Topic: Linux Certification Testing

Session: C01

Title: Linux LPI Certification Testing

Abstract:

Attention IBM PartnerWorld Members, IBM Business Partners, & IBM Certified Professionals...
Free LPI Linux Certification Tests
Thinking about getting Linux certified? Take advantage of the no-charge LPI certification test at the conference. In conjunction with the Linux Professional Institute (LPI), IBM will offer the Linux certification exam LPI-101 (a value of $100) at no-charge for all IBM PartnerWorld members, as well as anyone who already has an IBM Professional certification.
Registration for the exam LPI-101 will be at the developerWorks pedestal in the IBM booth in the EXPO Monday and Tuesday night. Please bring your PartnerWorld ID Number or proof of your IBM Professional Certification (i.e., a copy of your certificate or your certification business card) to register.
The exam, which takes approximately 1.5 - 2 hours to complete, will be delivered in the **Burgundy Room** on the 1st floor at the following times:

- Wed, October 9th at 8:30 AM, 10:30 AM, 1:00 PM, and 3:00 PM
- Thurs, October 10th at 8:30 AM, 10:30 AM and 1:00 PM

As a reminder, the first 50 candidates for this event will receive the O'Reilly reference book 'LPI Linux Certification in a Nutshell'.

Topic: VSE Connectors Lab Sessions

Session: E10

Title: VSE Connectors Lab : Setup the e-business Connectors to access VSE Resources Part 1

Speaker: Wilhelm Mild, IBM

Abstract:

Today's heterogeneous environments are more and more dependent to exchange data in a comfortable manner and integrate their resources in a distributed computing world.
This Hands-on Lab will guide you step by step to install and setup the VSE e-business Connectors to access VSE resources from remote systems. You will learn how to interact with your POWER queues or browse through your VSAM data for example. The various scenarios allows you to be as flexible as you want to be, depending on your business needs.
NOTE : Part 1 of this lab starts at **8:15 AM** , so please grab some breakfast and head on up early to Imperial IV for the lab.

Session: E11

Title: VSE Connectors Lab : Setup the e-business Connectors to access VSE Resources Part 2

Speaker: Wilhelm Mild, IBM

Abstract:

Part 2 of this lab continues on at 9:00AM - 10:15AM. Please see E10 for the description.

Session: E12

Title: VSE Connectors Lab : Wrap Up Discussion Part 3

Speaker: Wilhelm Mild, IBM

Abstract:

Now that you've gotten to play with the VSE connectors in lab, come to the wrap up to discuss what you did, ask any questions you have, etc.

Topic: e-business and VSE/ESA Sessions

Session: E21

Title: VSE/ESA 2.6 Connectors: Architecture and Use

Speaker: Wilhelm Mild, IBM

Abstract:

The VSE/ESA connectors provide a base infrastructure that allows the full involvement of VSE/ESA in state-of-the-art e-business processes. Open interfaces allow real time access to VSE resources to include them in web solutions, automation, remote control, and e-commerce. Involving various platforms, the presentation shows VSE/ESA plays well with others in a heterogeneous environment. A demo will show real time access to various types of data and system management possibilities using classical and Java technologies.

Session: E22

Title: VSE Navigator - the free tool for system management tasks (with Demo)

Speaker: Wilhelm Mild, IBM

Abstract:

It's not the big bang, but a big sample of possibilities using the VSE Java-Based Connectors. This session illustrates how to use VSE/ESA resources from the comfort of a PC file system using only your mouse. Edit a VSE job with the editor of your choice and send it by a click to VSE. Start or stop VSE programs. Browse through your VSE data, libraries, catalog, or move library members by drag and drop - even from one VSE system to another. Monitor system activities, VSAM space, or partition balancing, and analyze it in a spreadsheet. As a Pure Java application, the VSE/ESA Navigator can be used on various platforms. And you can get it with a click from the VSE/ESA home page at no charge!

Session: E23

Title: CICS Transaction Server for VSE/ESA: CICS Web Support Overview

Speaker: Chris Smith, IBM

Abstract:

This presentation provides an overview of CICS Web support, which provides a set of services within CICS Transaction Server for VSE/ESA that allows direct connection from a Web browser to CICS without the need for an intermediate server. There are extensions to the EXEC CICS Application Programming Interface for Web aware applications, including the introduction of the Document API. CICS Web Support also provides facilities to enable existing COMMAREA based applications and 3270 transactions to be invoked from the Web without change.

Session: E24

Title: The CICS Transaction Gateway: Web and Java access to CICS

Speaker: Chris Smith, IBM

Abstract:

This presentation provides an overview of the CICS Transaction Gateway -- an IBM e-business connector which provides state-of-the-art access to CICS from the world of Java and the Web. The CICS Transaction Gateway provides the ability to invoke CICS application programs and transactions from any Java program -- Java Applets, Java Servlets, Java Server Pages, Enterprise JavaBeans, or any other Java Application.

Session: E25

Title: IBM WebSphere Application Server Exploitation for VSE Users

Speaker: Ingolf Salm, IBM

Abstract:

Ingolf Salm will present technical information centered around internet, middleware and legacy technology and products required to assess and implement e-business solutions. An introduction into the WebSphere family and the e-business connectors (available with VSE/ESA V2.5) will be included. New possibilities arise with Linux on zSeries

Session: E26

Title: Using WebSphere Studio Application Developer to access VSE Resources (with Demo)

Speaker: Wilhelm Mild, IBM

Abstract:

Websphere Studio Application Developer is an universal tool for developing Complex Java based applications, from the Web interface and the presentation logic to the access of different data resources from local or remote. The use of standard interfaces for VSE/ESA resources, enables the easy and fast development of e-business solutions for VSE/ESA. Based on the internet technologies used by Websphere Studio Application Developer, the session will show live, the power of this development tool by developing a Java application and running it. Come and count the time and mouse clicks necessary for this Java application.

Session: E27

Title: VSE/ESA as client - VSAM Redirector and Virtual Tape Support

Speaker: Wilhelm Mild, IBM

Abstract:

The e-business connectors allow the access of VSE/ESA resources from various remote systems. In this presentation you'll see VSE from the other perspective. Use your existing VSE programs to work with data on a remote system - that's the brand new **VSE/VSAM Redirector** function. The **VSE/ESA Virtual Tape** function lets you emulate a real tape on any Java platform. Your backup to a tape image file on a server can then become a VSE tape on CD-ROM .

Session: E28

Title: TCP/IP for VSE/ESA - Potpourri

Speaker: John Lawson, IntelliWare Systems, Inc.

Abstract:

If you want to hear the latest tips and techniques on implementing and using the IBM/CSI TCP/IP for VSE/ESA product, then you should come to this session. John will cover some of the new functions introduced with the 1.4 release and subsequent service pack updates. Recommendations for tuning, debugging, and monitoring the TCP/IP for VSE product will also be discussed. The speaker will welcome any of your TCP/IP for VSE/ESA questions or any hints and tips you have to offer.

Session: E29

Title: TCP/IP for VSE: Native SSL for VSE

Speaker: Don Stoever, CSI International

Abstract:

Can you guarantee the integrity and confidentiality of information traversing the TCP/IP for VSE network? How can you authenticate clients, servers, and users connecting to VSE, or authenticate VSE client programs to other systems outside of VSE ? State of the art cryptography natively implemented with SSL for VSE can provide these capabilities with secure key exchange, data encryption, secure message hashing, digital signatures, and x509v3 PKI certificates for authentication of clients and servers. These services are now provided to VSE customers in the Secure Sockets Layer feature of TCP/IP for VSE.
In this presentation, the author of SSL for VSE, Don Stoever, will describe the concepts behind SSL for VSE, including a discussion of Public Key Infrastructure (PKI), key exchange algorithms (RSA), secure message hashing (MD5, SHA-1), and encryption techniques (DES, Triple DES). Information about implementing SSL on VSE (e.g. how do you get a RSA private key for your VSE site) will also be provided. Come join Don and get an education into how e-business can be done securely on the VSE platform.

Session: E30

Title: TCP/IP for VSE/ESA Update

Speaker: John Rankin, CSI International

Abstract:

This session will provide a comprehensive product update, for this important IBM product. It will bring you current on all the new enhancements and features that are available within TCP/IP for VSE/ESA. Connectivity Systems TCP/IP for VSE/ESA is the technical underpinning for IBM's E-Business initiatives in VSE/ESA Version 2, Release 5 including MQSeries, DB2 Version 7, the VSE Connectors, the CICS Web Interface and the CICS 3270 bridge. John will also discuss how the new VSE/ESA V2.7 enhancements (HiperSockets and PCICA) relate to TCP/IP.

