changing business demands.

To help you take full advantage of the benefits of virtualization, the Tivoli Workload Automation portfolio offers a centralized, easy-to-use operations console from which you can monitor and coordinate management of mixed, interdependent workloads — across distributed, mainframe and high-performance computing grid environments. This console offers consistent visibility and control over diverse workloads, and helps you rapidly identify and take action to recover from workload exceptions, as well as to generate and view reports. During this session we will demonstrate how dynamic batch workloads spanning z/OS, Linux on System z, and other platforms can managed from the mainframe or distributed servers.

G51 The Business Value of System z Virtualization Leadership (Reed Mullen, IBM)

IT managers are facing significant cost issues in deploying server workloads on distributed systems. x86 server virtualization support is perceived by some to be the solution to solving the “server sprawl” problem. Perception is not always reality. This session will explain why System z virtualization support offers higher levels of business value for hosting virtual server

workloads. The fundamental differences between z/VM on System z and x86 virtualization offerings such as VMware will be discussed. Server virtualization concepts will be explained for the uninitiated, and specific value propositions for Linux-on-z/VM will be highlighted.

G53 Changing the way computers compute: Decimal arithmetic on System z (Mike Cowlshaw, IBM Fellow)

Most data in commercial and human-centric applications are decimal, and floating-point decimal is increasingly important as these applications become ever more complex. Benchmarking has indicated that some applications spend a considerable amount of time in decimal processing, and IBM has now implemented decimal floating-point in System z9 microcode and new System z10 hardware, Power 6 hardware, and in many software products.

In this talk, Mike will cover:

- o why decimal arithmetic is increasingly important
- o why IBM has added hardware support
- o the decimal floating-point formats and arithmetic which is in the IEEE 754 draft, DB2, C and other languages, and in hardware
- o how to exploit the new hardware and software in Java and C.

Please see: <http://www2.hursley.ibm.com/decimal> for details and an FAQ.

G54 What are universities doing with System z? (Dr. Malcolm Beattie, IBM)

This session will talk about some of the ways in which universities across Europe have been bringing mainframe knowledge to their students. The IBM System z University Program for Europe works with universities and clients and supports them in a number of ways, advancing the goals of the IBM Academic Initiative for System z. The presenter will describe some of the events, courses, online projects and other work that universities have been doing this last year to help enthuse and educate those who will be forming the next generation of IT professionals.

G55 Porting OpenSolaris to System z: A Long Way Home (Dr. David Boyes, Sine Nomine Associates)

What was involved in getting Solaris running on System z? What does it take to make a new operating system available on System z? Come hear about the adventures in coding involved in bringing another popular OS to the System z platform.

G56 Introduction to REXX: Hands-on-Lab Part 1 (John Franciscovich, IBM and Brian Hugenbruch, IBM)

The REXX Language has been with us for more than two decades. It was designed to be easy (and fun!) to use, and continues to be popular across many computing platforms. Would you like to boost your skills by learning the basics of the powerful REXX Language? This two-part hands-on-lab is for you. We'll begin with the basic syntax and expressions, continue with class exercises, and progress to more advanced topics. This lab continues with Part 2 in session **G57**.

G57 Introduction to REXX Hands-on-Lab Part 2 **(John Franciscovich, IBM and Brian Hugenbruch, IBM)**

This session is a continuation of Session **G56**.

z/OS Implementation and Parallel Sysplex Track

Z01 What's New in z/OS 1.9 and Beyond? (Garry Geokdjian, IBM)

Are you are interested in the latest news, trends and directions related to z/OS, IBM's flagship mainframe operating system? See how z/OS 1.9 provides the foundation for your most mission critical applications. Learn about the latest release and hear about how z/OS 1.9 has improved scalability and performance, CF Duplexing enhancements, WLM improvements, new security features, advances for application developers, enterprise-wide management, new networking capabilities, z/OS simplification with "new face" and usability improvements for ISPF. You will also hear about IBM's plans for z/OS 1.10.

Z02 Migration to z/OS R9 Part 1: Planning (Marna Walle, IBM)

Thinking about migrating to z/OS R9? This session will cover many of the installation requirements for preparing for your z/OS migration. Included will be:

- Content of the z/OS R9 - what is new, changing, and removed. And what's being removed in the future!
- Ordering and deliverables
- Coexistence requirements - including the coexistence/migration/fallback/service policy
- Driving and target system requirements - including both software and hardware
- Some migrations actions you can perform now, on your current z/OS release.

Attend session 'Migrating to z/OS R9 Part 2: Some Migration Actions' and 'Migration to z/OS R9 Part 3: More Migration Actions' for specific migration tasks for z/OS R9. Preparing for your z/OS migration to the latest release can be started today, with this session's important information!

Z03 Migration to z/OS R9 Part 2: Some Migration Actions (Marna Walle, IBM)

Want to know about the specific migration tasks for the latest and greatest z/OS release? Come to this session, where the migrations actions new for z/OS R9 will be covered when coming from z/OS R7 or R8. Included will be required migration tasks which were introduced in z/OS R9 from selected elements - BCP, C/C++, Communications Server, and ISPF. This session will be of interest to systems programmers and their managers who are migrating to z/OS R9, or through z/OS R9. It is strongly recommended that you attend 'Migrating to z/OS R9 Part 1: Planning' before attending this session.

Z04 Migration to z/OS R9 Part 3: More Migration Actions (Marna Walle, IBM)

This is part three of a three-part session that will be of interest to systems programmers and their managers who are migrating to z/OS R9. In the last part, remaining migration tasks from additional selected elements will be covered: DFSMS, Distributed File Service – zFS, Language Environment, JES2, JES3, TSO/E, and z/OS UNIX will be included. Also, helpful system programmer enhancements introduced in z/OS R9 (for when your migration is complete!) will be briefly discussed. It is strongly recommended that you attend 'Migrating to z/OS R9 Part 1: Planning' and 'Migration to z/OS R9 Part 2: Some Migration Actions' before attending this session.

Z05 An Update of the IBM Health Checker for z/OS and the IBM Migration Checker for z/OS Tool (Marna Walle, IBM)

This session will discuss the recent enhancements to the very popular IBM Health Checker for z/OS, including the newer Health Checks added to z/OS. Another checking tool, the IBM Migration Checker for z/OS, will also be covered. This is an "as is" tool to help you with your z/OS migration. If you want programmatic assistance to help with availability and migration, this session is the place to be!

Z06 What's New in System z Software Pricing (Kay Adams, IBM)

This session will cover the details of System z Software Pricing Announcements made in 1Q08.

Z07 System z8xx / System z9 BC Software Pricing Overview (Kay Adams, IBM)

The z800/z890/z9BC processors offer the most flexible pricing options in the System z product line. IBM offers several "standalone" pricing options, unique to these processors, that offer very attractive entry level pricing and flexibility. This session will focus on these standalone pricing options.

Topics include:

- Entry Workload License Charge (EWLC)
- zSeries Entry License Charge (zELC)

- Tiered Entry Workload License Charge (TWLC)
- zNALC (replacing z/OS.e & Divide-a-Box)

In addition, these processors can take advantage of and fully participate in all of the z9EC/z10/Sysplex metrics. Information on z800/z890/z9BC participation in Sysplex SW pricing metrics, e.g., PSLC & Workload License Charge, will be included in the z9EC/z10/Sysplex SW Pricing session.

Z08 System z9EC / z10 / Sysplex Software Pricing Overview (Kay Adams, IBM)

This session will focus on the SW Pricing options available to IBM's Series z9EC/z10 processors & System z Sysplexes.

We will discuss Monthly License Charge (MLC) metrics including:

- PSLC (Parallel Sysplex License Charge)
- WLC (Workload License Charge)
- ULC (Usage License Charge)
- zNALC (New Application License Charge)

plus

- IPLA "OTC" pricing.

Z09 z/OS V1.9 and V1.10 System Programmer Goody Bag (Robert Rogers, IBM)

In this session, the speaker will overview some of the 'little goodies' that have been included in the BCP and related elements of z/OS in the most recent release. Larger items are just overviewed and many of the items are too small to have been addressed in a full presentation. This edition of the presentation covers items in z/OS 1.9 not covered last year and an introduction to z/OS 1.10. Topics will include:

- WLM promotion on cancel
- IPSec offload to zIIP
- HealthChecker checks in REXX
- Binder enhancements
- Select JES2 and JES2 enhancements
- Metal C compiler
- ISPF enhancement
- Other important 1.9 items
- Select 1.10 items that are not yet announced

Z10 A z/OS System Programmer's Guide to Migrating to a new IBM System z10 EC Server (Greg Daynes, IBM)

The latest generation of IBM System z servers builds on the inherent strengths of the System z platform and delivering new technologies that can offer improvements in price/performance for key workloads as well as enabling a new range of hybrid solutions. It further extends System z's leadership in key capabilities with the delivery of expanded scalability for growth and large scale

consolidation, availability to help reduce risk and improve flexibility to respond to changing business requirements and improved security.

Come hear about how to upgrade to a IBM System z10 Enterprise Class (z10 EC) server! This informative session will describe the software required to run on a new server (including cryptographic software) and any migration or exploitation actions required to use the new server. This session will be of interest to systems programmers and their managers who will upgrade to a IBM System z server. This is a new session, not presented at prior System z Tech conferences.

Z11 z/OS Maintenance Best Practices (The Rational Behind the Recommendations) (Greg Daynes, IBM)

Staying current on maintenance can be a key contributor to high availability. The IBM software maintenance strategy is geared to avoiding known critical problems, as well as minimizing new problems encountered. The strategy, and supporting infrastructure, has evolved in recent years. Come to this session to learn more about the best practices for installing z/OS service, with particular focus on why the recommendations are what they are.

Z12 z/OS Installation and Maintenance Trends and Directions (Greg Daynes, IBM)

The greying of the system programmer is real. It is critical that we make it easier to install, maintain, and migrate systems. Come to this session to learn what IBM is doing, and planning on doing, to automate and simplify many of the complex tasks manually performed today.

The speaker will give you a glimpse of the future, as well as provide a roadmap on how we all will get there.

Z13 SMP/E 3.5: Simplifying PSP Buckets and Other Goodies (Greg Daynes, IBM)

Have you ever installed a software product and wanted SMP/E to ensure all service recommended in the product's Preventive Service Planning Bucket was also installed? Have you ever prepared to install new hardware and wanted an easy way to install required software service? Did you ever want an easy way to tell SMP/E to install coexistence service or cross-product dependencies for a new z/OS release? If the answer to any of these questions is yes, then you just might be a system programmer. You should come to this session to hear how SMP/E will be enhanced to help automate and simplify those tasks.

This support is planned to be available with z/OS V1.10. It will also be available as part of SMP/E 3.5 which can be installed on top of all supported z/OS releases. Target availability of both products is planned for September 2008. This is a new session, not presented at prior System z Tech conferences.

Z14 An Introduction to CIM on z/OS (Redelf Janssen, IBM)

This session will discuss the concept of Common Information Model (CIM) and its meaning for z/OS. With CIM, management applications from different vendors can manage a heterogeneous environment of systems via the same technology. All applications operate on the same set of common data, which is the standard CIM Schema, using the same access protocol (CIM-XML over http). Since z/OS V1R7, CIM functionality is available on z/OS. It will play an important role on the new face of z/OS.

You will get an overview on the implementation of CIM on z/OS V1R9 and the functionality it gives you to manage your environment.

Z15 InfiniBand Implementation and Server Time Protocol (STP) Update (Iain Neville, IBM)

This session discusses the planning, implementation and migration considerations for the adoption of InfiniBand Coupling Links. In addition, we introduce additional developments for the Server Time protocol, including the availability of the connection to a NTP server as an external time source.

Z16 The New Face of z/OS - z/OS Simplification (Thomas Kraus, IBM)

The New Face of z/OS initiative is a key effort of IBM to simplify the management, administration and configuration of the z/OS system. This presentation covers the New Face Architecture, its components and usage scenarios. The goal is to make System z servers easier to manage, and to provide a modern user interface with integrated task guidance.

Z17 IBM Tivoli System Automation for z/OS V3.2 - What's New? (Raimund Thielker and Gabriele Frey-Ganzel, IBM)

IBM Tivoli System Automation for z/OS (SA z/OS) release 3.2 is now available, with many new and enhanced functions. This session will discuss a subset of the enhancements made to the SA z/OS 3.2 release. Topics discussed include an overview of the SA z/OS 3.2 release, integration with other Tivoli products such as System Automation for Integrated Operations Management (SA IOM) and event-based monitoring using the OMEGAMON XE architecture, changes to the default desired status of resources, enabling resource notifications, move group enhancements, nested application class enhancements, availability and recovery time reporting, migration, and more. Changes to the Customization Dialog as well as new and changed commands will also be discussed.