Session: E31

Title: VSE Connectors and Linux - A User Experience

Speaker: James Gross, Columbian Financial Group

Speaker: Dr. Klaus Goebel, IBM

Abstract:

Come hear James Gross, Manager Technical Services, from Columbian Financial Group discuss how and why his company is using the VSE Connectors and Linux on zSeries. From z/VM, VSE/ESA V2.6, writing Java programs, DB2 UDB, they are leveraging their VSE system and exploiting Linux. Finally, he will discuss their future plans.
To conclude the session, Dr. Klaus Goebel will briefly review how others are using Linux on zSeries.

Topic: CICS Transaction Server for VSE/ESA Sessions

Session: E40

Title: Migrating to CICS Transaction Server for VSE/ESA

Speaker: Chris Smith, IBM

Speaker: John Lawson, IntelliWare Systems, Inc.

Abstract:

CICS Transaction Server for VSE/ESA is where you want to move to take advantage of the many enhancements that it provides -- these include improved reliability, extensive virtual storage constraint relief, storage protection, RDO for files, the External CICS Interface (EXCI), and CICS Web Support.
Part one of this session is an IBM presentation that provides an overview of the key considerations when migrating to CICS Transaction Server for VSE/ESA. This is followed by part two where John Lawson of IntelliWare Systems, Inc., who teaches the IBM CICS Transaction Server for VSE/ESA Migration class, will describe customer migration experiences, issues, and tips.

Session: E41

Title: Exploiting CICS TS for VSE/ESA 31-bit Support

Speaker: John Lawson, IntelliWare Systems, Inc.

Abstract:

After you have migrated to CICS Transaction Server for VSE/ESA, what are some of the options available to you to fully exploit the 31-bit capabilities of this new CICS product? This session will discuss the 31-bit virtual storage support available in CICS TS and the definitions you can change to more fully utilize 31-bit virtual storage. If you want to learn how to gain even more virtual storage constraint relief (VSCR) in your CICS TS partitions, don't miss this session.

Session: E42

Title: Implementing CICS TS for VSE/ESA Shared Data Tables

Speaker: Justin McMurry, IntelliWare Systems, Inc.

Abstract:

If you want to improve the performance of your CICS TS partition by exploiting more data in memory, then this session is the one for you. Data table support has been available in prior releases of CICS/VSE but few users have exploited this data in memory facility of CICS. CICS TS for VSE/ESA has extended the data table support to improve the sharing of CICS data tables between multiple CICS partitions. Our speaker will discuss the concepts of data tables and new support available in CICS TS as well as the steps required to implement shared data tables in your CICS environment.

Session: E43

Title: Problem Determination under CICS TS for VSE/ESA Part 1

Speaker: Chuck Olsen, IBM

Abstract:

Well, CICS TS appears to be here to stay! How comfortable do you feel with your diagnostic skills? During this double session, we will cover problem analysis techniques for the six most common problems besetting CICS TS System Programmers. We have a lot to cover, so we will be starting on time.

Session: E44

Title: Problem Determination Under CICS TS for VSE/ESA Part 2

Speaker: Chuck Olsen, IBM

Abstract:

Please see E43 for abstract.

Topic: General VSE/ESA Sessions

Session: E50

Title: VSE/ESA Trends and Directions

Speaker: Jerry Johnston, IBM

Abstract:

To tell the truth, VSE/ESA Trends and Directions are only mildly interesting. The really interesting part is knowing how it all comes together to support your own corporate and personal trends and directions. Are you a) actively pursuing ways to aggressively exploit internet technology for your company's gain and your own professional glory, or b) waiting for DISCO to make a comeback before you do anything?
Jerry Johnston will tell you all about IBM's direction and strategy for VSE. In this session, you'll see how IBM plans to help you create dependable, cost-effective, and open solutions that continue to protect and leverage VSE and exploit Linux on zSeries. Unless you'd rather go shopping for your favorite DISCO records, you should not miss this session!

Session: E51

Title: VSE/ESA Update

Speaker: Ingolf Salm, IBM

Abstract:

There have been lots of changes and e-business enhancements to VSE/ESA with V2.5 and V2.6, and there are more to come with V2.7. Would you like to hear more from the chief designer? Then this is the session for you.

Session: E52

Title: VSE/ESA Security Concepts

Speaker: Ingolf Salm, IBM

Abstract:

Ingolf will talk about VSE batch and online (CICS) security. This will include a discussion on RACROUTE interfaces. He will also address connector and TCP security.
Note: this session starts at **8:15 AM** on Wednesday, so please grab some breakfast and come on up.

Session: E53

Title: VSE/ESA Hot Topics

Speaker: Justin McMurry, IntelliWare Systems, Inc.

Abstract:

What are the 'HOT' VSE Topics? When we say 'hot', we mean the latest tips and techniques for improving performance and getting the most out of your VSE/ESA system. Over the years Justin has built this session into one of the favorites. You will hear about some special tips to help performance on your system, commands to find out more about your system, some useful new functions in the latest releases of VSE/ESA that you may have missed, and more.
p.s. - Bring your own HOT tips to share!

Session: E54

Title: Design & Tuning of VSE/VSAM

Speaker: Chuck Olsen, IBM

Abstract:

"In an age of World-Wide Web, eX tensible Mark-up Language, and e-business connectors, who needs to talk about VSAM? Well, under VSE/ESA that is where the rubber meets the road." So, following in the grand tradition of Dan Janda and Wolfgang Kraemer, we look at the world of catalogs and clusters, alternate indices and aberrant database design. From Basic Concepts through the latest product enhancements, we explore common misconceptions and design/usage issues to give you a broader view of IBM's most important Data Manager. Cinch up your Nike's; there is a lot of material here, and we will be moving fast.

Session: E55

Title: VSAM Advanced Features (Compression, XXL, Large DASD, VSAM 24 X 7)

Speaker: Wilhelm Mild, IBM

Abstract:

For efficient VSAM exploitation, this session will give an overview about the most powerful functions implemented in the last releases. It will also illustrate possibilities for minimizing VSAM downtime for backup and recovery in a production environment. Did you know that using VSE connectors, you can check the status of nightly operations via mobile devices including a PDA or Cell phone? Warning: Customers are urged not to check the status of their VSE system with any mobile device while driving. Please pull over to the side of the road to do so.

Session: E56

Title: Problem Determination Under VSE/ESA

Speaker: Chuck Olsen, IBM

Abstract:

"The System is down"; words to strike fear into the heart of the most intrepid Systems Programmer. This session provides a cookbook approach to figuring out what is really going on and preventing you from losing precious time spinning your tires in deep mud. Using excerpts from actual customer problem documentation, basic dump reading skills, and a variety of VSE console commands, we provide a step-by-step process to identify and analyze a range of abnormal VSE system conditions including waits, loops, and abends. It is designed for everyone from novices to "old salts".

Session: E58

Title: Rapidly Build Java Systems for VSE with IBM VisualAge Generator

Speaker: John Berry, IBM

Abstract:

To be competitive in today's environment, organizations must be able to provide application access via the internet. One of the biggest obstacles facing most organizations is how to apply legacy resources - applications, data, and people skills - to the task of doing serious e-business on the Internet.
This presentation will discuss how VisualAge Generator, a strategic part of IBM's WebSphere software platform, can enable non-Java programmers to rapidly build and deliver mission-critical, scaleable, portable web applications for VSE and VM.

Session: E59

Title: VSE/ESA Birds-of-a-Feather Discussion

Speaker: Panel, All

Abstract:

This VSE Birds-of-a-feather session will take place on Tuesday morning at **8:15 am** before the start of the regular sessions at 9:00am. Grab some breakfast and bring your questions for the panel.