Z18 Alert Escalation IBM System Automation for IOM V2.1 (Gabriele Frey-Ganzel, IBM)

SA IOM is the new kid in the SA product family. One of the key functions that SA IOM provides is the alert/escalation facility. This session gives an overview what SA IOM is all about and then

concentrates on the alert/escalation function. Finally, it shows how SA z/OS exploits the facility offered by SA IOM.

Z19 IBM Tivoli System Automation for z/OS: Beginners Hands-On Lab - Part 1 (Raimund Thielker and Gabriele Frey-Ganzel, IBM)

This lab is designed for z/OS users, who are familiar with TSO/ISPF and who have already been logged on to NetView. A short theoretical part will give you an ultra-short product introduction. Then you will get a working document to guide you when doing your first steps with SA z/OS. Questions are always welcome!

You will learn how to work with the SA z/OS system operations component to:

- Define a new application using the application class concept
- Create an application group to manage multiple applications as a whole
- Setup relationships to existing applications
- Exploit the reporting capabilities of SA z/OS to see how the automated environment looks like, and finally
- Test the new policy on the life system

We are looking forward to see you in this lab!

Z20 IBM Tivoli System Automation for z/OS: Beginners Hands-On Lab - Part 2 (Raimund Thielker and Gabriele Frey-Ganzel, IBM)

See abstract for Part 1.

Z21 HCM - What's new in z/OS 1.8 and 1.9 (Friedrich Beichter, IBM)

Hardware Configuration Manager (HCM) is an optional element of z/OS. It provides a graphical user interface to the hardware configuration definition (HCD) and extends the scope of HCD by adding physical data and cable management. It interfaces with other systems management products and tools like

- I/O Operations of Tivoli Systems Automation
- RMF via its Distributed Data Server
- the CHPID Mapping Tool

During this session, the speaker will discuss the new functions of z/OS V1R8 and V1R9 HCM such as:

- Create/Copy/Edit I/O Subsystem wizard
- Report enhancements
- Password Phrase Support
- Vertical Processor View
- Copy wizards
- Keep configuration file on Host

and a lot more...

Z22 HCD - Latest Support for the IBM System z Servers (Friedrich Beichter, IBM)

Hardware Configuration Definition (HCD) is the z/OS base element that is used to define the hardware configuration to the channel subsystem and to the operating system.

This session includes the details of the latest functions provided with z/OS V1R9 HCD and SPEs.

- Support of the eServer IBM System z Processors including System z10
 - Support of the Server Time Protocol (STP) Link
 - Support of Multiple Subchannel Sets

Furthermore, the following topics will be presented:

- Maintaining a Change Log File
- Automatic Activity Logging
- Report enhancements

Z23 Parallel Sysplex Update (Garry Geokdjian, IBM)

The z/OS Parallel Sysplex is able to provide a unique set of advantages:

- Continuous availability for both planned and unplanned outages with no single points of failure
- High-performance, scalable, read/write access to shared data across all systems in the sysplex
- Better use of resources with dynamic workload balancing

This presentation reviews the Parallel Sysplex architecture at a high level and provides a detailed update on the latest technology delivered by z/OS, the Coupling Facility, and the servers.

Z24 GDPS Overview: Availability for On Demand (Udo Pimiskern, IBM)

Are your critical business applications protected from the many unplanned and planned outages that can contribute to application and data unavailability? The very survival of your business

may depend upon how quickly you can react to and recover from an unplanned outage such as a disk failure or an entire site failure. Is your business-critical data protected from a site disaster? Do you put off system maintenance and upgrades to avoid system downtime?

This session will provide an overview of how GDPS, IBM's industry leading disaster recovery and high availability solution, integrates key availability technologies such as Parallel Sysplex, Remote Copy technologies of Metro Mirror (PPRC), Global Mirror and z/OS Global Mirror (XRC) together with System Automation to enhance application and data availability and improve disaster recovery. The basic GDPS functions, GDPS/PPRC, GDPS/XRC, GDPS/GM configuration combinations, options, positioning will be discussed along with real customer implementation scenarios and business benefits.

Z25 GDPS Update

(Udo Pimiskern, IBM)

GDPS is IBM's industry leading disaster recovery and high availability solution. This session will provide an update on recent GDPS V3.5 and V3.4 functional enhancements, including enterprise-wide management of data and servers, support for DS8000 technologies, three-site incremental resynchronization, new GUI interface, and many other performance, usability, and availability improvements. GDPS trends and directions will also be covered. The latest Server Time Protocol enhancements will be presented as well.

Z26 z/OS Dispatcher Enhancements

(Robert Rogers, IBM)

z/OS and its predecessors have always treated all the general purpose processors in the configuration as a symmetric pool of resource and not attempted throughput optimization through affinity dispatching. As instruction processing gets faster while the latencies to memory and cache grow relative to processor speed, dispatching with affinity becomes ever more important for minimizing these latencies. Also, the increasing number of processors in a given configuration reduce the need to be able to dispatch anything anywhere in order to maintain responsiveness. In response to these trends, the next release of z/OS introduces affinity dispatching constructs that can boost throughput. This presentation reviews the historical context for these enhancements and provides an overview of the affinity dispatching techniques that will be employed.

Z27 Parallel Sysplex Trainer Environment Hands-On Lab (Michael Grossmann, IBM)

Are you interested in a sysplex sandbox in your shop? The Parallel Sysplex Trainer Environment (PSTE) provides a risk free training environment for System Programmers and Operators. The training environment or "sand box" consists of three z/OS images, two Coupling Facilities and canned jobs to simulate production like activity for various exploiters including XCF, DB2, CICS TS and others. Come to this session to test drive the PSTE. The PSTE will provide you the opportunity to use z/OS commands to do activities like, identify the sysplex configuration, start workload activity, alter/move structures, manage coupling facilities, change

couple data sets and much more. During the Hands-On lab we will start with identifying the configuration to give you a good sense about "The Trainer".

z/OS Performance Management Track

ZP01 z/OS Workload Manager: z/OS V1R9 Update (Robert Vaupel, IBM)

This session is intended to bring you up to speed about the recent enhancements in Workload Management up to the most current z/OS Release V1R9. You will hear about WLM managed batch initiator enhancements, zAAP/zIIP support, enhancements in WLM Sysplex Routing and Contention Management, new Resource Group Types, Group Capacity limits, the all new Workstation based policy editor and other new WLM features. This session will also cover the new Capacity Provisioning feature.

ZP02 WLM Policy Definition: Protecting Work (Robert Vaupel, IBM)

This session explains some of the more advanced Policy Definition concepts in WLM with a focus on ways to protect work. In particular the concept of resource groups will be explained in detail including the latest enhancements in z/OS V1R8.

ZP03 WLM CPU Management, Defined Capacity and Group Capacity Limits (Robert Vaupel, IBM)

Are you interested in WLM weight and CPU management? Are you curious about the technical details behind 'Defined Capacity' and some pitfalls to avoid when exploiting it? Do you want to learn the details behind Group Capacity Limits? Then this session is for you! The speaker will explain the concepts of the WLM CPU and weight management and Defined Capacity in detail. In addition the new concept of Group Capacity limits and how to exploit will be covered.

ZP04 What's New in RMF for z/OS V1.9 and 1.10 (Harald Bender, IBM)

RMF is IBM's strategic product for z/OS performance management. It is the base product to collect performance data of z/OS systems and it provides reporting capabilities for sysplex-wide monitoring, performance analysis and capacity planning. During this session, the speaker will point out how RMF supports you in major areas such as:

- System z 10 Exploitation
- Detection of XCF Performance Problems
- Monitoring of System Locking Activities
- Blocked Workload Analysis

This session includes the details of the latest functions provided with z/OS V1R9 RMF and z/OS V1R10 RMF.

ZP05 The RMF - WTO Secret: How to Generate Console Messages from Exceptions (Harald Bender, IBM)

Have you ever searched for a function in RMF that generates a console message when a certain threshold is exceeded? At first glance, you probably didn't find a smart solution - nevertheless it is there! You can simply run Monitor III Exception Reports in batch mode and route the exception lines to the console. Moreover - with a few lines of REXX code - you can define thresholds for almost all metrics contained in Monitor III reports. Once the messages appear on the console, you can take appropriate actions by means of the z/OS Message Processing Facility (MPF) or any other z/OS automation product. This session explains how it works and how you can set up everything in less than 10 minutes!

ZP06 The RMF Monitor III Data Portal (Hands-on Lab) (Harald Bender, IBM)

Did you already know that RMF z/OS performance data can be accessed on demand by simply using a web browser? The RMF Distributed Data Server (DDS) has been enhanced to respond directly to HTTP requests. Without the installation of any client software is now possible to explore the configuration and performance of your z/OS system instantly. You need only one HTTP session per sysplex - and it's all graphical! The lab will take you through the following topics:

- initial connection and sysplex health check
- sysplex configuration accordingly to the RMF data model
- resources and attributes
- single metrics and list valued metrics
- define your own personal view
- view complete Monitor III reports

The lab is suited for beginners as well as for experienced RMF users, who have not exploited the Web Browser GUI so far.

ZP07 Analyzing XCF Performance with the RMF Spreadsheet Reporter (Hands-on Lab) (Harald Bender, IBM)

Isn't it a drudgery to bring together all the raw XCF data from your individual z/OS systems and combine it to a sysplex wide view? And even if this piece of work is done - how to start with an efficient analysis? The RMF Spreadsheet Reporter is well known as a graphical performance analysis extension for Postprocessor reports on the workstation. With the version 5.2.4 you can run the RMF Postprocessor remotely and create XCF Reports from raw SMF74.2 data. The reports are automatically downloaded to your workstation and converted to spreadsheet-compliant format. Now you are ready to exploit the features of the new XCF macro *Rmfr9xcf.xls*:

- Analyze your XCF performance on transport-class as well as on path granularity
- Powerful filtering options help you to reduce the amount of data and detect bottlenecks

In the lab you will learn how to use the RMF Spreadsheet Reporter efficiently. Come to see how easy it is to submit Postprocessor jobs and analyze the data immediately - everything on your PC!

ZP08 zIIPs and zAAPs: Transaction Flows and CPU Measurements (Peter Enrico, Enterprise Performance Strategies, Inc.)

Today's transactions on z/OS can run on zIIP and zAAP processors, as well as traditional general purpose processors. It is necessary to understand the measurement of the CPU time consumed on these processors at the CEC level, at the WLM service class period level, and at the address space level. But to fully understand the measurements it is important to also understand typical transaction flows that will involve zIIP and zAAP processing since it is these transactions that will consume the CPU service.

During this presentation the speaker will discuss some typical transaction flows involving zIIP and zAAP processors and how the CPU time consumed is accumulated to the address space SMF 30, the processor SMF 70, and the WLM service class period SMF 72.3 records. Additional topics discussed will include dependent and independent enclaves, client SRBs, unmanaged threads, and other key concepts necessary to understand the interpretation of zIIP and zAAP CPU times.

ZP09 z/OS WLM: Understanding and Using WLM State Samples (Peter Enrico, Enterprise Performance Strategies, Inc.)

WLM wakes up every 0.25 seconds and samples the state of the work in the system to determine who is using and delayed for WLM managed resources. WLM then uses these state samples in a variety of ways including calculating velocities, projecting the affects of changes, and reporting the samples back to performance monitors. These same state samples are also valuable to WLM performance analysts. The speaker will review WLM state sampling and show how you can use these valuable WLM measurements to gain optimal performance.

ZP10 z/OS WLM Top Ten Questions (and Answers!) (Glenn Anderson, IBM)

OK, so maybe it's not a David Letterman Top Ten List, but it's the next best thing - the z/OS Workload Manager (WLM)! Glenn Anderson has been teaching WLM since day 1, and will guide you through the questions he hears the most these days about WLM, including velocity goals, enclaves, routing services, managing DB2 workloads, PI, using RMF reporting, the new Resource Groups, Blocked Workload support, and more. If time permits, in addition to the questions, Glenn will also supply answers.

ZP11 Understanding and Managing zAAPs and zIIPs (Glenn Anderson, IBM)

If you are new to the idea of zAAPs, zIIPs and specialty engines, or are confused with all the details, then this session is for you. The speaker will begin by looking at JVM's on z/OS, where they run, and what makes work zAAP eligible. Then a look at enclave SRBs, their use by DB2 and IPsec, and what makes work zIIP eligible. Other topics will look at the basics of how the z/OS dispatcher gets involved, the controls in PARMLIB, and how to predict how much zAAP

and zIIP eligible work you have on z/OS. This session covers basic functionality, and will prepare you to understand more advanced information.