Topic: Keynote Sessions

Session: K03

Title: The Next Generation Internet

Speaker: Dan Powers, IBM

Abstract:

It is a given that the Internet is transforming business, education, entertainment -- almost every aspect of our lives. And we know that even larger changes are coming as the Internet becomes faster, more robust, and more versatile. Join us for an exciting glimpse into the future as Dan Powers, one of the original members of IBM's Internet Technology Team, demonstrates the characteristics the next generation of the Internet will have -- a network that will be fast, always on, everywhere, natural, easy, intelligent and trusted. Dan will provide an exciting vision of the power and the potential of the Internet and how it will provide significant advances in ease-of-life. Dan will discuss the key opportunities that are just beginning to surface, and the potential limitations that may stand in the way. Dan will conclude his presentation with some thoughts on the role that Linux will play in the evolution of computing.

Topic: General Linux for S/390 & zSeries Sessions

Session: L02

Title: IBM's Linux Strategy

Speaker: Jim Elliott, IBM

Abstract:

Wondering where IBM is going with their Linux strategy? This session will provide an overview of that very topic.

- Linux Overview, value and marketplace: A brief overview of what Linux is, its value to our customers and trends in the marketplace
- Linux Misconceptions: Setting right the facts about Linux and what it is capable of today
- IBM Strategy and Linux Opportunities: The strategic plays where we see Linux and the opportunities for its usage today
- IBM Products and Services Overview: A short overview of the IBM Linux portfolio (server platforms, middleware and support and services)
- IBM Customer Focus Areas: Focus areas by industry where Linux can play

Session: L03

Title: Linux on zSeries: What, Why, Where

Speaker: Jim Elliott, IBM

Abstract:

IBM believes Linux to be game changing technology; as the Internet was to networking, IBM believes Linux will be to application programming. This session will provide information on:

- Why IBM is so committed to Linux in general, and on zSeries specifically
- What IBM means by Linux for zSeries (and Linux for S/390) and the zSeries virtualization technology provided by z/VM
- Where Linux on zSeries has come from, where it is now and where IBM sees it going in the future
- IBM and ISV applications available for Linux on zSeries

Session: L04

Title: Linux and zSeries: The eServer of the Future

Speaker: Dr. Karl-Heinz Strassemeyer, IBM

Abstract:

Based on his personal experience with large Server designs Dr. Strassemeyer will give an overview on major trend settings in the IT industry and conclude from there his outlook into the future.
He will specifically focus on the strength and value of IBM zSeries as the Server with the most advanced Technology leading the way towards IBM's eServer.
His experience and the success of moving Linux to the Mainframe is one of the latest exciting innovations which has put the Mainframe into the position to be an ideal platform for heterogeneous server integration. In this sense zSeries right now provides large elements of the ultimate IBM eServer functionality. This means the z800 is a heterogeneous enterprise system rather than just a low-end S/390 system.

Session: L05

Title: Linux Means Success to Your Business

Speaker: Dr. Klaus Goebel, IBM

Abstract:

Hundreds of companies are using Linux on zSeries to run their business. They use it for server consolidation of Unix and/or NT servers, for Web serving, for File and Print serving, for new applications that hadn't been used in their shops before, and even for running mission critical applications in cooperation with z/OS, z/VM, and VSE/ESA. This presentation tells you everything you wanted to know about Linux reference customers, their business scenarios and business solutions with Linux on zSeries.

Session: L06

Title: Linux on S/390: The Beginnings of the Dream Machine

Speaker: Scott Courtney, Sine Nomine Associates

Abstract:

The speaker will survey the history of the System/390 Linux port and IBM's involvement with Linux, from a skunkworks project to an IBM strategic platform. For mainframe folks, he answers the question, 'Why Linux?' For Linux folks, he answers the question, 'Why a mainframe?' Looking ahead, he examines how these two disparate cultures can come together to learn from one another and to build something totally new.

Session: L07

Title: Linux for zSeries - A Roadmap for Success

Speaker: Larry Rotolo, Sytek Services

Abstract:

Sytek Services, a Preferred CA and IBM Business Partner, has been involved in many Linux mainframe implementations and will discuss what you must know to successfully implement Linux. How can you cost justify Linux? How can you prepare your infrastructure? What provisions should you make for ongoing support?

Session: L08

Title: Linux Free for All

Speaker: Panel, All

Abstract:

This is your chance to get your questions about Linux answered. A panel of Linux experts from IBM and other companies will be available to field both technical and non-technical questions about Linux on zSeries.

Session: L09

Title: Business Do It Yourself: Building Enterprise Infrastructure on Linux - Part 1

Speaker: David Boyes, Sine Nomine Associates

Abstract:

This session introduces a method to build a low-cost business infrastructure service set using Linux systems to deliver useful and secure environments at a fraction of the cost of commercial products. The first part discusses the overall architecture of the DIY business, including what components will be built and a review of the open-source products available to deliver the solution.

Session: L10

Title: Business Do It Yourself: Building Enterprise Infrastructure on Linux - Part 2

Speaker: David Boyes, Sine Nomine Associates

Abstract:

This session continues from L09. In this session we get gritty with the process of creating the tools and the architecture. We select some concrete examples of common infrastructure and build them step-by-step. The end of the session will allow time for discussion of the economics and functional differences and how to work the process of delivering the solution within a possibly hostile environment.

Session: L11

Title: Linux on zSeries: What's New?

Speaker: Jens Osterkamp, IBM

Abstract:

Linux for zSeries has been open source for 3 years. Performance and stability have been improved at a rapid pace, and many new functions were added to the platform. What are these improvements and new features ?
This presentation will give you a technical overview of this new Linux for zSeries functionality.
The following Linux for zSeries features will be presented in this session along with examples of how to use them in your daily work:

- SCSI
- LVM
- Dynamic device attachment
- snIPL
- VIPA
- IPv6
- VLAN
- Lcrash
- Useful Linux commands

Session: L12

Title: Linux 2.4 - Kernel Updates

Speaker: Neale Ferguson, Software AG

Abstract:

Need to know what updates have been made available to the Linux kernel in version 2.4 including what's new for zSeries? This is the session to attend to hear what's happened, what works and what doesn't. In this session the speaker will examine:

- Linux kernel architecture features
- Linux kernel hardware support features
- File System Enhancements
- Networking Enhancements
- Device Support Enhancements

Session: L13

Title: Getting READY for Linux as an IBM Business Partner

Speaker: Gail Homan, IBM

Abstract:

If you are an IBM Business Partner, or would like to be; and are interested in Linux, or are already involved with Linux, then this session is for you!!
You will learn about what Linux is, the explosive growth of Linux in the marketplace, where Linux is being deployed by customers today, and IBM's strategy and what IBM Products are enabled around Linux.
But, most importantly, you will learn how YOU can use the IBM Tools and Programs to become a LINUX LEADER!! A Linux Leader will qualify for special invites to events, participation in events, teaming opportunities with other IBM Linux-oriented Business Partners, as well as leads from campaigns.

Session: L14

Title: Got Grid?: An Introduction to Globus on Linux for S/390

Speaker: David Boyes, Sine Nomine Associates

Abstract:

Globus provides a rich set of architecture-independent tools for building distributed applications in network-rich environments. Originally rooted in the scientific community, the toolkit is proving useful in new business application models and dataflow requirements. This presentation provides an overview of Globus services, describes how these services operate to form a inter-organization "grid" environment, and summarizes with a review of the process to bring Globus to the Linux on S/390 environment. The session assumes knowledge of C programming and Unix program development; some knowledge of distributed computing techniques and XML will be helpful.

Session: L15

Title: Running Linux in an LPAR

Speaker: Erich Amrehn, IBM

Abstract:

If you have a spare LPAR and want to get started with Linux on zSeries, here are the steps for preparing the LPAR and installing Linux on zSeries in the LPAR.

Session: L16

Title: Linux for zSeries: Lessons Learned from Linux Installations in Europe

Speaker: Erich Amrehn, IBM

Abstract:

In this session, Erich Amrehn will review the lessons learned from some of the successful Linux on zSeries deployments in Europe. The session will cover configurations, performance data if available and detailed solution information. This session will summarize the common criteria for a successful Linux for zSeries project and show some sample TCO numbers based on customer input.

Session: L17

Title: Open Source: The Business Case

Speaker: Philip H. Smith III, Linuxcare, Inc.

Abstract:

We've all heard how Open Source programs are the answer to all our computing TCO woes. But, like home cancer remedies and 'Make Money Fa$t!!!' schemes, most folks find themselves somewhat skeptical of such too-good-to-be-true claims. Yet we hear of success stories, and all of us can see that Open Source code -- particularly Linux -- is in the news, and garnering the attention of upper management. So what is the real story? Is Open Source a panacea? When does it make sense -- always? Never? Sometimes? How can you possibly make intelligent, you-bet-your-job decisions about it? This session will discuss the value of Open Source. While centered on a formal presentation, the goal is an interactive exchange of ideas and experiences, which will enable a realistic appraisal of the pros and cons of using Open Source in the enterprise.

Session: L18

Title: DB2 for Linux on zSeries for DBAs

Speaker: Frank C. Fillmore, Jr., The Fillmore Group, Inc

Abstract:

What is Linux? Can I run it on a zSeries box? What about DB2? What are the benefits to building a data warehouse or OLTP database application on a zSeries platform using Linux? What are the "gotchas"? A primer for OS/390, z/OS, z/VM or VSE/ESA mainframe DBAs.

Topic: Introductory Linux for the Mainframe Systems Programmer Sessions

Session: L20

Title: Linux 101 Lab - Part 1

Speaker: Neale Ferguson, Software AG

Abstract:

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 L21.

Session: L21

Title: Linux 101 Lab - Part 2

Speaker: Neale Ferguson, Software AG

Abstract:

This is a continuation of session L20.

Session: L22

Title: RPM 101

Speaker: Neale Ferguson, Software AG

Abstract:

Need an introduction to RPM, the Red Hat Package Manager? Come and learn the basics - installing and maintaining software packages. A basic understanding of RPM makes Linux system administration easier and more productive. Topics covered include

- What is RPM and why should we use it
- Basic RPM functions
- Special Parameters or modifiers
- Directory layout and files
- Building packages and development

- The SPEC file

Session: L23

Title: Linux Text Utilities 101 for S/390 Wizards

Speaker: Scott Courtney, Sine Nomine Associates

Abstract:

IBM S/390 operating environments such as VM/CMS and OS/390 TSO offer myriad and powerful ways to manipulate line-oriented character datasets using system utilities combined with REXX (or VM/PIPES). Linux provides many of the same capabilities, but it approaches them from a somewhat different philosophical angle, and this can make moving from traditional mainframe tools to Linux tools somewhat confusing. If it seems that the more you know about S/390 systems, the tougher it is to 'unlearn and relearn' for Linux, then this session is for you! The speaker will present several of the most useful Linux text utilities from a pragmatic viewpoint, with real working example scripts.

Topic: Linux for zSeries & S/390 Installation Sessions

Session: L30

Title: Linux for S/390 Installation Lab - Part 1

Speaker: Richard Lewis, IBM

Speaker: Chuck Morse, IBM

Abstract:

Linux for S/390 has generated a lot of excitement among S/390 customers. However, for many this is a new and strange environment. This workshop will provide an opportunity to install and configure Linux for S/390 in a z/VM virtual machine. The hands on portion of this workshop will be self paced, and result in a Linux for S/390 system running Apache, Samba, DNS (BIND-8), a firewall (with Ipchains) and the KDE desktop. The goal is to equip each attendee with the skills required to return home and install Linux for S/390 using the distributions from SuSe or RedHat, or the binary objects available for download from the Marist College web site.

Session: L31

Title: Linux for S/390 Installation Lab - Part 2

Speaker: Richard Lewis, IBM

Speaker: Chuck Morse, IBM

Abstract:

This is a continuation of session L30. See session L30 for the abstract.

Session: L32

Title: Linux for S/390 Installation Lab - Part 3

Speaker: Richard Lewis, IBM

Speaker: Chuck Morse, IBM

Abstract:

This is a continuation of session L30. Please see session L30 for the abstract.

Session: L33

Title: Linux Practical Experience, Hints, and Tips

Speaker: Rick Troth, BMC Software

Abstract:

The speaker will present his experiences, both in the enterprise and the home, with using Linux. Sections of the presentation will address

- A comparison of the commercial Linux distributions
- Installation hints and tips
- Upgrading to new versions or distributions
- Functions you can put together on one machine
- Functions you shouldn't put together on one machine
- hear about Linux on lap-tops and hand-helds
- Various tips for Linux on z/VM

Session: L34

Title: Best Practices for Deploying Linux on VM

Speaker: Alex deVries, Linuxcare, Inc.

Abstract:

While the deployment of Linux on z/VM is gaining momentum in enterprise data centers, unfamiliar or inexperienced Linux system administrators may be unaware of common mistakes or hazards that could potentially jeopardize a successful Linux on z/VM implementation. For example, tricks such as sharing or copying minidisks are tempting when considering how to manage dozens or hundreds of Linux instances, but these shortcuts frequently result in systems that are more difficult to manage. This session is aimed at VM system programmers who are either considering or already deploying multiple instances of Linux on VM and who need a manageable and dependable software stack in their environment.

Topic: Networking with Linux for zSeries & S/390 Sessions

Session: L40

Title: Connecting to Linux on zSeries

Speaker: Alan Altmark, IBM

Abstract:

Alan Altmark of IBM will provide detailed information on how to integrate Linux for zSeries into your IP network. He will show you how to configure LCS, OSA Express (QDIO), zSeries HiperSockets, Channel-to-Channel, and IUCV connections. Special emphasis is given to the z/VM environment, IP address assignment, and routing considerations.

Session: L41

Title: IBM Middleware for Linux on zSeries and S/390

Speaker: Ingolf Salm, IBM

Abstract:

IBM's WebSphere Application Server with connector software provides an enhanced e-business application environment. Mainframe customers can benefit from the integration of Linux. IBM has also made available a wide range of middleware in the WebSphere and DB2 families and as well as other products. Come learn how IBM's middleware can be used on Linux running on zSeries and S/390.

Session: L42

Title: Building a Linux Firewall with IPTABLES

Speaker: Scott Courtney, Sine Nomine Associates

Abstract:

Starting with kernel 2.4, Linux has deprecated the IPCHAINS packet filtering in favor of a more versatile tool called IPTABLES. IPTABLES allows an inexpensive Linux computer to take the place of a much more expensive commercial firewall for many small- to medium-sized organizations. This session introduces the IPTABLES packet filter and provides practical examples of how to configure IPTABLES for basic packet filtering as well as transparent IP address masquerading. Brief discussion of migration issues from IPCHAINS to IPTABLES, if time permits.

Session: L43

Title: Networking Alternatives with z/VM for Penguin Colonies Part 1

Speaker: Steve Gracin, IBM

Speaker: Jon vonWolfersdorf, IBM

Abstract:

This 2 part session will first highlight an alternative to internal point-to-point networking configurations for Linux guests under z/VM - Guest LANs. Jon will describe z/VM Guest LAN support, implementation requirements, enhancements in z/VM 4.3, and the differences between virtual HiperSockets Guest LANs and the zSeries HiperSockets microcode function.
Next Steve will cover the various ways that Linux virtual machines can be networked together under z/VM. Point-to-point, Guest LAN, and other methods of creating a virtual internal network of Linux guests will be explored. In addition, routing options implicit with various network topology choices will be explored.
These sessions will provide information useful to architects responsible for designing and integrating a z/VM virtual internal network into an existing network infrastructure.

Session: L44

Title: Networking Alternatives with z/VM for Penguin Colonies Part 2

Speaker: Steve Gracin, IBM

Speaker: Jon vonWolfersdorf, IBM

Abstract:

Please see session L43 for abstract.

Session: L45

Title: From QDIO to Advanced Networking

Speaker: Martin Peschke, IBM

Abstract:

Linux provides networking drivers for the OSA Express devices as well as for HiperSockets. This session deals with the use of these devices. Some scenarios (from easy to complex) are discussed and it's showed, how Linux is set up for them. The main part of the session talks about integrating advanced and new OSA and HiperSockets features: Virtual IP Addresses (VIPAs), Proxy ARP, IP takeover, ARP management, SNMP, VLAN, IPv6. Usage and differences to other platforms are explained.

Topic: Linux for zSeries & S/390 User Experience Sessions

Session: L60

Title: Linux User Experience - Boscov's

Speaker: Joe Poole, Boscov's Department Stores

Abstract:

Come hear Joe Poole, Manager of Technical Support, from Boscov's Department Stores discuss how and why his company is using Linux on zSeries. Boscov's replaced a S/390 G3 server with a new z900 processor to handle their critical z/OS applications as well as to consolidate their server farm applications onto Linux virtual servers under z/VM. Joe will discuss how they got up to speed on Linux, and went from simplex to complex Linux applications. Finally he will discuss their future plans with VisualAge for Java and WebSphere Commerce Suite.