ZP12 Monitoring Parallel Sysplex Performance (Glenn Anderson, IBM)

The performance of a Parallel Sysplex begins with two major components - XCF and the Coupling Facility. This presentation explores how XCF and the Coupling Facility operate in a Parallel sysplex, what the basic metrics are for measuring and monitoring performance, and how this data is reported in the XCF and Coupling Facility RMF reports. This presentation lays a foundation for understanding and measuring your Parallel Sysplex's XCF and CF performance.

ZP13 Memory Matters in 2008 (Martin Packer, IBM)

For z/OS LPARs memory management has changed radically over the years – from both the operating system perspective and that of applications. And the pendulum has swung back and forth between focusing on Real Memory and on Virtual Memory.

This presentation discusses managing both Real and Virtual Memory – from the perspectives of both the operating system and the exploiting products. The products include DB2, DFSORT, CICS, IMS, MQ and WebSphere. It contains in particular lots of information about the Real Storage Manager rewrite of z/OS Release 8 and Virtual Storage information for DB2 Version 9.

ZP14 Much Ado About CPU: An Update (Martin Packer, IBM)

zSeries and System z9 processors have in recent years introduced a number of capabilities of real value to mainframe customers. These capabilities have, however, required changes in the way we think about CPU management. This presentation describes these capabilities and how to evolve your CPU management to take them into account. It is based on the author's experience of evolving his reporting to support these changes. In particular new information on z/OS Release 8 and Release 9 CPU instrumentation is presented, including Coupling Facility CPU.

ZP15 DB2 Data Sharing Performance for Beginners (Martin Packer, IBM)

This presentation provides an introductory-level view of how to look at the DB2 Data Sharing performance numbers from both a z/OS / RMF and a DB2 perspective. Performance topics include XCF, Coupling Facility, Data Sharing Structures, The application's perspective, and Structure Duplexing. Performance topics don't include other forms of Data Sharing e.g. VSAM RLS or overly detailed descriptions. New information is presented on Coupling Facility CFLEVEL 15, DB2 Version 9, z/OS Release 8 and 9 RMF changes and also "data sharing at a distance".

ZP16 Estimating GCP, zAAP and zIIP Latent Demand (Danilo Gipponi and Fabio Massimo Ottaviani, EPV Technologies)

Experienced Capacity Planners know that the worst mistake they can do is to plan a CPU constrained system. To avoid that they always use some technique to check if CPU latent demand is present on the current systems before setting the baseline. Most of the techniques used in the last years to estimate CPU latent demand have been based on the CPU ready queue analysis. Unfortunately the availability of the new specialized processors (zAAP and zIIP) changed the meaning of this metric: it now provides the number of AS running on or waiting for standard processors (GCP), zAAP or zIIP. This change has made all the existing techniques obsolete. In this presentation a possible approach will be discussed to understand if latent demand is in the system and to which kind of processor it belongs to.

ZP17 Managing WebSphere / DB2 Transactions with z/OS WLM (Danilo Gipponi and Fabio Massimo Ottaviani, EPV Technologies)

WebSphere incoming requests can be classified to WLM in order to allow a better control of application performance and resource usage. In this paper, starting from a real life experience of monitoring new web applications, we will show how WLM classification works. We will also discuss the way WebSphere transactions accessing DB2 can produce either a dependent or an independent enclave, thus making WLM priority management less effective and resource consumption and response time analysis more complex. An independent enclave is a new work request completely separated from the creating and server address spaces in which it runs; a dependent enclave has, on the contrary, a strong relationship with the creating address space. Enclaves are the units of work used by all the “new” z/OS workloads.

ZP18 Dashboarding Your OMEGAMON (Clayton Ching, IBM)

OMEGAMON has existed since 1976 and one of its original goals was to provide a “view” into an IT area that is often difficult to see and understand. Since then OMEGAMON has been able to produce several methods for visualizing your IT environment. This presentation will look at a method to create dashboards for IT and Business using OMEGAMON.

ZP19 WebSphere MQ on z/OS – Performance Considerations (Peter Enrico, Enterprise Performance Strategies, Inc.)

WebSphere MQ (previously known as MQSeries) is becoming an ever more critical subsystem exploited by enterprise applications. What are some of the steps one would take to conduct a WebSphere MQ performance analysis or tuning exercise? What are some of the more important MQ performance considerations? What sorts of measurements are available? During this presentation Peter Enrico will discuss performance considerations for WebSphere MQ, touching upon the following areas:

- Introduction to WebSphere MQ performance data

- Performance considerations relative to how an application is exploiting messaging
- z/OS setup considerations for optimal WebSphere MQ performance
- Performance consideration when configuring WebSphere MQ resources
- Performance considerations relative to the topology of the application exploiting WebSphere MQ

z/OS: Transactions, Data Base, Networking, Security Track

ZW01 z/OS Security - Building the Installation's Trust Authority (Patrick Kappeler, IBM)

In this session you will review the Security features of z/OS, as they are delivered in z/OS V1R9 (with whatever R10 preview information that might be available at the time of the conference), with a specific emphasis on the interoperability characteristics of z/OS with distributed systems. Explanations will be given on the different sets of Security services and APIs provided in z/OS, the major Security related components such as RACF, the z/OS LDAP and the z/OS PKI services and how they inter-operate. The discussion will also address the insertion the Tivoli zSecure suite of products in this functional architecture, and how the z/OS components can interact with the Tivoli Security products. The information provided will then be put into perspective of the SOA Security requirements, and the capability of z/OS to act as a Trust Authority in the involved heterogeneous environments will be further developed.

ZW02 Exploiting Hardware Cryptography on System z10: An Up-to-Date Explanation and Status (Patrick Kappeler, IBM)

In this session you are introduced to the System z hardware cryptography implementation and how it can be exploited by applications developed using various languages and software technologies. You will be explained what are the cryptographic devices available in System z, as of the recently announced z10 system, their respective domains of applicability, the expected ranges of performance and the monitoring and administration tasks. This session will then focus on the specific implementation of integrated hardware cryptography in z/OS (as of z/OS V1R9, with any R10 preview information that might be available at the time of the conference), with examples of exploitation such as the cryptographic hardware support for the SSL/TLS or IPSec protocols, for the new z/OS PKCS#11 API, or for the Java/J2EE IBM cryptographic services providers. In addition an overview will be given on IBM products that can be used on the mainframe for the purpose of encrypting data on tapes or DASD units.

ZW03 Encrypting Tapes or DASD Data Using the Encryption Facility for z/OS (Patrick Kappeler, IBM)

This session describes the features and the operations of the Encryption Facility for z/OS program product. Details are provided on the product principles of operation and how it exploits the System z hardware cryptography. Examples of use, administrative dependencies and recommendations are also given and discussed. This session also addresses the release 2 of the product, and more specifically its support of the OpenPGP protocol. You will be provided with an explanation of the OpenPGP protocol and its z/OS implementation peculiarities. The discussion will also stress how this support can dramatically extend the interoperability of the product with non-z/OS vendors' platforms.

ZW04 Exploiting the z/OS Integrated Cryptographic Service Facility (ICSF) in Your Applications (Patrick Kappeler, IBM)

After a short reminder on the System z hardware cryptography implementation, as of the recently announced z10 system, this session focuses on how z/OS applications can exploit the System z cryptographic coprocessors. A detailed description of the z/OS integrated hardware cryptography infrastructure is given that encompasses the ICSF component of z/OS (which drives the System z cryptographic coprocessors), as of the z/OS V1R10 preview announcement. This description addresses the ICSF key management schemes and services, its relationship with RACF and the APIs it provides to various programming languages, including Java. An overview is also given of the ICSF setup and operations management and the administrative organization and tasks an installation should consider when exploiting ICSF. You will then be given explanations, with examples, on the set of cryptographic services provided by ICSF and how z/OS applications, in different software models, can explicitly call these services, or implicitly benefit from them via other z/OS components or middlewares. Details will also be provided on how the ICSF cryptographic workloads performance can be monitored on z/OS.

ZW05 z/OS V1.9 Communications Server Technical Update (Alfred Christensen, IBM)

This session will present the latest and greatest capabilities of the Communications Server on z/OS. The session will focus on enhancements provided in the z/OS V1R9 CS release, allowing attendees to plan for use of those new functions. Among the Communications Server for z/OS V1R9 new functions that will be discussed are: z/OS support for policy-based routing (PBR), enhanced z/OS FTP support for UNICODE, centralized networking policy management and network security services, new Sysplex Distributor algorithm, Sysplex Distributor support for WLM feedback that includes specialty engine capacity if appropriate for the distributed workload, EE/SNA enhancements, and Configuration Assistant enhancements. The session will also include a brief introduction to Communications Server enhancements that are planned for z/OS V1R10.

ZW06 z/OS V1.9 Communications Server: Getting the Policy Agent Up and Running

(Alfred Christensen, IBM)

Many of the more advanced functions in the z/OS Communications Server, such as IPSec VPNs, Intrusion Detection Services, Policy-based Routing, transparent SSL/TLS processing, etc. are based on a common z/OS Communications Server networking policy infrastructure. To enable this common policy infrastructure you need to configure several components, of which one is the Policy Agent (PAGENT). You will also need to define your networking policies (the rules) by which the policy infrastructure will process your network traffic - these policies are most easily defined using the z/OS Communications Server Configuration Assistant - a Windows-based GUI tool that hides much of the policy definition details. If policy agent is new to you, or if you haven't taken a look at it recently, you may have concerns about implementing policy-based functions due to the anticipated learning curve. In this session we will try to flatten that curve by explaining how to configure, operate, and monitor policy agent - so you can start taking advantage of transparent SSL/TLS, IP filtering, IPSec Virtual Private Networks, Intrusion Detection Services, etc.

ZW07 z/OS V1.9 Communications Server: What is All That Network Security About?

(Alfred Christensen, IBM)

One of the main attributes of the System z9 platform is security. This session will discuss how the mainframe platform and z/OS security is extended to include secure IP networking access to z/OS. The session will discuss how to protect the operating system platform from malicious attacks through the IP network and will also discuss how to secure the data that is transmitted over the network to/from IP applications running on the z/OS platform. Topics such as IPSec (secure Virtual Private Networks), IPSec on zIIP processors, IP filtering, Intrusion detection and prevention (IDS), securing application access through authentication and encryption using SSL/TLS (including transparent SSL/TLS processing by the z/OS Communications Server) - will all be introduced and explained at an overview level with the purpose of enabling you to better choose the correct technology to meet your specific end-to-end networking security objectives.

ZW08 Implementing CICS Web Services

(Nigel Williams, IBM)

Many customers want to build Web services based on their existing CICS applications so that they can be incorporated into a service-oriented architecture. This presentation reviews the major areas that need to be considered when implementing a CICS Web services infrastructure, such as security, workload management and performance. It uses a project example to highlight how a particular customer is implementing CICS Web services to interoperate with new J2EE and Microsoft .NET applications. It also covers some of the new enhancements introduced in CICS Transaction Server V3.2, including support for the WS-Trust and MTOM/XOP specifications.

ZW09 Integrating WebSphere App Server and CICS Using the CICS Transaction Gateway

(Nigel Williams, IBM)

Many customers want to utilize both J2EE application servers and CICS as environments to run their business applications. They need to understand how applications in the two environments can interoperate, as well as how to provide the transactional and security characteristics which they require. This presentation will focus on using the CICS Transaction Gateway for z/OS to integrate new J2EE applications with existing CICS applications. It covers some of the new enhancements introduced in CICS Transaction Gateway V7.1 such as the improved systems monitoring and extended networking enhancements . It also uses real project examples to highlight how customers are deploying the CICS TG today to meet their WebSphere and CICS integration requirements.

ZW10 IMS Update for 2008

(Alison Coughtrie, IBM)

For many companies, core business applications and critical information are managed by IBM's Information Management System (IMS) product. This session highlight how IMS address the challenges of today's world by providing new version of the product every two years. Let's go through the enhancement that IMS Version 10 recently provided especially in the area of SOA integration.

ZW11 DB2 z/OS Overview and News

(Georg Kistenberger, IBM)

This presentation is not designed for DB2 z/OS experts. It gives rather an overview for z/OS experts, who might be occasional DB2 users and wonder what these MSTR, DBM1 or DIST address spaces do for them. It will cover the DB2 z/OS architecture, how DB2 is integrated in certain application architectures, explain major DB2 z/OS functions and last but not least where it is different and also almost identical to other relational database systems on distributed platforms. Finally, there will be a summary of DB2 news, which will highlight on more z/OS-like integrated functions of DB2 Version 9.