Session: L62

Title: SCSI Devices on Linux for zSeries - Early Experiences

Speaker: Neale Ferguson, Software AG

Abstract:

SCSI disks? On a mainframe? You heard right! IBM's first foray into the world of SCSI for S/390 is being done on the Linux platform. This session's speaker will describe his early experiences at exercising the code, the SAN, and the Shark ESS that the Linux system supports. Topics include:

- Hardware components
- Kernel and device driver considerations

- Software configuration
- Using the devices
- Initial observations on performance

Topic: Linux for zSeries Systems Management and Performance Sessions

Session: L70

Title: Linux/390 System Management for the Mainframe System Programmer - Part 1

Speaker: Mark Post, EDS

Abstract:

More and more, mainframe systems programmers are being asked to install and manage Linux/390. They have years of experience in installing and managing 'traditional' IBM mainframe operating systems such as MVS and VM, but they don't know where to start with Linux/390. Installation is covered by other sessions, so these two sessions will concentrate instead on 'translating' typical system management tasks to the Linux/390 environment by comparing and contrasting the familiar with the new.

Session: L71

Title: Linux/390 System Management for the Mainframe System Programmer - Part 2

Speaker: Mark Post, EDS

Abstract:

This is a continuation of session L70.

Session: L72

Title: Cloning Linux Images on VM: How We Do It On The Linux Community Development System

Speaker: Richard Lewis, IBM

Abstract:

As Linux on the s/390 and zSeries continues to gain in popularity, solutions for automating the process of creating a new Linux virtual machines are being created by many software vendors. The investment made by these companies underscores the importance of this activity. Most of these solutions not only automate instance creation, but also offer some level of management support for the Linux virtual machines after they have been created. Rather than survey these solutions, this session will focus on a "roll-your-own" solution that was developed for use on the Linux Community Development System (LCDS). After an overview of the LCDS, it's mission and architecture, the session will look in some detail at how an end user of that system would create the Linux virtual machine they will use.

Session: L73

Title: Project eLiza Linux application self-healing

Speaker: Joachim Schmalzried, IBM

Abstract:

Abstract not available.

Session: L74

Title: Linux on zSeries Security

Speaker: Ingolf Salm, IBM

Abstract:

Ingolf Salm will talk about Linux security in general, such as Linux security aspects, firewalls, VPN and intrusion detection. He will also address security related topics for Linux on zSeries derived from the zSeries platform and z/VM.

Session: L80

Title: Server Farm Utilization and the Relative Capacity of zSeries Linux

Speaker: Joe Temple, IBM

Abstract:

We will discuss the elements of relative capacity, server architecture and the leverage of utilization on capacity and TCO. The purpose is to familiarize the audience with the main factors and issues involved in comparing the capacity of Linux on zSeries to other platforms and then to relate this to total cost comparisons. The audience should come away with a basic understanding of how to approach server consolidation with zLinux and which applications best fit the platform.

Session: L81

Title: Capacity Estimation for Linux Workloads

Speaker: David Boyes, Sine Nomine Associates

Abstract:

This presentation covers some empirical observation of the characteristics of Linux workloads in virtual machines and some concrete tuning suggestions on how to best leverage the VM infrastructure to enhance the Linux guest environment in terms of reducing the hardware commitment required to support a specific workload. This is an evolving work in progress, so bring your own observations and let's build a better model of a modern major server farm.

Session: L82

Title: Analyzing performance of Unix, Linux and NT machines in a network

Speaker: Barton Robinson, Velocity Software, Inc.

Abstract:

It is a big problem when managing a large network of rack servers to readily identify those servers that encounter performance problems. The paper presents a methodology and discusses the means of identifying the servers that have

excessive CPU, storage or disk storage utilization. Deficiencies in the technology of performance instrumentation of these servers will be noted. A case study will be presented.

Session: L83

Title: Managing server (Unix, Linux, NT) Consolidation to zSeries

Speaker: Barton Robinson, Velocity Software, Inc.

Abstract:

Mainframes are dead? This presentation will illustrate the process of identifying those servers and applications that can and should be consolidated to s/390 (mainframe). Why? Server consolidation saves money in people costs as shown by many TCO studies. Server consolidation gives you the opportunity to provide better resource utilization and performance given certain conditions are met. This session discusses the method of selecting the servers and applications to be so chosen.

Session: L84

Title: I/O Tuning, in the VM/LINUX Environment

Speaker: Thomas Beretvas, Beretvas Performance Consultants

Abstract:

Linux is gradually making major inroads into the corporate world. Furthermore, there is a strong trend to consolidate hundreds of Linux servers on a single z/VM (main frame) CPU for ease of maintenance, space and people resource saving. A very important consideration in consolidating these servers is hardware resource sharing, thus, specifically I/O resource sharing. A corollary of resource sharing is potential resource contention. Luckily, the mainframe z/VM environment provides excellent facilities of monitoring, and measuring the resource usage and to identify contention and tuning problems. The analysis narrows down the problem both to the user and the specific I/O bottleneck. It has to be emphasized that because multiple Linuxes share the I/O resources provided by z/VM, it is possible to identify the I/O bottlenecks by making use of the z/VM measurement capabilities and appropriate reduction facilities. The paper provides a methodology for identifying Linux environment I/O performance problems in a z/VM environment. It starts by describing I/O measurements such as response time, and its components and their meanings. This is followed by the establishment of expectations, i.e., what is good and why. The case study illustrates the reduction methods that lead to rapid identification of problem areas to analyze the data emphasizing the concept of I/O and Queuing intensities.

Session: L85

Title: Monitoring & Understanding Performance on Linux for S/390 & zSeries

Speaker: Joachim Schmalzried, IBM

Abstract:

Interested in understanding S/390 & zSeries architecture or Linux for S/390 performance concepts? Looking for some important performance tools? This session will give you an introduction to Linux for S/390 performance measurement. The first part is about some theoretical background and concepts, the second part is about performance tools. On the mainframe, there are normally many operating systems like z/OS, z/VM and Linux running together on the same machine - a fact which generates interesting situations for performance analysis. The characteristics of z/VM and LPAR need to be understood in order to tune the mainframe as a whole. Even z/OS (V1R2) WLM may decide to adjust

the resources a Linux image can get. Some new items regarding performance introduced in kernel level 2.4 are described.
In the latter part of the session, there will be an overview on some Linux for S/390 tools for benchmarking, accounting, long-term monitoring, problem drill-down, etc.

Session: L86

Title: Linux for zSeries Performance

Speaker: Jens Osterkamp, IBM

Abstract:

This presentation gives an introduction into general aspects of relative system capacity. It then focuses on specific Linux for zSeries performance topics.
The IBM Germany Linux/390 performance team worked on:

- Networking performance using Gigabit Ethernet and HiperSockets
- DASD performance
- ESCON and FICON attachment
- Microbenchmarks evaluating the processor subsystem (e.g. memory bandwidth and latency, process creation and context switch overhead)
- Linux under VM

The results of this work will be presented along with useful hints and tips to optimally exploit the capabilities of Linux for zSeries.

Topic: Linux for zSeries Storage Sessions

Session: L96

Title: Linux on zSeries - Disk and Tape Connectivity

Speaker: Tony Pearson, IBM

Abstract:

This session will cover disk and tape storage concepts for Linux on S/390 architecture. A review of storage connectivity protocols and options, not just ESCON and FICON, but also FCP, iSCSI and Network Attached Storage (NAS). Finally, status of which IBM disk and tape storage devices are available.

Session: L97

Title: Linux on zSeries - Storage Management Techniques for Disk and Tape

Speaker: Tony Pearson, IBM

Abstract:

This session covers disk and tape storage management techniques for Linux on zSeries, including support under DFSMS on z/OS in support of Compatible Disk Layout feature of Linux data on channel-attach disk, as well as Tivoli Storage Manager, and tools available on z/VM and VSE. This session will cover backup and recovery techniques as well as disaster recovery options.

Session: L98

Title: Operating Your Mainframe in an FCP Environment with Linux

Speaker: Martin Peschke, IBM

Abstract:

Why would you use zfcp and the FCP-hardware on your zSeries box? How do you do it? What do you gain by using it? These are the questions to which it is attempted to find answers within the scope of this presentation. Several "consolidation" scenarios are discussed: Many Intel boxes for web-hosting into one zSeries running VM, a few Sun servers into one zSeries in LPAR mode, etc.
Also, the possibility of moving from ESCON/FICON to FCP in certain scenarios is touched on. In all cases, reasons for such a move, prerequisites, considerations and examples are provided. Short-comings and advantages of the examples are also analyzed briefly.
The connection to current development work on an HBA API implementation for this platform will be drawn, when manageability of the resulting storage area network configurations is discussed. Naturally, strong links also exist to "Session L99 - The zFCP Device Driver - SCSI over Fibre Channel Support for Linux on zSeries", which explains, among other things, how to set the correct parameters in the driver.

Session: L99

Title: The zFCP Device Driver - SCSI over Fibre Channel Support for Linux on zSeries

Speaker: Martin Peschke, IBM

Abstract:

SCSI over fibre channel is currently the big thing for zSeries. For the first time in its history, it is possible to attach industry standard SCSI devices such as disks, tapes, CD-ROMs, CD-burners, DVDs and maybe even more exotic devices such as scanners or digital cameras. The above functionality is provided by the combination of the new zSeries fibre-channel card and the corresponding Linux device driver. This presentation will focus on the latter.
The driver, zfcp by name, is a host bus adapter driver for the SCSI system running under the Linux kernel. It provides a whole new concept of representation of the SCSI device landscape (the Storage Area Network, SAN). At the same time it exists alongside other, already existing Linux SCSI adapter drivers, which are used to provide SCSI IO over simple, parallel cables. In this way, zfcp can utilize the existing SCSI infrastructure and thereby leverage the advantages of using a tried and trusted concept. Still, some incompatibility's between a SCSI over parallel cable and the new SCSI over Fibre channel topology exist. These have been overcome by clever design decisions in zfcp itself and some minor modifications to the existing SCSI stack.
This talk is concerned with giving a picture of how the user application, the Linux Kernel, the Linux SCSI stack, the zfcp module and the hardware adapter and devices fit together. A simple configuration example will be provided. In addition, some of the design decisions included in zfcp will be presented. In this way, some appreciation of 'why things are the way they are' should be achieved.
There exist a link between this presentation and "Session L98 - Operating your Mainframe in an FCP Environment with Linux", which explains different possible zfcp usage scenarios.

Topic: z/VM, Linux and VSE General Interest Sessions

Session: U01

Title: Bringing You Up To Date with zSeries Hardware

Speaker: Mike Augustine, IBM

Abstract:

This presentation is an overview of the new z800 announced in earlier this year and the latest up to the minute news too. Come and find out how this new processor line fits into your future whether you want to run traditional workloads (CICS), new workloads (Linux) or both! The best things packaged in a smaller zSeries.

Session: U02

Title: ShopzSeries: Order zSeries Software on the Web

Speaker: Alex Feinberg, IBM, ShopzSeries Design

Abstract:

ShopzSeries is a Web-based eBusiness solution which allows you to configure and submit zSeries software orders over the Internet. ShopzSeries already supports ordering software for z/OS, z/OS.e and OS/390 and will soon support z/VM, VM/ESA and VSE/ESA orders. Since it is a self-service tool, it can significantly reduce the amount of time you spend ordering software. You can order corrective service, preventive service, individual products, or complete system replacements. Software orders placed through ShopzSeries can be tailored to your existing software configuration, so you can identify which products you have licensed, which products are installed on your systems, and potential upgrades to these products. You can also order new products for your systems. Planning for future upgrades is greatly simplified with clear views of product requisites. For z/OS, z/OS.e and OS/390 systems, ShopzSeries can configure a complete ServerPac order to upgrade your entire system with just a few clicks of your mouse. Orders placed through ShopzSeries can be tracked right on the Web site and saved for future reference. You can send the details of your orders to your peers or management for review and approval, and you can even request price quotes for your product orders before submitting them. At this session, the speaker will explain all of the features of ShopzSeries and how this new eBusiness solution can improve your productivity by simplifying and expediting the ordering process for zSeries software. **Note:** this session starts at **8:15 AM** on Tuesday, so please grab some breakfast and come on up.

Session: U03

Title: DB2 Server for VSE & VM- What's New in Version 7?

Speaker: Frank C. Fillmore, Jr., The Fillmore Group, Inc

Abstract:

In today's fast-track world, managing vast amounts of data is just part of a day's work. And managing that data effectively makes the difference between getting by and getting ahead. DB2 Server for VSE & VM, a key member of the DB2 Family, provides all the pieces of the puzzle you need to start building your distributed database solution. Learn what's new with DB2 in this session. **Note:** this session starts at **8:15 AM** on Wednesday, so please grab some breakfast and come on up.

Session: U04

Title: DB2 Server for VSE & VM - Tips, Tricks and Techniques

Speaker: Frank C. Fillmore, Jr., The Fillmore Group, Inc

Abstract:

Performance tuning DB2 Server for VSE & VM can be more art than science. Frank Fillmore has over 14 years experience troubleshooting and tuning SQL/DS and DB2 databases in decision support and transaction processing environments. Hear about real world challenges and solutions. Come armed with your toughest performance problems.

Session: U05

Title: TXSeries Overview

Speaker: Chris Smith, IBM

Abstract:

Would you like to use your existing skills to a distributed environment? Did you know that CICS-like functionality is available on a variety of platforms?
TXSeries V5 is available on Windows 2000, WindowsNT, and AIX, supporting popular database managers, including DB2, Oracle, Informix, Sybase and SQL Server, MQSeries messaging software, and programming languages including C, C++, COBOL, and PL/I. **Note:** this session starts at **8:15 AM** on Wednesday, so please grab some breakfast and come on up.

Topic: Virtualization Technology for Linux on zSeries & S/390 Sessions

Session: V10

Title: Automating Linux for S/390 using the VM Programmable Operator

Speaker: David Boyes, Sine Nomine Associates

Abstract:

One of the fantastic benefits of running Linux under VM is the availability of a sophisticated programmable operations facility that can monitor Linux console and syslog output and respond intelligently to messages and queries posted by literally thousands of Linux instances. This session will describe a set of Linux automation tools that form a framework for handling common console and user problems, do availability testing and application availability monitoring, and provide rudimentary security scanning for a farm of nearly 10,000 virtual Linux systems in production. Come see how to use VM's best features to also drive events on other systems as well -- we'll also present a prototype of a distributed console monitoring tool that provides PROP-based control of AIX, Solaris, and SGI systems integrated with a Linux for S/390 environment.

Session: V16

Title: LPAR vs. VM Preferred Guests

Speaker: Romney White, IBM

Abstract:

In non-VM installations, hardware Logical Partitioning (LPAR) support is widely viewed as an alternative to VM/ESA Multiple Preferred Guest (MPG) facilities. However, VM aficionados know that there must be a catch, since VM offers so much more. In fact, as this session explains, running VM in an LPAR can even be a viable configuration option. Because LPAR and MPG are based on many of the same technologies and concepts, it isn't surprising that they are often compared and sometimes confused. In this session, we try to present a factual comparison of LPAR and MPG, with an eye to helping customers decide which solution is the right one for them.

Session: V17

Title: Sharing Data between Linux and VM

Speaker: Will Roden, IBM

Abstract:

When SSL was developed on Linux on VM, some interesting techniques were created. This discussion will describe some of them including:

- Moving data from VM to Linux on the same signon
- Moving data using different signons
- Developing Linux applications on VM
- Tracing Techniques.

This will give you a better understanding of how to develop a Linux application on VM.

Topic: z/VM Connectivity Sessions

Session: V20

Title: VM TCP/IP Routing (Part 1 of 2)

Speaker: Alan Altmark, IBM

Abstract:

This presentation discussion the theory and implementation of static and dynamic routing. The mysteries of the GATEWAY and BSDRoutingPARMS statements are revealed. The second half of this presentation is session V21.

Session: V21

Title: VM TCP/IP Routing (Part 2 of 2)

Speaker: Alan Altmark, IBM

Abstract:

This session is the continuation of session V20.

Session: V22

Title: VM TCP/IP Advanced Configuration

Speaker: Alan Altmark, IBM

Abstract:

Learn important advanced configuration information for VM TCP/IP. Configuration of TN3270E, FTP, NFS, SMTP, and elementary routing are discussed. Problem determination procedures will also be discussed. Attendees should be familiar with VM TCP/IP FL310 or later, or should attend Session V70 Getting Started with TCP/IP before attending this session.