ZW12 DB2 z/OS Security Aspects

(Georg Kistenberger, IBM)

There is an increasing awareness and demand to make sure that applications, which issue remote SQL calls through IP networks to DB2 z/OS are exploiting appropriate security functions. This presentation will give an overview of the various DB2 and network/IP access control mechanism, which should be considered for distributed application architectures. Encryption goes along with higher security requirements. This presentation will also cover the different possibilities to use encryption in a DB2 z/OS environment. Finally, it will position in which cases DB2, IP access control or encryption is the right choice based upon certain customer demands.

ZW13 Discovering and Dashboarding Your z/OS Application Dependencies (Clayton Ching, IBM)

The z/OS environment is getting more complex, often having z/OS and one or more subsystems required to support a Business Service. These business services often originate on a distributed platform and then need to navigate through an enterprise environment. This navigation can be

complex, and difficult to map. By using top-down analysis it is possible to visualize (map) and manage any business service application dependencies.

ZW15 Facing the Challenges of an SAP/IBM Enterprise Solution (Herve Sabrie, IBM)

Select first an automotive customer on his way to deploy an integrated solution package like SAP. Take into consideration the way this client is dealing with his suppliers. Understand the complexity of his business solutions. Would you like to learn the type of infrastructure solution that can deal with such a situation? How to mitigate business & infrastructure challenges of a SAP/IBM enterprise solution in the context of a global automotive Asian manufacturer ? Then come and see this presentation!

The objective of this session is to describe the approach and the results achieved for a proof-of-concept performed for one of the globally well known automotive manufacturer, currently on his way to deploy SAP modules. From the OEM's BOM and application architecture complexity, I will explain how was achieved the aggressive performance numbers targeted by the client. This customer has recently selected SAP as the core of his future IT system solution with the objective of managing his automotive production with a consolidated target of 5 Millions of vehicles produced per year by 2010. At the end of this session, the audience will :

- Understand the main business challenges
- Learn the type of architecture implemented to fulfill the customer expectation
- Understand the performance achieved on four specific SAP functions: Rapid Planning Matrix, Material Requirements Planning, BackFlush, and Material Ledger.

ZW16 IBM System z - The Ultimate XML Processing Machine (Christian Strauer, IBM)

Today, XML is becoming more and more important as a document exchange format. This presentation explains, which native capabilities z/OS provides out of the box to support XML processing. It compares different facilities like z/OS XML System Services, XML Toolkit for z/OS or the IBM z/OS Java SDK concerning functionality and performance. Furthermore, example scenarios will be given. Finally, the cost of XML under z/OS will be examined.

ZW17 Introduction to Object-Oriented and Java on z/OS (Martina Schmidt, IBM)

This presentation describes the ideas and key concepts of object orientation and the Java programming language and how Java fits into a z/OS system. Furthermore it includes all the z/OS specific add-ons available for Java.

ZW18 Troubleshooting Java in a z/OS Environment (Thomas Schulze, IBM)

Looking for ways to simplify software support, reduce support costs and improve your ability to resolve software problems in-house quickly? IBM Support Assistant (ISA) is the answer!

With ISA, you can:

- Run free troubleshooting and diagnostic tools on your troublesome application
- Shorten the amount of time it takes to resolve your problem with automated data gathering and submission

This presentation will explain which problems can occur with Java-based applications in a production environment, e.g. loops, deadlocks and memory leaks, and how to diagnose them in a very efficient way. IBM Support Assistant combines the traditional System z problem determination tools - well known by your system programmers – with dump, log and thread analyzers – well known by your Java application developers.

- Learn how to recognize typical problems in production environments
- Learn how to use effective diagnostic tools from both worlds – the new and the traditional one
- Speak the same language with z/OS system programmers and Java application developers

ZW19 Making Sense of Web 2.0 on z/OS

(Kevin Keller, IBM)

First of all let's talk about the question, what exactly means Web 2.0? What are the key characteristics. Where does it come from? Is it a new technology? Talking about that, what technologies are actually used to realize Web 2.0? How does AJAX work? Maybe you thought Web 2.0 is just a fancy marketing term or you think of your son surfing on "MySpace" or "Facebook". You will know better if you get to know the power of these lightweight technologies and how you can use them especially for your company. Get your company ready for Enterprise 2.0.

Get to know the Long Tail, push SOA, reduce TCO costs and the most important of all: Be more attractive for your customers! With Web 2.0, you can realize a great emancipated customer driven communication platform to build up better customer intimacy. Get to know the real problems of your customers, before you talk about solutions. Additionally, you want the great security and stability you got used to on System z? You want to use Java, PHP, PERL, Python or .NET with tight back-end integration?

We have news for you. System z is Enterprise 2.0 ready and the perfect iron for up drafting your business with Web 2.0. The real Enterprise 2.0 runs on z.

ZW20 How System z Security Addresses the Payment Card Industry Standard (PCI)

(Jack Jones, IBM)

With recent events, the security and protection of your customers private and personal information has become a critical requirement for the IT specialist. There are many legal law that have required this for years now but recently the enforcement of these laws has tighten and the penalties have increased. One of these compliance laws is called Payment Card Industry Data Security Standards (PCI-DSS) which is being set by the credit card companies. This

session will review the PCI standards and what they mean to the IT security environment. Then the session will demonstrate the security features of the z/OS and how they can assist in protecting the personal information and in passing a PCI audit.

ZW21 Introducing Security Terms into an SOA Environment (Jack Jones, IBM)

You have probably heard an introductory session on SOA that defines the terms and the SOA framework. This introductory session is a follow-on to those sessions. It will look at the security within the SOA framework. It will look at a 'typical' generic situation and define the security terms and concepts. The speaker will define the differences between transport security and message security, and look at the considerations between the two.

ZW23 Introducing TDS for z/OS (Tivoli Directory Services for z/OS) (Jack Jones, IBM)

LDAP (lightweight Directory Access Protocol) has been available on the z/OS since OS/390 2.4. It has been updated, enhanced, and revised through the years until z/OS 1.8. Last year, a new LDAP server was introduced to the z/OS platform. It is called Tivoli Directory Services for z/OS (TDS). TDS will replace the old LDAP server which is called the ISS (Integrated Security Services) LDAP server. This session will define both LDAP servers and identify the differences between them. It will also show the migration path from the ISS LDAP server to the TDS LDAP server. At some future date, the ISS LDAP server will be removed from the z/OS system.

ZW24 Real Life Experiences with WebSphere Process Server for z/OS (Vesna Eibel, IBM)

In this session the speaker will share their experience implementing WPS for z/OS in production like Smart Bank environment. How does WPS run on z/OS? What were the major issues that found and the key points that we had to consider when we implemented WPS for Network Deployment? Introduce the basic concepts around JMS Message Engines and their different topology in creating a ND environment. What were the key reasons for our choice of configuration to have high availability and workload balancing. What is the workload that we run on this platform and how we classified it.

ZW26 WebSphere MQ Introduction and What's New

(Colin Paice, IBM)

This presentation will cover an introduction to WebSphere MQ and will cover its capabilities, for example connecting your distributed boxes to the mainframe, CICS and IMS and will cover a brief introduction to shared queue. It will also cover enhancements introduced in the last release.

ZW27 101 Ways of Breaking Production MQ and Ways to Avoid This **(Colin Paice, IBM)**

The most unreliable component of computer systems these days is the human. This presentation covers the areas you need to address to keep production MQ up and running. It covers how many queue managers you need, taking backups, planning for a disaster, upgrade strategy, bullet proofing applications.

ZW28 WebSphere Message Broker Introduction and What's New **(Colin Paice, IBM)**

This presentation will cover an introduction to WebSphere Message Broker and will cover its capabilities, how it is configured, how it runs on z/OS and a flavour of how to program it. For those familiar with Message Broker V6.0 this will cover the enhancements introduced in V6.1.

ZW29 WebSphere Portal Server for z/OS Product Update 2008 **(Hendrik Woerner, IBM)**

The world talks about web 2.0 – and you can have it on the mainframe as well! This presentation will give you a technical insight view about WebSphere Portal on z/OS. The presentation includes technical experiences with installation, customization and back-end integration together with business-driven arguments why Portal on z/OS might be a good choice for your environment as well. The speaker has profound experience in the WebSphere z/OS area and is project leader of an actual Portal z/OS implementation project in Germany.

ZW30 OMEGAMON for Mainframe Networks

(Laura Knapp, IBM)

Whether you're an Internet company with exponential growth or an old line "brick and mortar" enterprise transforming your business, your success depends on how well you optimize your IT assets. Investigate the 7 deadly sins of IP performance management AND how to avoid them using IBM Tivoli OMEGAMON XE for Mainframe Networks. Also, learn more about the key issues impacting IP performance on your System z environment.

z/VM Sessions - Basics, General Interest, Performance, and Networking

Note: z/VM V5.3 became generally available June 29, 2007.

V0 z/VM Basics TRACK

V01 The Very Basics of z/VM: Concepts and Terminology (Bill Bitner, IBM)

This session is designed for those who are new to VM, are back working on VM after being away from it for a few years, or are just confused about the concepts of 'virtualization'. This session describes the basics of the virtualization in VM, the resources it can manage, and various other facilities it offers. Terminology that will be used in other VM sessions this week will be introduced and explained here.

V02 The z/VM Control Program (CP): Part 1- Useful Things to Know (John Franciscovich, IBM)

Come to this session for an introduction to the z/VM Control Program (CP) and to learn about some of the things ("what") it does for you. After an overview of CP and how it uses disk space, storage, and devices, we'll cover starting (IPLing) your z/VM system, defining virtual machines, virtual networking, and various ways you can interact with CP.

This session continues in Part 2 (session V03) where we'll take a look at "how" CP does its work.

V03 The z/VM Control Program (CP): Part 2 – Under the Covers (John Franciscovich, IBM)

In Part 1 (session V02), we looked at "what" the z/VM Control Program (CP) does for you.

Come to this session for a look under the covers at "how" CP operates, including the steps it takes to IPL and shut down CP and how CP manages storage (memory) and processor resources among virtual machines so they can do their work efficiently. We'll also cover diagnostic information that can be useful for testing and problem determination.

V04 The Basics of Using z/VM (Brian Hugenbruch, IBM, and John Franciscovich, IBM)

If you are new to z/VM, with either a Linux and/or z/OS background, or if you had simply stepped away from VM for a while and want a VM refresher, this is the session for you!

We will show you which VM commands to use, how data is stored, what the file system looks like, how to edit files, and introduce some of the many tools available for you to be productive in this new environment.

V05 z/VM TCP/IP Stack Configuration (Miguel Delapaz, IBM)

This presentation is an in depth look at configuration of the z/VM TCP/IP server. Basic and advanced configuration topics will be discussed, with an emphasis on practical examples. Topics such as elementary routing, network hardware, and security are discussed in as much depth as necessary to provide an understanding of how to configure them on the z/VM TCP/IP server. Common configuration errors will also be addressed. While prior experience with z/VM TCP/IP is not necessary for attendees, some basic knowledge of z/VM minidisk structure is assumed.

V06 Introduction to VM Performance

(Bill Bitner, IBM)

If you are just getting started understanding VM performance, this presentation will give you the foundation and tools you need to tackle various performance problems. We will talk about configuration guidelines, monitoring, and tuning, and look at a simple case study, with pointers to additional information so that you can learn even more on your own.

V07 Introduction to Automatic SSL Support in z/VM TCP/IP (Brian Hugenbruch, IBM)

SSL (Secure Socket Layer), also known as TLS (Transport Layer Security), is traditionally used to secure Web transactions over the Internet. Most VM Web servers support SSL. However, this protocol has also been extended to Telnet and FTP. IBM implemented automatic SSL support in order to provide general-purpose SSL support for z/VM TCP/IP servers without having to change each server individually. This session explains SSL from an external viewpoint and describes how to exploit it with z/VM TCP/IP.

V08 Introduction to Performance Toolkit for VM

(Bruce Dailey, IBM)

The Performance Toolkit for VM is an optional, priced, pre-installed feature of z/VM that provides enhanced capabilities for a z/VM systems programmer, system operator, or performance analyst to monitor and report performance data. Come to this session to see an overview of the function available.

V2 z/VM Networking and Connectivity TRACK

V21 TCP/IP for z/VM Update

(Tracy Adams, IBM)

z/VM V5.3 includes TCP/IP Function Level 530, a new level of the TCP/IP Feature that delivers significant new functions. This session gives an overview of these enhancements, as well as describing the VM TCP/IP product and the changes to it that were introduced in Function Level 520 with z/VM V5.2.

V22 Virtual Networking with z/VM Guest LANs the z/VM Virtual Switch (Tracy Adams, IBM)

Did you know that you can create virtual LAN segments that connect your z/VM guests together without the need for all those messy point-to-point connections? And did you know you can do that without creating new subnets? Come to this session to hear the latest on how, and when, to use z/VM Guest LANs and the z/VM Virtual Switch. We'll also talk about z/VM support for IEEE Virtual LANs (VLANs) and Layer 2 networks.

V23 Configuration Tools for z/VM TCP/IP Network Connections **(Miguel Delapaz, IBM)**

The IPWIZARD function allows you to quickly and easily do the base configuration as you first try and get TCP/IP running. The IFCONFIG command allows you to quickly and easily add new connections to your running TCP/IP stack. With these functions, you can get your connections up and running quickly without having to learn the format of the z/VM TCP/IP configuration files. The IFCONFIG command allows you to display information about and make temporary dynamic changes to the TCP/IP configuration without stopping and restarting the TCPIP virtual machine. The command syntax is very similar to that of Linux, making skills more transferable.

V24 MPRoute Configuration for z/VM **(Miguel Delapaz, IBM)**

This presentation discusses the configuration of MPRoute, the strategic dynamic routing server for z/VM TCP/IP. Topics include z/VM TCP/IP server configuration to work with MPRoute, configuration of the z/VM MPRoute server for the RIP or OSPF protocols (or both!), and MPRoute server operation. Discussion of the routing protocols themselves is limited to how they affect configuration and operation of the server. While knowledge of OSPF and RIP specifics are not required, a basic knowledge of routing concepts is assumed. Prior knowledge of z/VM TCP/IP or attendance at session V05 (z/VM TCP/IP Stack Configuration) is recommended.

V25 Link Aggregation with the z/VM Virtual Switch **(Tracy Adams, IBM)**

Link Aggregation is a new feature of z/VM V5.3. Do you already using a z/VM Virtual Switch to manage your network connections? Do you want to find out how to get more out of z/VM Virtual Switch technology?

Come to this session to learn how to make your backup OSA cards work for you by increasing your throughput and creating near seamless failover for your virtual network.

V28 Migrating to the z/VM Virtual Switch **(Alan Altmark, IBM)**

Converting your existing point-to-point or z/VM Guest LAN configurations to the z/VM Virtual Switch can appear to be a daunting task, but it's easier than you think. Here we'll talk about how to move subnet routing off of your z/VM system and onto your networking hardware where it belongs. We'll even talk about how to create IEEE VLANs on a Cisco switch. This presentation is a great way to bridge the "buzzword gap" between you and your network administrators.

V5 z/VM General Interest TRACK

V51 New Features of the z/VM 5.3 Hypervisor

(John Franciscovich, IBM)

The newest releases of z/VM include many enhancements to the z/VM Control Program. These include additional new support for Linux guests, virtual networks, and guest connectivity, as well as technological advances for IBM System z servers. Come to this session to hear about the newest features of the z/VM Control Program and how to use them.

V53 z/VM Platform Update: Advancing the Art of Server with z/VM V5.3

(Reed Mullen, IBM)

This presentation will highlight the new functions available with z/VM V5.3, IBM's advanced server virtualization solution for IBM System z. z/VM V5.3, generally available since June 29, 2007, offers enhanced virtualization capabilities which include: greater "scale up" and "scale out" support, new system security features, productivity improvements for the IT staff, and enhanced support for business continuance. Find out how z/VM V5.3 can help clients further leverage their System z infrastructure for improved business results. This session also serves as an excellent launching point for your week of z/VM training, touching on many of the topics that will be discussed at length during the conference.

V54 z/VM Platform Manager: z/VM Direction and Discussion (George Madl, IBM)

This session is an open dialog and discussion with IBM z/VM Product Owner and Platform Manager, to discuss the z/VM role in the future.

On Feb. 6, 2007, IBM announced z/VM V5.3 - Improving scalability, security, and virtualization technology, and made it available June 29, 2007.

The z/VM hypervisor is designed to help clients extend the business value of mainframe technology across the enterprise by integrating applications and data while providing exceptional levels of availability, security, and operational ease. z/VM virtualization technology is designed to allow the capability for clients to run hundreds to thousands of Linux servers on a single mainframe running with other System z operating systems, such as z/OS, or as a large-scale Linux-only enterprise server solution. z/VM V5.3 can also help to improve productivity by hosting non-Linux workloads such as z/OS, z/VSE, and z/TPF.

V55 z/VM Device Support Overview

(Eric Farman, IBM)

Come to this presentation to hear an overview of current device support available on z/VM Version 5. The speaker will discuss Disk, Tape, and OSA technologies available for VM system I/O and guest operating systems running under z/VM. This presentation is also well-suited for an audience new to z/VM.

V56 What's new in CMS Pipelines ?
(Rob van der Heij, Velocity Software GmbH)

CMS Pipelines has been enhanced in many ways since VM had the last major revision of its indoor plumbing. The CMS Pipelines Runtime Library is freely available for VM users and can be installed as alternative for the version provided with z/VM. New stages and enhancements to existing stages often can simplify the writing of new applications or revision of existing ones.

In recent years the "Piper" released several significant enhancements that show us CMS Pipelines development still continues. This presentation introduces some of the new features and shows other neat tricks with pipes.

V57 Introduction to the IBM System Storage DS6000 (for z/VM)
(Eric Farman, IBM)

This presentation brings you up to date on the IBM System Storage DS6000, an affordable storage solution specifically designed to help medium and large enterprises simplify their storage infrastructures, support business continuity, and optimize information life cycle management. The DS6000 provides both SCSI and FICON attachment, enabling it to serve the needs of your z/OS, z/VSE, z/VM and Linux operating systems.

V58 Using z/VM in a SCSI Environment **(Eric Farman, IBM)**

This presentation will provide an overview of the z/VM new native support for SCSI disks and how they can be used to install, IPL and run your z/VM system in a SCSI-only environment. z/VM Version 5 supports SCSI FCP disk logical units (SCSI disks) for both system and guest use. SCSI disks can be used as emulated 9336 Model 20 fixed-block-architecture (FBA) disks. Guests that support FBA disks (such as CMS, GCS and VSE) can use SCSI disks through the emulated-FBA support without requiring their own SCSI support. VM's SCSI support allows a Linux server farm to be deployed on z/VM in a configuration that includes only SCSI disks. ECKD™ disks are no longer required. Installation of z/VM from DVD to a SCSI disk, IPL from a SCSI disk using Stand-Alone Program Loader (SAPL) and VM system dumps to a SCSI disk are supported. DASD Dump/Restore (DDR) services using SCSI disks are supported when DDR is running under CMS. This presentation will also provide information on current updates, such as new support for the IBM SAN Volume Controller (SVC).

V59 z/VM and TS1120 Tape Encryption **(Eric Farman, IBM)**

The IBM System Storage TS1120 tape drive is now capable of encrypting tapes as it writes them. This presentation will provide a high-level overview on how the solution works and how to utilize the tape encryption support available for z/VM Version 5 and its guests, including those guests that do not understand tape encryption themselves.

V6 z/VM System Management TRACK

V61 System Management on z/VM

(Chuck Brazie, IBM)

As more customers discover the benefits of z/VM virtualization technology and begin to deploy tens to hundreds virtual images, they will need ways to easily manage their systems. This presentation gives a general overview of the various systems management options available on z/VM today, including systems management enhancements for z/VM's newest release.

V62 Configuring, Customizing, and Modifying your z/VM System (John Franciscovich, IBM)

Configuring your VM system is easier than it's ever been. Most changes to your VM system configuration may be done dynamically without requiring a system outage. This session will provide hints and tips on exploiting VM CP configuration capabilities, including creating the system configuration file, defining IPL parameters, and dynamically adding, redefining, and removing resources from your CP configuration.

E66 SOA with z/VSE, z/VM and Linux on System z (Oskar Lang, ALCAD of Slovenia)

This customer presentation shows a short history of Alcad, and their position especially in z/VSE, z/VM and Linux on System z environments. The main focus in this presentation is SOA, how Alcad approached this architecture, and developed a solution to their main customer, which totally reengineered the time to market process. This is a new innovation for this area of industry in Slovenia. The presentation shows, how a SOA solution integrates existing applications in different environments, with new solutions, in z/VSE, z/VM and Linux on System z. This is a success story of the cooperation between the customer, Alcad and IBM.

V68 Managing z/VM and Linux on System z

(Tracy Dean, IBM)

Whether you're using z/VM for the first time to support Linux guests, using z/VM again after a few years away from the platform, or expanding your use of z/VM due to server consolidation to Linux on System z, you'll need to decide how you'll manage the new or growing system. Come hear what IBM has to offer to help you manage this environment more efficiently and effectively. The presentation will include automated operations, backup and restore, tape management, and archiving. The session will include a live demo.

V69 z/VM and Linux on System z - Integrating IBM's Solutions (Tracy Dean, IBM)

IBM offers several solutions that touch on systems and performance management of z/VM systems, including their Linux guests. This session will discuss the role of each product (including Performance Toolkit for VM, OMEGAMON XE on z/VM and Linux, and Operations Manager for z/VM) and how they can be integrated. Examples of performance and system management scenarios will be discussed, including live demos.

V7 z/VM Security TRACK

V71 z/VM Security Update

(Alan Altmark, IBM)

This session provides detailed information about the security enhancements in z/VM V5.3. We will discuss mixed-case passwords, password phrases, LDAP, directory commands and enhancements to the support for SSL/TLS in TN3270E, FTP and SMTP.

V72 Securing Linux with RACF on z/VM (Alan Altmark, IBM)

In this session we will discuss the new z/VM LDAP server and how to use it with the z/VM RACF Security Server. Learn how to create a shared user name space and authenticate Linux users against the RACF database.

V9 z/VM Performance TRACK

V91 z/VM Performance Update

(Bill Bitner, IBM)

This presentation covers new developments in z/VM performance and capacity. Included are discussions of the performance and capacity characteristics of new and recent z/VM releases and of performance-related service.

V92 z/VM System Limits

(Bill Bitner, IBM)

This presentation examines z/VM's theoretical and practical operating limits. It discusses the reports and other data you can use to evaluate how close your system is to those limits. Included is a brief look at some of the ways IBM tests these limits.

V94 Performance Toolkit for VM – Product Update

(Bruce Dailey, IBM)

Performance Toolkit for VM is a powerful tool from IBM for monitoring z/VM system performance that was introduced as an optional, priced feature with z/VM V4.4. With additional enhancements in z/VM V5.1, Performance Toolkit replaced VMPRF and RTM. This presentation will focus on the enhancements to Performance Toolkit for VM that are associated with z/VM V5.2 and with the newly available z/VM V5.3.

V95 Performance Toolkit for VM - Hints and Tips (Bruce Dailey, IBM)

Performance Toolkit for VM is a powerful tool from IBM for monitoring z/VM system performance. Come to this session to learn some uses and configuration hints to help you realize the full potential of this tool.

V96 Tivoli OMEGAMON XE on z/VM and Linux (Raymond Sun, IBM)

z/VM is critical to growing use of software running on Linux guests. Managing this environment requires insight into resource consumption at the z/VM level and at the Linux guest level. IBM's product offerings provide an integrated way to monitor (and manage) these performance characteristics. This presentation will discuss the current offerings - functionally, as an integrated solution, with user scenarios, and within the larger system management infrastructure. It will also provide a roadmap for futures with the expectation of gathering advice.

Linux sessions: General Interest, Performance, Applications, Networking, System Management, Security, Installation and hands-on-labs

L0 General Linux on System z TRACK

L01 What 's New for Linux on System z? (Horst Hummel, IBM)

The session will attempt to give an impression of how Linux development for System z works, and where we are heading. So the first part gives you an overview how Open Source development works within IBM. How do we get new functionality upstream into the current Linux kernel and how do we get this functionality into current distributions.