Session: V23

Title: z/VM TCP/IP Update

Speaker: Romney White, IBM

Abstract:

z/VM Version 4 Release 3 includes TCP/IP Function Level 430, a new level of the TCP/IP Feature that delivers significant new functions. The speaker will give an overview of these functions, as well as describing the product and changes to it that have been delivered through the service stream since Function Level 420 was made available with z/VM V4R2.

Topic: z/VM General Interest Sessions

Session: V43

Title: z/VM: The Value of zSeries Virtualization Technology for Linux

Speaker: Reed Mullen, IBM

Abstract:

This presentation will explain the business value and technological advantages of running Linux systems in virtual machines using IBM's z/VM product. Much of the "buzz" surrounding Linux on the mainframe comes from running Linux on VM. You'll learn about the details generating the buzz.

Session: V44

Title: z/VM Platform Update - What is new in V4

Speaker: Reed Mullen, IBM

Abstract:

Launched in July of 2001, z/VM Version 4 has already seen three releases of new function. This session will give you an overview of the latest capabilities shipped in z/VM 4.3.0, offering you an introduction to z/VM function presented in various sessions throughout the week. You'll also find out how z/VM V4 is priced differently than VM/ESA or z/VM V3, offering cost savings for existing VM customers and making it easy to deploy Linux with z/VM on your zSeries processor complex.

Session: V45

Title: z/VM Platform Direction and Discussion

Speaker: George Madl, IBM

Abstract:

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.
z/VM V4.3 is a newest IBM VM operating system based on the new 64-bit zV/M z/Architecture. z/VM provides a highly flexible test and production environment for enterprises deploying the latest e-business solutions. Built upon the solid VM/ESA base, z/VM exploits the z/Architecture and helps enterprises meet their growing demands for

multi-system server solutions with a broad range of support for operating system environments such as z/OS, OS/390, TPF, VSE/ESA, CMS, Linux for S/390, or Linux for zSeries.

Session: V50

Title: CP Communications: IUCV, ISFC, CSE, etc.

Speaker: Alan Altmark, IBM

Speaker: John Franciscovich, IBM

Abstract:

The z/VM and VM/ESA Control Program provides several facilities which allow communications and sharing of data between applications and/or users on the same system or across multiple VM systems. The speakers will discuss the various facilities included in CP, such as IUCV, APPC, ISFC, and CSE. Examples of how you might find each of these useful will also be provided.

Session: V51

Title: Taking Advantage of VM Dynamic Configuration Capabilities - CP

Speaker: John Franciscovich, IBM

Abstract:

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's CP configuration capabilities, including creating the system configuration file, defining IPL parameters, and dynamically adding, redefining, and removing resources from your CP configuration.

Session: V53

Title: The Latest and Greatest of z/VM Control Program (CP)

Speaker: Romney White, IBM

Abstract:

The newest releases of z/VM Version 4 include many enhancements to the z/VM Control Program. These include new support for Linux guests, virtual networks, and guest connectivity, as well as technological enhancements for IBM eServer zSeries servers. Come to this session to hear about the newest enhancements in the z/VM Control Program.

Topic: z/VM Systems Management Sessions

Session: V60

Title: z/VM Security and Integrity

Speaker: Alan Altmark, IBM

Abstract:

Existing VM customers are familiar with the isolation/security/integrity features that z/VM provides. However many customers running Linux on IBM zSeries processors for the first time are new to the world of Virtualization and seek reassurance not only that multiple Linux servers can share hardware resources efficiently and scalability but also comply with organizational I/T security mandates. This presentation is an overview of the security and integrity characteristics of the VM operating system when used to host virtual Linux servers on IBM zSeries or S/390 processors.

Session: V61

Title: z/VM Resource Management

Speaker: Christine Casey, IBM

Abstract:

The new Virtual Machine Resource Manager (VMRM) provides functions to dynamically tune a z/VM system. This presentation discusses how the VMRM Service Virtual Machine can create a form of group scheduling by managing virtual machines into groups, or workloads, and how performance parameters are adjusted when there is contention for certain system resources.

Session: V62

Title: z/VM System Administration Facility for Linux Guests

Speaker: Christine Casey, IBM

Abstract:

The z/VM System Administration Facility consists of functions that provide an environment to let you create and manage multiple Linux images on a single z/VM platform. If you are new to VM or are migrating to z/VM from the S/390 Virtual Image Facility for Linux (VIF) product, and would like a simple method to create and manage Linux guests, then this session is for you. This presentation introduces the concepts, functions, installation and configuration of this environment.

Session: V65

Title: Managing z/VM Using the 'Hidden' Tools

Speaker: Jim Elliott, IBM

Abstract:

Over the years IBM has added a lot of utility functions to what is now z/VM and its features. For most people, these utilities remain a hidden secret as they are buried in the large library of z/VM documentation. Topics will include the using the AUDITOR, ACCOUNT and PROP utility functions of CMS, among many others! An overview of RSCS and PVM functions will also be provided. This session will bring to light these utilities and provide an overview of how they can be used to make your life easier in managing and monitoring your Linux, VSE/ESA and even z/OS guest images.

Topic: z/VM Basics Sessions

Session: V70

Title: Getting Started with TCP/IP: The Basics

Speaker: Alan Altmark, IBM

Abstract:

This presentation is a gentle introduction to VM TCP/IP. You will learn the elements of a TCP/IP 'stack', the major components of VM TCP/IP and its basic software configuration options, as well as some practical information about the IBM Open Systems Adapter.

Session: V71

Title: Introduction to VM Performance

Speaker: Bill Bitner, IBM

Abstract:

Are you new to VM or VM Performance? Then this is a great session to help you get oriented to performance on z/VM. We will start with a brief description of the performance process and in defining "performance". A significant amount of time will then be spent providing some basic guidelines to configuring VM for performance. The various performance related VM commands and performance products will be reviewed to let you know what is available. And finally, a short case study will be used to illustrate how it all fits together.

Session: V72

Title: Under the Covers: The VM Control Program (CP) - Part 1 of 2

Speaker: John Franciscovich, IBM

Abstract:

Do you use your VM system interactively? To run applications? To host a web server? To run another operating system? For something else? All of the above?
Whatever you use VM for, the Control Program (CP) works under the covers as a real machine resource manager. It provides each virtual machine (user) with an individual working environment and access to real processor resources and devices, and allows applications and users to exchange information. Come to this session and get a glimpse of what CP does for you "under the hood" of VM.
This session will be continued in Session V73 Under the Covers: The VM Control Program (CP): Part 2 of 2.

Session: V73

Title: Under the Covers: The VM Control Program (CP) - Part 2 of 2

Speaker: John Franciscovich, IBM

Abstract:

This session is a continuation of Session V72 Under the Covers: The VM Control Program (CP): Part 1. Please refer to that session for the abstract.

Session: V74

Title: CMS Fundamentals

Speaker: Romney White, IBM

Abstract:

VM has always provided interactive timesharing in a conceptually novel manner by giving each user a virtual machine in which to run a relatively small, single-user operating system known as CMS. That very same CMS is also used as the base for large, complex server applications, or as the transient vehicle for tailoring a virtual machine environment to the requirements of a guest SCP such as OS/390, VSE, TPF, or VM itself. The intent of this talk is to provide an introduction to CMS that emphasizes the characteristics that allow it to perform these diverse roles effectively and give it its special personality

Session: V75

Title: Intro to Automatic SSL Support in z/VM TCP/IP

Speaker: Will Roden, IBM

Abstract:

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. In order to provide general-purpose SSL support for z/VM TCP/IP servers without having to change each server individually, IBM has implemented automatic SSL support. This session explains SSL from an externals viewpoint and describes how to exploit it with z/VM TCP/IP.

Session: V76

Title: Getting Started with CMS Pipelines

Speaker: Will Roden, IBM

Abstract:

CMS/TSO Pipelines is the most efficient way to write an application that I know. Some of our customers tell us that they get a productivity enhancement of between 15 and 300 by using Pipelines. This is because Pipelines consists of over 150 "gems" called stages that provide simple but complete function. Each stage is completely tested and provides solid function that is available for use. The stages are combined into Pipelines when you build an application. Pipelines can be used to write the entire application, or just a part of one. During this discussion, I will explain the Pipelines concepts that are needed to get started and I will also expose several useful stages. When we are finished, you will be able to use Pipelines to enhance your applications and start you on the road to increased application productivity.