The second part of this session will provide an overview of new features in Linux on System z that are currently under development by IBM and the open source community, and are expected to be provided with upcoming releases of Linux enterprise distributions. We will address both System z specific features and some current platform-independent developments in Linux

L02 Understanding the Technology Advantages of Running Linux on z/VM (Reed Mullen, IBM)

The IBM z/VM hypervisor is a key component in most System z Linux success stories. This is because z/VM offers an extensive set of virtualization technologies that enable users to enjoy significant cost savings when deploying Linux-based solutions on the mainframe. This presentation will explain in some detail the various virtualization capabilities in z/VM that enable users to achieve these cost savings and simplify the operational tasks needed to host a large-scale virtual server environment.

For additional sessions of this theme, please check the “V” (z/VM) sessions.

G54 What are universities doing with System z? **(Dr. Malcolm Beattie, IBM)**

This session will talk about some of the ways in which universities across Europe have been bringing mainframe knowledge to their students. The IBM System z University Program for Europe works with universities and clients and supports them in a number of ways, advancing the goals of the IBM Academic Initiative for System z. The presenter will describe some of the events, courses, online projects and other work that universities have been doing this last year to help enthuse and educate those who will be forming the next generation of IT professionals.

L03 Linux Security **(Dr. Malcolm Beattie, IBM)** **(Abstract forthcoming)**

L04 Integrated Removable Media Manager for the Enterprise on System z (IRMM) **(Wolfgang Mueller, IBM)**

Come hear about the IBM Integrated Removable Media Manager (IRMM) for the Enterprise on IBM System z, announced August 7th, 2007. IRMM is a new, robust systems management product for Linux on IBM System z that manages open system media in heterogeneous distributed environments and virtualizes physical tape libraries. IRMM combines the capacity of multiple heterogeneous libraries into a single reservoir of tape storage that can be managed from a central point. IRMM complements Linux on System z consolidation efforts.

L05 Linux on System z information – help us to help you! **(Maria Eisenhaendler, IBM)**

Seize this chance to talk to one of the lead writers on the Linux on System z information team! Make your needs heard and influence Linux on System z information. Learn who we are, what we can do, and help us to create the information you need.

Are you new to Linux on System z?

- Learn what's available now
- Find out where to find it.

Have you seen it all before ?

- Hear what IBM plans for new approaches to information
- Tell us what you think and what you want to see
- Learn how you can give ongoing feedback to IBM Information Development.

L06 Linux on System z: What new in the I/O Area ? (Horst Hummel, IBM)

This presentation gives an overview on new features in the IO area - especially zFCP (e.g. 'FCP performance data collection'), DASD (e.g. 'PAV support on LPAR') and generic new features (e.g. 'Improved handling of dynamic subchannel mapping' or 'Channel path measurement data'). The focus of the presentation is the functional description of the major enhancements and some usage related hints and tips. Finally the presentation shows in which distributions they are integrated and gives an outlook on future directions of Linux on System z I/O development.

L07 Logical Volume Management for Linux on System z (Horst Hummel, IBM)

This presentation will show how disks (SCSI and DASD) are seen in a multiple path environment and how they are treated by the operating system. The Focus of this presentation is the System z specific part of the multipath solution, how to deal with zFCP/SCSI and how to use multipath in combination with DASD Parallel Access Volume (PAV) support on LPAR. In addition there will be a short visit to related themes (e.g. disk mirroring or GDPS/PPRC for Linux on System z) and an outlook on possible future directions of logical volume management.

L08 Additional Feet for the Penguin: SCSI over FCP Multipathing (Martin Peschke, IBM)

Using storage attachments with less than two independent paths is more than grossly negligent. So the solution is a waterproof multipathing setup. But that sounds easier than it is and there are several configuration pitfalls. This presentation will give you a multipathing overview and lights the multipathing configuration for SCSI devices connected over FCP.

L09 Making Your Penguin Fly - Introduction to SCSI over Fiber Channel Protocol (FCP) for Linux on System z (Martin Peschke, IBM)

The Linux zfc device driver adds support for Fibre Channel attached SCSI devices to Linux on System z. The Fibre Channel protocol is an open, standard-based alternative and supplement to existing ESCON or FICON connections and becomes more and more important. The intention of this presentation is to give an introduction to the SCSI world on a System z mainframe. Main topics are hardware and software requirements, configuration, performance considerations, IPL and dump. Other points will be FCP support in recent Linux distributions, application areas and FCP troubleshooting basics.

L10 Proven Open Source Software for Linux on IBM System z (Michael Störchle, IBM)

Linux is Linux is Linux...that is also true for Linux on IBM System z. Therefore, Open Source software is also executable on Linux on IBM System z.

Open Source software is very popular and it is widely spread. But which Open Source software products are useful in productive server environments? Which tools are recommendable and have been proofed of value? Within this session such valuable Open Source software tools for Linux on IBM System z will be introduced with focus on systems management.

L2 Introductory Linux for the Mainframe Systems Programmer TRACK

L21 Lab: An Introduction to Linux for the UNIX newcomer Part 1 (Neale Ferguson, Sine Nomine Associates)

What is this thing called Linux? How is it organized? What are its key technologies? How do you start using it? These lab sessions are designed to allow you to answer these questions.

If you are a Linux and UNIX neophyte who would like to start down the Linux path, then plan on attending these sessions. If you are familiar with UNIX already then these labs are probably not for you. This session is continued in session L22 and L23.

L22 Lab: An Introduction to Linux for the UNIX newcomer Part 2 (Neale Ferguson, Sine Nomine Associates)

This is a continuation of session L21 and continues with L23.

L23 Lab: An Introduction to Linux for the UNIX newcomer Part 3 (Neale Ferguson, Sine Nomine Associates)

This is a continuation of session L22.

L24 Lab: An Introduction to Scripting Hands on Lab - Part I (Neale Ferguson, Sine Nomine Associates)

You've been told that Linux on System z is a good thing and that you need to "make it happen". Great. So how do I do this:

```
//REPORT          JOB          51315,  
                  NEALE,  
                  MSGLEVEL=(1,1)
```



```
//RPT          EXEC          PGM=REPORT,PARM='Report Title'
//SYSLIB       DD           DSN=HOME.NEALE,DISP=SHR
//SYSPRINT DD      SYSOUT=*
//IN1          DD           DSN=TMP.PROD.MON.IN001,DISP=SHR
//IN2          DD           DSN=TMP.PROD.MON.IN002,DISP=SHR
//IN3          DD           DSN=TMP.PROD.MON.IN003,DISP=SHR
//OUT          DD           DSN=TMP.PROD.MON.NEALE(OUT),DISP=SHR
```

with Linux? There's no such thing as JCL so how do I control my jobs?

That's where scripting comes in. While in concept CLISTs are similar to scripting in Linux the analogy doesn't stretch very far. You have to face facts: I need to learn bash, ksh, or csh. "Where do I start?" you ask. This hands-on lab attempts to serve as your starting point as you are introduced to the basics of bash scripts and learn how to achieve what JCL used to do for you.

This session is continued in session L25.

L25 Lab: An Introduction to Scripting Hands on Lab - Part 2 (Neale Ferguson, Sine Nomine Associates)

This is a continuation of session L24.

L3 Linux on System z Installation TRACK

L31 Lab: Linux on System z Installation Lab - Part 1 (Mario Held, IBM and Ursula Braun, IBM)

Since its first going-public in 1999, Linux on the mainframe has found its place next to z/OS, z/VM and z/VSE. This lab is the chance for all who either know Linux or the mainframe but have never tried the combination of both. Part I will begin with an assisted installation of a recent mainframe Linux distribution and will result in a fully installed system. After this lab attendees should be able to install a mainframe Linux in their environment from scratch.

L32 Linux on System z Installation Lab - Part 2 (Mario Held, IBM and Ursula Braun, IBM)

This is a continuation of session L31.

L33 Linux on System z Installation Lab - Part 3 (Mario Held, IBM and Ursula Braun, IBM)

This is a continuation of session L32.

L4 Networking with Linux on System z Track

L41 Communication Controller for Linux (CCL) - Technical Update (Alfred B Christensen, IBM)

The Communication Controller for Linux (CCL) on System z offers an opportunity to modernize the traditional SNA subarea access environment that typically consist of ESCON channel-attached and Token-ring LAN-attached IBM 3745s running NCP and optionally NPSI. CCL allows you to continue using selected NCP and NPSI functions, but at the same time migrate away from ESCON channels, Token-ring hardware, and IBM 3745 hardware. CCL is a program product that emulates the IBM 3745 hardware so that the NCP can run on top of CCL in a Linux environment on the System z9 hardware. This session will introduce the CCL technology, its characteristics, and its limitations.

The session will in particular focus on the latest connectivity, performance, and functional enhancement. The current release of CCL (CCL V1.2.1) supports SNA connectivity over OSA fiber technology (QDIO layer-2), OSA for NCP connectivity (emulated CDLC channel) to VTAM and TPF on a System z9, support for non-SNA X.25 workloads through continued use of the NCP Packet Switching Interface (NPSI) product and IBM X.25 Over TCP/IP (XOT) in the CCL environment. Finally CCL V1.2.1 also supports Data Link Switching (DLSw) connectivity into the Linux operating system where CCL operates - offering an option to simplify the overall SNA network infrastructure where SNA data is transported over IP all the way into System z.

L42 Networking with Linux on System z (Ursula Braun, IBM)

Linux on System z offers a lot of possibilities to get your system connected to a network, including both virtual intra-machine as well as inter-machine connections. This presentation will give an overview of all the network devices supported by Linux on System z. Examples will show how to set up networking on your system using OSA, z/VM Guest LAN, z/VM VSWITCH, and HiperSockets. You will learn how to configure a network device manually and how to configure a network device automatically in RedHat and Novell distributions.

The presentation will end with more advanced network topics such as VLAN and Channel Bonding.

L5 Linux on System z Applications / Application Development TRACK

G16 System Automation Application Manager (Dr. Norbert Lenz, IBM)

How can you automate the operations of your heterogeneous business applications running on z/OS, AIX, Linux, Windows, SUN Solaris? With IBM Tivoli System Automation Application Manager (the next version of System Automation for Multiplatforms End to End Automation) you can automate the availability of your business applications end to end from a single point of control, managing cross cluster dependencies. The functionality and platform coverage of System Automation Application Manager is extended to include coordinated disaster recovery scenarios covering z/OS and distributed platforms.

L6 Linux on System z User Experience TRACK

L61 Linux on z/VM - OSS, Clustering and high availability (Armin A. Arbinger, ZIVIT DE)

What can be done with Linux on System z? Come to this session to get

an idea, what is possible with Open Source Software, how Clustering and HA can be done, and hear about the experience the customer gained.

E66 SOA with z/VSE, z/VM and Linux on System z (Oskar Lang, ALCAD of Slovenia)

This customer presentation shows a short history of Alcad, and their position especially in z/VSE, z/VM and Linux on System z environments. The main focus in this presentation is SOA, how Alcad approached this architecture, and developed a solution to their main customer, which totally reengineered the time to market process. This is a new innovation for this area of industry in Slovenia. The presentation shows, how a SOA solution integrates existing applications in different environments, with new solutions, in z/VSE, z/VM and Linux on System z. This is a success story of the cooperation between the customer, Alcad and IBM.

L7 Linux on System z Systems Management and Security TRACK

G17 GDPS/PPRC Multi Platform Resiliency for System z (Cross- Platform Disaster Recovery) (Dr. Norbert Lenz, IBM)

If you are using Linux on System z together with z/OS for your critical business applications, how can you provide coordinated high availability and disaster recovery? With GDPS/PPRC Multi Platform Resiliency for System z and IBM Tivoli System Automation you can manage the Linux and z/OS systems and their data in a coordinated way, supporting planned and unplanned restart of systems in place, HyperSwap and site takeover. These functions are available for Linux systems running under z/VM and in LPARs on System z.

L72 Easy z/VM Linux Guest System Deployment and Management with IBM Director (Chuck Brazie, IBM)

IBM Director 5.20 provides basic systems management for Linux on IBM System z and z/VM. For Linux on System z, the base Director functions such as monitoring, event action plans, task scheduling, etc., are available like on any other IBM platform. For z/VM, a Director extension called “z/VM Center” enables you to provision, configure and manage Linux guests from a Director console. Learn more about these capabilities at this session.

L73 Data Center Automation Managed from Linux on System z (Claudia Prawirakusumah, IBM)

Starting with IBM Director on Linux for System z, you've got several options to grow into an enterprise-wide 'Data Center Automation' implementation with Linux on System z hosting the central management site. Data Center Automation in the definition of client, where this solution has been implemented, comprises Server deployment, software distribution, patch management to servers which spread across different locations. In this session, growth paths from IBM Director to components of the Tivoli Service Management portfolio are evaluated – and finally detailed with implementation details of the already mentioned client implementation.

L74 Linux on System z: Security Features and Configurations (John C “Jack” Jones, IBM)

Linux was introduced to the System z family several years ago. This session will discuss the differences and benefits of running Linux on System z from a security point of view. It will identify different open source security products, how they might be enhanced with System z security features, and how they might be integrated with z/OS. Customer configurations will be used as examples.

L75 The IBM Tivoli Service Management Center for System z (Raymond Sun, IBM)

The IBM Tivoli Service Management Center for System z is a set of integrated solutions that enable System z as a highly reliable hub for efficient management of business and IT services that span the enterprise, bringing service management and process automation to System z. In this session, we'll examine industry pressures and inhibitors, how service management and process automation can address these issues, and look at specific scenarios showing how Tivoli Service Management Center for System z can deliver service management and process automation capabilities, through integrated Tivoli solutions.

L76 Backup consolidation with TSM on Linux for System z (Ulf Troppens, IBM)

This session shares the experience of deploying a TSM server farm on Linux for System z. It briefly introduces TSM and gives recommendations to configure such a large environment.

L9 Linux on System z Performance TRACK

L91 Linux on System z Performance Update (Mario Held, IBM)

This presentation gives a short introduction into general aspects of System z hardware. It then focuses on performance data obtained with Linux on System z measurements. The discussed results show the performance exploitation of IBM hardware, performance improvements in the Linux kernel, performance statements on current Linux distributions and performance experiences with software products.

L92 Performance Tuning for Linux on System z (Mario Held, IBM)

This session is focused on tuning recommendations for Linux on System z. It covers recommendations on the Linux kernel, system setup, the gcc compiler, Java, efficient use of IBM hardware, including disk I/O, networking and cryptography, and Linux performance tools. It is based on frequently asked questions about Linux on System z performance.

L93 Linux on z/VM Performance Cases (Rob van der Heij, Velocity Software GmbH)

The Performance Monitor is your friend when diagnosing problems, performance problems as well as others. This presentation will present some "real life" case studies to show how to diagnose problems and analyze resource efficiency by combining different performance metrics. The cases presented are about z/VM as well as Linux on z/VM.

L94 Linux on z/VM - Java Performance Aspects (Rob van der Heij, Velocity Software GmbH)

Java-based application frameworks like WebSphere and JBoss are getting popular for use with Linux on z/VM. The additional layer introduced by the Java Virtual Machine (JVM) makes it sometimes hard to understand the performance characteristics of the application. This presentation will show some of the Java performance research that Velocity Software does to better manage deployment of Java-based frameworks.

V96 Tivoli OMEGAMON XE on z/VM and Linux (Raymond Sun, IBM)

z/VM is critical to growing use of software running on Linux guests. Managing this environment requires insight into resource consumption at the z/VM level and at the Linux guest level. IBM's product offerings provide an integrated way to monitor (and manage) these performance characteristics. This presentation will discuss the current offerings - functionally, as an integrated solution, with user scenarios, and within the larger system management infrastructure

L97 Configuring Linux on z/VM for Performance (Barton Robinson, Velocity Software GmbH)

Many installations have failed in their proof of concept because of simple errors in the configuration. Linux on System z is NOT Linux on Intel. The requirements are different. But on System z, we have technologies that other platforms can only dream of - and utilizing those

technologies often means the difference between success and failure. This presentation provides configuration guidelines on how to configure Linux for performance and success.

z/VSE Sessions - General Interest, SOA and On Demand Connectors, System Management and Performance

E sessions for z/VSE

On January 9, 2007, IBM announced that "IBM z/VSE V4.1 is generally available, supports z/Architecture, and introduces Sub-Capacity pricing".

E4 z/VSE General Interest TRACK

E41 z/VSE Version 4 News and Views (Wilhelm Mild, IBM)

This session focuses on z/VSE Version 4. It covers z/VSE status, content, strategy (including SOA and interoperability), as well as the benefits of an hybrid environment incorporating the best of z/VSE and Linux on System z. The session will also review attractive new MWLC pricing (with full-capacity and sub-capacity options) introduced exclusively for z/VSE V4 on IBM System z9. It includes examples of z9 BC and z9 EC opportunities made possible by IBM's renewed emphasis on z/VSE V4.

E42 z/VSE Version 4 featuring Midrange Workload License Charge (MWLC) software pricing for IBM System z (Dr. Klaus Goebel, IBM)

On March 16, 2007, IBM delivered z/VSE V4.1, a 64-bit enabled, z/Architecture version of z/VSE. IBM also introduced a new software pricing metric known as MWLC. MWLC offers both full-capacity and sub-capacity options. MWLC applies only to z/VSE V4 and 12 key VSE-related IBM middleware software products running on IBM System z9 BC and z9 EC servers. MWLC software pricing offers excellent value for customers. Together, the z/VSE V4.1 and MWLC announcements represent a major revitalization of z/VSE. This session provides a "deep dive" into implementation details and customer advantages of this new software pricing metric. It is designed to help customers understand:

- MWLC full-capacity and sub-capacity modes
- MWLC terms and conditions, implementation, and processes
- Benefits of MWLC for customers considering z/VSE V4 and z9 BC or z9 EC servers

E43 z/VSE Version 4 Exploitation and Enterprise modernization (Wilhelm Mild, IBM)

The 64-bit support and the new functions can help significant in decisions for new modern Solution Architectures and Optimizations. This session shows new functionality and extensions in z/VSE 4 and how they can contribute to modernize your heterogeneous IT environment. The integration with Tivoli TSM and IBM Middleware enables modern enterprise solutions with z/VSE.

E44 z/VSE Birds-of-a-Feather (Wilhelm Mild, IBM and z/VSE Panel)

This is an open discussion with the IBM Boeblingen z/VSE team. There will be no prepared presentation. Please bring your own questions and thoughts on the present, future, directions, priorities, concerns, etc. Let us know what we're doing right as well as what we are doing wrong. Both compliments and criticism will be accepted. This is your session.

E45 z/VSE Requirements Session (Wilhelm Mild, IBM)

We'll answer your questions, and review your own ideas for modernizing your specific IT environment.

E46 Approaches to Application Development for z/VSE (Wilhelm Mild, IBM)

Modern development tools help increase productivity and lower the error rate. What about the possibility of using them to develop and support applications for z/VSE? A variety of methods and tools will be shown in this presentation. What about developing based on a standard application design and a generation platform such as Eclipse? You may be surprised to find the range of possibilities for z/VSE.

E47 Live Demo for Modern Application Development Across the Enterprise including z/VSE (Wilhelm Mild, IBM)

Come to this last session of the week to see the live demo for modern application development across the enterprise including z/VSE.

E6 z/VSE SOA and On Demand Connectors

E61 User Experiences with z/VSE Connectors Wilhelm Mild, IBM)

Discover what you can do with new function already working in real customer environments. Environments similar to yours have implemented modern, mixed, hybrid business solutions involving z/VSE and other platforms. This session will describe actual, real-life scenarios and the steps taken to create solutions that exploit data interchange in a distributed environment. Development tools and transparent data access methods allow integration of z/VSE processes into the WebSphere architecture. Business Intelligence solutions and intelligent business architectures work with DB2 Server on z/VSE and DB2 UDB on Linux for System z, on the same mainframe.

E62 SOA and z/VSE: Implementing SOA using Web Services and Tools.

Wilhelm Mild, IBM

Service Oriented Architecture (SOA) is the concept for new modern solutions. We'll see how the concepts of SOA can be used to generate Web Services from existing CICS Applications and the tool that brings SOA close to VSE. The CICS2WS Toolkit is a "charge" development tool that reads WSDL files and Copybooks, and enables VSE to act as a Web Service provider (server) and as a Web Service requestor (client) in an SOA environment.

E63 Tools around z/VSE (operation, SOA) (Ingo Franzki, IBM)

The z/VSE web site offers more than 20 tools ('as is', at no additional charge) for download. The tools are designed make certain z/VSE tasks easier and more interesting. Because of the sheer number of tools, you may have lost track about what tools are provided and what they are for. There may be a tool available that you are not aware of, for a task you need to perform. This session will provide an overview of each the tools that are currently available on the VSE homepage. For every tool, a short description and usage scenarios will be discussed.

E64 The VSAM Redirector Technology (with live demo) (Wilhelm Mild, IBM and Ingo Franzki, IBM)

The VSAM Redirector began as an integrated function for data propagation. It has evolved to a more flexible technology that supports VSAM-to-relational data synchronization, and incremental processing. This session will highlight practical possibilities to replace FTP, normalize your VSAM data in multiple tables on a database, populate a Data Warehouse (in real time), and more.

E65 Rational Application Developer for z/VSE (with live demo) (Wilhelm Mild, IBM and Ingo Franzki, IBM)

This session shows the options for a modern development environment for z/VSE. It focuses on a live demo of the IBM WebSphere Developer for System z (WDz) product. You will see how you can develop z/VSE CICS and batch applications in COBOL, PL/1 or Assembler using this modern application development framework based on the open platform Eclipse. WDz provides powerful editing capabilities, including syntax highlighting, outline view, code assist. Local syntax check using a built in compiler, as well as remote compiles on z/VSE make it a lot easier to develop and maintain applications.

E66 SOA with z/VSE, z/VM and Linux on System z (Oskar Lang, ALCAD of Slovenia)

This customer presentation shows a short history of Alcad, and their position especially in z/VSE, z/VM and Linux on System z environments. The main focus in this presentation is SOA, how Alcad approached this architecture, and developed a solution to their main customer, which totally reengineered the time to market process. This is a new innovation for this area of industry in Slovenia. The presentation shows, how a SOA solution integrates existing applications in different environments, with new solutions, in z/VSE, z/VM and Linux on System z. This is a success story of the cooperation between the customer, Alcad and IBM.

E7 z/VSE System Management, Security and Performance

E71 Storage Options and Disaster Recovery for z/VSE (Storage Devices, PPRC, Backup Concepts, Flashcopy, DR) (Wilhelm Mild, IBM)

New functions in IBM Total Storage products and concepts in z/VSE increase your flexibility for cloning, continuous operations, data recovery and disaster situations. This session shows you the options you have to exploit these concepts with IBM Storage Subsystems.

E72 z/VSE Performance Update (Ingo Franzki, IBM)

This session will share the latest on z/VSE V4 and V3 performance. This information may be useful in managing your own overall performance, including distributed environments. For example, how does z/VSE V4 compare with prior versions/releases of VSE? What are the performance implications of z/VSE and Linux mainframe environments? What about 64-bit and SCSI?

E73 z/VSE Security Concepts and News (Ingo Franzki, IBM)

This session provides an introduction to z/VSE security concepts. It includes CICS and batch security, plus connector and network security. It will cover the standard RACROUTE interface, as well as z/VSE security concepts in an open and heterogeneous world where z/VSE may be connected to anyone and everyone. It will cover new security features first introduced in z/VSE V3.1.1, plus z/VSE V4 enhancements like the new auditing features

E74 z/VSE Security Exploitation with Crypto Hardware (Ingo Franzki, IBM)

This session shows how z/VSE security features like SSL (Secure Socket Layer) can be exploited. It contains step by step instructions on how to create keys and certificates for use with SSL. In addition, this session will describe z/VSE cryptographic capabilities, including Crypto Express2 and CP Assist for Cryptographic Function (CPACF). This session also covers z/VSE's support for the TS1120 encrypting tape drive.

E75 Virtual Tape functionality in z/VSE. Usage and news. (Ingo Franzki, IBM)

This session covers the latest news about VSE VTAPE and shares hints and tips for best usage. It covers various usage scenarios for VTAPE including electronic product and service delivery, Integration of VSE into a Tivoli Storage Manager environment, as well as other distributed backup environments.

TS- System Storage Tracks

TSB- System Storage - Business Continuity and Disaster Recovery Sessions

TSB01 Business Continuance: Some Lessons Learned and IBM Solutions (Vic Peltz, IBM)

The collapse of the New York World Trade Center towers and the flooding of New Orleans once again have brought into focus the importance of companies having a workable and practical Business Continuity Plan. This session will discuss some of the important lessons to be learned from these disasters and highlight IBM hardware and software which can assist in implementing economical solutions to enable an appropriate level of protection.

TSB02 Update on Multi-site Business Continuity Strategies (Vic Peltz, IBM)

Many customers are investigating and implementing multi-site data center strategies to protect against regional as well as local disasters. This session will discuss the current state of hardware and software technology which can help implement a multi-site data center strategy. Failover / fallback and performance considerations will be discussed.

TSB03 IBM Disk Mirroring Update for System z (John Sing, IBM)

This session provides an update on IBM disk mirroring in the System z environment. New functions of IBM disk mirroring on IBM DS8000 are introduced, and high level implementation guidelines are provided. Topics include: FlashCopy SE, z/OS Basic HyperSwap, z/OS Global Mirror Multiple Reader support, Extended Distance FICON, z/OS Global Mirror SDM on zIIP engine. Three site mirroring topics are: update on DS8000 Metro/Global Mirror, preview of GDPS/XRC + GDPS/PPRC HyperSwap Incremental Resync. A basic understanding of IBM disk mirroring is assumed..

TSD- System Storage - Disk Storage Sessions

TSD01 IBM DS8000 Disk System Update (Bob Halem, IBM)

The DS8000, IBM's premier storage subsystem has been receiving rave reviews all over the world. Since last year, there have been some major enhancements in performance, capacity and feature/function. This session will discuss the basic features, but focus on the newly announced enhancements.

TSG- System Storage - General Interest Sessions

TSG01 Overview of Storage Options for System z (Bob Halem, IBM)

There are many options for disk and tape on System z. This session will be a very quick review of almost all of those options. There will be detailed sessions on all topics

for further information later in the conference. If you are new to System z or to Storage, this would be a good place to start.

V55 z/VM Device Support Overview

(Eric Farman, IBM)

Come to this presentation to hear an overview of current device support available on z/VM Version 5. The speaker will discuss Disk, Tape, and OSA technologies available for VM system I/O and guest operating systems running under z/VM. This presentation is also well-suited for an audience new to z/VM.

V57 Introduction to the IBM System Storage DS6000 (for z/VM) **(Eric Farman, IBM)**

This presentation brings you up to date on the IBM System Storage DS6000, an affordable storage solution specifically designed to help medium and large enterprises simplify their storage infrastructures, support business continuity, and optimize information life cycle management. The DS6000 provides both SCSI and FICON attachment, enabling it to serve the needs of your z/OS, z/VSE, z/VM and Linux operating systems.

V58 Using z/VM in a SCSI Environment

(Eric Farman, IBM)

This presentation will provide an overview of the z/VM new native support for SCSI disks and how they can be used to install, IPL and run your z/VM system in a SCSI-only environment. z/VM Version 5 supports SCSI FCP disk logical units (SCSI disks) for both system and guest use. SCSI disks can be used as emulated 9336 Model 20 fixed-block-architecture (FBA) disks. Guests that support FBA disks (such as CMS, GCS and VSE) can use SCSI disks through the emulated-FBA support without requiring their own SCSI support. VM's SCSI support allows a Linux server farm to be deployed on z/VM in a configuration that includes only SCSI disks. ECKD™ disks are no longer required. Installation of z/VM from DVD to a SCSI disk, IPL from a SCSI disk using Stand-Alone Program Loader (SAPL) and VM system dumps to a SCSI disk are supported. DASD Dump/Restore (DDR) services using SCSI disks are supported when DDR is running under CMS. This presentation will also provide information on current updates, such as new support for the IBM SAN Volume Controller (SVC).

L07 Logical Volume Management for Linux on System z **(Horst Hummel, IBM)**

This presentation will show how disks (SCSI and DASD) are seen in a multiple path environment and how they are treated by the operating system. The Focus of this presentation is the System z specific part of the multipath solution, how to deal with zFCP/SCSI and how to use multipath in combination with DASD Parallel Access Volume (PAV) support on LPAR. In addition there will be a short visit to related themes (e.g. disk mirroring or GDPS/PPRC for Linux on System z) and an outlook on possible future directions of logical volume management.

L08 Additional Feet for the Penguin: SCSI over FCP Multipathing **(Martin Peschke, IBM)**

Using storage attachments with less than two independent paths is more than grossly negligent. So the solution is a waterproof multipathing setup. But that sounds easier than it is and there are several configuration pitfalls. This presentation will give you a multipathing overview and lights the multipathing configuration for SCSI devices connected over FCP.

L08 Making Your Penguin Fly - Introduction to SCSI over Fiber Channel Protocol (FCP) for Linux on System z (Martin Peschke, IBM)

The Linux zfcp device driver adds support for Fibre Channel attached SCSI devices to Linux on System z. The Fibre Channel protocol is an open, standard-based alternative and supplement to existing ESCON or FICON connections and becomes more and more important. The intention of this presentation is to give an introduction to the SCSI world on a System z mainframe. Main topics are hardware and software requirements, configuration, performance considerations, IPL and dump. Other points will be FCP support in recent Linux distributions, application areas and FCP troubleshooting basics.

E71 Storage Options and Disaster Recovery for z/VSE (Storage Devices, PPRC, Backup Concepts, Flashcopy, DR) (Wilhelm Mild, IBM)

New functions in IBM Total Storage products and concepts in z/VSE increase your flexibility for cloning, continuous operations, data recovery and disaster situations. This session shows you the options you have to exploit these concepts with IBM Storage Subsystems.

TSP- System Storage - Performance Sessions

TSP01 Revisiting the basics of DASD IO performance (Tom Beretvas, Enterprise Performance Strategies, Inc.)

With all the advances in DASD I/O performance such as FICON, PAV, new storage processors, it is time to go back and revisit the basics of DASD I/O performance. This presentation reviews these basics, showing recommended values, (ROT's) and indicates how to examine performance, how to approach "tuning".

TSP02 DASD Tuning (Tom Beretvas, Enterprise Performance Strategies, Inc.)

This presentation begins by discussing basic tuning rules. These tuning rules are universally applicable (or at least is so claimed by author.) Then two different approaches of tuning are discussed, one using the RMF Spreadsheet Reporter, the other one using RMF Magic, a software product. The two approaches are contrasted, advantages and disadvantages are shown.

TSP03 Performance of MVS I/O Systems 2006-2007 **(Tom Beretvas, Enterprise Performance Strategies, Inc.)**

This paper summarizes the I/O subsystem measurements for some MVS (z/OS) installations with the intention of determining current I/O performance parameter values. Once the range of customary values is determined, then they can be used for capacity planning, design and setting future objectives. These parameters also yield an idea of how much tuning is still required in the I/O area, and where the emphasis should be. With these objectives in mind, measurement data of recent vintage for about 50 installations are examined. Interesting observations include access density change trends.

TSS- System Storage - Storage Management Software Sessions

TSS01 What's New in DFSMS 1.10 **(Scott Drummond, IBM)**

This session will review the new functions/features of the new preview announced release - DFSMS 1.10. We'll review new items in the categories - Scalability, Performance, Optimization, Networking and Ease of Use. Additionally, we'll review new storage hardware support provided by DFSMS.

TSS02 DFSMS Basics: Introduction to Access Methods **(Stephen Branch, IBM)**

It's not just a question of how to your data, but also, what is the best access method for your application. DFSMS provides an abundant selection of access methods which you can use to access your data based on the nature of the application. This session will focus on the various data sets types available to users of z/OS with particular emphasis on Physical Sequential and Partitioned and Extended Partitioned data sets, how they are used in applications, and what access methods are used to process these data sets. We will also explore some of the many utilities that are provided to let you work with the data sets.

TSS03 DFSMS Basics: What Is VSAM? **(Stephen Branch, IBM)**

Not just an access method, not just a data set type - It's both! Learn what the Virtual Storage Access Method is, and what it can do for you. We will talk about the various VSAM data set types and how they can be used to help you with your z/OS applications. Learn about the VSAM data types and which ones to choose for your specific needs. Learn what an alternate index is and how it can be used to retrieve records by different keys. Get an understanding of how to create and work with VSAM data sets. You should have some prior knowledge of z/OS access methods for this session.

TSS04 DFSMS Basics: How SMS Volume Selection Works

(Stephen Branch, IBM)

Have you ever wondered why your data set ended up in a particular storage group? Have you ever wondered why SMS picked a particular volume on which to place your data set? If so here is your chance to learn the ins and outs of SMS volume selection. The volume selection logic has been refined over the various z/OS releases. The speaker will address the latest changes to the volume selection algorithms.

TSS05 Storage Management Tools on System z (Scott Drummond, IBM)

This session provides an overview of the IBM System z Storage Management strategy and how it ensures existing and future investments are well positioned to satisfy growing business demands. Details are provided about each layer of the IBM System z Storage Management strategy: Process management, IBM Service Management foundation and Operational management.

TSS06 Managing Storage Hardware with TPC and TPC for Replication (Scott Drummond, IBM)

This session will explore how to manage storage hardware with IBM TotalStorage Productivity Center and IBM TotalStorage Productivity Center for Replication. We'll primarily focus on management, performance reporting, problem identification and resolution, monitoring and alerting in the first part of the session. In the second portion of this session, we'll review TPC for Replication provides ease of use functionality for disk based replication functions - Metro Mirror, Global Mirror and Metro Global Mirror.

TSS07 What's New in DFSMSHsm (Edward Baker, IBM)

This will cover the most recent enhancements to DFSMSHsm, including the recently announced enhancements for the upcoming DFSMS R10 and a review of the DFSMSHsm R8 and R9 items as well as any recent development APAR activity. If you need to keep up with that fast moving DFSMSHsm landscape, this is the session you need to attend.

TSS08 DFSMSHsm Best Practices (Edward Baker, IBM)

DFSMSHsm has made many improvements in recent releases to its Fast Replication support, which allows installations to make very fast copies of critical data while minimizing and in some cases eliminating application downtime. This is especially important for an application such as DB2. This session also describes how DFSMSHsm Fast Replication and DB2 Backup system utilities together provide for a Continuous Data Protection (CDP) solution for DB2.

TSS09 Extracting Data from DFSMSHsm (Edward Baker, IBM)

Are you struggling to get the kind of information you need out of DFSMSHsm that you need to properly manage your DFSMSHsm environment? This presentation covers how you can use existing tools to extract data from DFSMSHsm and create the kind of reporting you need to effectively and efficiently manage your DFSMSHsm environment.

TSS10 IBM FlashCopy SE Overview and Implementation Guidelines (John Sing, IBM)

In 4Q2007, IBM introduced DS8000 FlashCopy SE, a space-efficient FlashCopy function. This session is a detailed technical review of IBM FlashCopy, and then presents the concepts, implementation guidelines, and best usage practices for FlashCopy SE in a System z environment. Suitable for both IT technical storage managers and storage administrators,

TST- System Storage - Tape Sessions

TST01 IBM Tape Solutions for Mainframe (Axel Melber, IBM)

Tape backup isn't what it used to be. From ultra-high capacity tape to electronic vaulting of virtual volumes, new technologies have changed the way tape backup is done. This session will review IBM's recent tape announcements and will cover native drives, automation and virtual tape subsystems for mainframe systems.

TST02 The IBM Virtualization Engine™ TS7700 (Axel Melber, IBM)

Introduced in 2006, the IBM Virtualization Engine TS7700 continues the highly successful story of IBM tape virtualization, that started more than a decade ago. Come learn what is new in IBM's latest tape virtualization solution for mainframe.

TST03 Managing Data Security – Tape Encryption (Axel Melber, IBM)

The loss of customer sensitive information can be quite costly. IBM's recent announcement of encryption support adds a new level of security for sensitive data being transported on cartridges. This presentation covers IBM's tape drive encryption support as well as key management solutions for the enterprise.

V59 z/VM and TS1120 Tape Encryption

(Eric Farman, IBM)

The IBM System Storage TS1120 tape drive is now capable of encrypting tapes as it writes them. This presentation will provide a high-level overview on how the solution works and how to utilize the tape encryption support available for z/VM Version 5 and its guests, including those guests that do not understand tape encryption themselves.

L04 Integrated Removable Media Manager for the Enterprise on System z (IRMM) (Wolfgang Mueller, IBM)

Come hear about the IBM Integrated Removable Media Manager (IRMM) for the Enterprise on IBM System z, announced August 7th, 2007. IRMM is a new, robust systems management product for Linux on IBM System z that manages open system media in heterogeneous distributed environments and virtualizes physical tape libraries. IRMM combines the capacity of multiple heterogeneous libraries into a single reservoir of tape storage that can be managed from a central point. IRMM complements Linux on System z consolidation efforts.

ISV / Vendor sessions

P01 Cisco's latest FICON Director: "The force is strong with this one." (Brent Anderson, CISCO Systems, Inc.)

This is a tool for a skilled FICON architect. Not a clumsy or random blaster; an elegant FICON director for a civilized age. This session focuses on the investment protection aspects of the new 8Gbps FICON cards, Quality of Service, NPIV, FICON Tape Acceleration Virtualization of fabric services, and best practices for tuning your channel extension implementation.