Session: V77

Title: You, too, can be a WIZARD at Configuring TCP/IP Connections

Speaker: Rod Nash, IBM

Abstract:

In this session you will learn how to become a WIZARD at configuring TCP/IP connections. We will cover the new TCPIP functions that came with z/VM V4.3. The new IPWIZARD function that allows you to quickly and easily do the base configuration as you first try and get TCP/IP running. The new IFCONFIG command the allows you to quickly and easily add new connections to your running TCP/IP stack.

These new functions mean that you can get up and running quickly without have to learn the format of the z/VM TCP/IP configuration files. The new 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.

Topic: z/VM Performance Sessions

Session: V90

Title: z/VM Performance Update

Speaker: Bill Bitner, IBM

Abstract:

There have been three releases of z/VM in the past 16 months and each contained changes related to performance. This session will cover the major changes in each of the z/VM Version 4 releases. This session will describe the purpose and concept of each change and also provide measurement data to help position the benefit of the change. Changes covered in the presentation include: HiperSockets, CCW translation, page fault processing, VM TCP/IP stack enhancements, and master processor relief for CP timer management.

Session: V91

Title: z/VM Guest Performance

Speaker: Bill Bitner, IBM

Abstract:

By now everyone knows my favorite answer to performance questions is "It Depends". This session will go a bit further by explaining what it depends on. We will discuss guest performance from a processor, storage, and I/O perspective. The various trade-offs will be described to help you better understand the decisions you face and the costs and benefits associated with the various choices. For example, minidisk cache can leverage storage for multiple guests to improve elapsed time, but at a processor time cost. That will be compared to I/O Assist which saves processor time, but rules out minidisk cache. The framework for this presentation was built for VSE. However, the concepts apply to z/OS, TPF, and Linux guests. The speaker will add particular comments as to the application to Linux guest environments

Session: V92

Title: FCON/ESA for VM Performance and Its Future with z/VM

Speaker: Eginhard Jaeger, IBM

Abstract:

FCON/ESA, a field developed program, is a very powerful VM/ESA performance monitor, and it is also designed to improve operator efficiency and productivity by means of its integrated full screen operating interface. This presentation is intended to give a general overview over the program's capabilities, and to inform about the latest enhancements and future plans.
IBM announced a statement of direction on April 30, 2002 that new performance monitoring and resource management functions will be made available in a future release of z/VM. Using FCON/ESA as the base, this new priced, optional feature will include functional capabilities not provided today by the PRF and RTM features of z/VM. The existing

PRF and RTM priced optional features will be withdrawn from marketing in a future release of z/VM, so it is important for you to attend this session.

Topic: Exhibitor Sessions

Session: X01

Title: Eight Steps to Successful z/OS Image Management

Abstract:

How do you ensure the integrity of your z/OS server in these times of higher demand and increased dependency, increased complexity and overwhelming addition of functions? We have seen exponential growth in the definitions needed to define an OS image yet the management of these definitions has changed little other than accommodating new statements and parmlib members. NewEra Software offers a complete solution for Sysplex and Image Management that is based on technology, not faith. SAE and IMAGE Focus can identify, inspect, detect change, synchronize, plan for new releases, provide a physical view, preserve that view and provide recovery capabilities.

Session: X02

Title: Storage Management from the comfort of your PC GUI

Abstract:

While the venerable 3270 connection has been used to manage all aspects of mainframe operating systems for decades, the graphical nature of today s PC workstations provides many enhanced capabilities, especially when it comes to z/OS storage management. The architecture and operational overview of a multi-tier z/OS storage management system will be presented in this session. The design philosophy and implementation details will be discussed for each system component and a demonstration of the graphical user interface will be offered.

Session: X04

Title: Turning TCP/IP Novices Into TCP/IP Experts: Vital Signs VisionNet

Abstract:

Since 1990, Vital Signs VisionNet has been providing the OS/390, VSE, and VM marketplace with tools to monitor SNA. In response to the introduction of TCP/IP, Vital Signs VisionNet introduced a TCP/IP module in 1998 and has continued to meet the needs of our customers by releasing a steady flow of customer-requested feature enhancements. As people become entrenched in the TCP/IP phenomen, they are finding that the deployment of TCP/IP is happening much faster than their TCP/IP training. Vital Signs VisionNet provides a method to turn these TCP/IP novices into TCP/IP experts and assists in capacity planning for the TCP/IP network. Through a series of examples provided by Vital Signs VisionNet customers, we will demonstrate how novice and expert users have relied on the Historical and Real Time component of the most economical monitor to avoid potentially devastating situations. Witness the generation of powerful reports via 3270 and the browser-based GUI.

Session: X05

Title: Candle's Current OS/390 and zSeries Monitoring Solutions

Abstract:

Candle has some new and exciting offerings in the way of mainframe products. This session will provide an overview of Candle s new and current mainframe monitoring solutions available today. Information from this session will

broadly cover the new Candle XE user interface, z/OS monitoring, Cryptographic coprocessors, Storage, Network, z/VM and Sinux solutions.

Session: X06

Title: OS/390, Your Central Output Server

Abstract:

Today s organization runs mission-critical software on every available computing platform. End users demand the ability to print documents on any output device in the enterprise, and Enterprise Output Management software from LRS provides that capability, enabling the OS/390 host to work as a central server for all output. Daron Worth, Senior Manager, North American Marketing, details how the OS/390 host and EOM software move output from any source to any destination. He will describe PJL-based bi-directional communication between host and printer, encryption for end-to-end security for print jobs transmitted over open networks, and browser-based viewing and control of print jobs.

Session: X07

Title: Linux on the Mainframe: Now Running Mission Critical Applications

Speaker: Jon Henderson, Computer Associates International

Abstract:

This session will focus on CA's own implementation of mission-critical applications on Linux on the mainframe - detailing the real-world benefits and the lessons learned. Topics include security, backup and recovery, disaster recovery, performance considerations and integration with mainframe data and applications.

Session: X08

Title: An Overview of BMC Software's Linux Solutions

Abstract:

Join us in this session to understand how BMC Software's Linux solutions can help you plan, deploy, and manage a Linux environment. We'll discuss many of the challenges and pitfalls associated with managing a Linux environment and how BMC Software's Linux products can help ease those challenges.

Session: X09

Title: An Introduction to IT Service Management Methodology Using Information Technology

Abstract:

As many companies strive to meet the critical success factors that improve IT service, delivery, and ultimately, customer satisfaction, many data center managers are now looking to the ITIL framework to help them reduce risks, costs and eliminate many of the every day incidents and problems they face. This framework, when utilized and implemented, can provide the bedrock for enhancing data center functionality through Best Practice processes. Providing solid and repeatable processes that customers can rely on helps the data center staff recast themselves as service providers rather than simply implementers and maintainers of technology. The most popular IT service management framework now being utilized throughout the world and now gaining more serious attention in the U.S. is the IT Infrastructure Library (ITIL) . Come hear about this framework, what it is, what it is not, and how you can use it to better manage the data center and ultimately improve Enterprise Operability.

Session: X10

Title: ASG-TMON for MVS Sysplex Analyzer

Abstract:

ASG recently acquired Landmark Systems and the TMON family of performance monitors. ASG-TMON for MVS contains the innovative Sysplex Analyzer, which searches long-term job execution, partition, delay, device, storage, I/O, and workload data across your enterprise to find answers to these and other questions:

- When did my job run?
- What resources were consumed?
- What delays caused my job to take longer than expected to execute?
- What job held a RESERVE on the dataset my job needed last night?
- What were the major conflicts degrading throughput?
- What job caused my production CICS region to experience I/O contention?

Session: X11

Title: How to monitor performance of J2EE apps on OS/390

Abstract:

With Java and J2EE gaining acceptance in mission critical applications, more e-Business companies are starting to leverage their investment in mainframe technology by running J2EE Applications on WebSphere and other application servers on their OS/390 systems from IBM. The mainframe environment offers a unique set of challenges when it comes to Java, especially with regards to performance management. Even as the power of Java and the mainframe Operating Systems increase and as leading enterprises continue to build web applications using the J2EE standard in order to connect customers and business partners to existing back-end databases, transaction systems and other business applications, one question still remains. How do you monitor and manage the performance of Java/J2EE applications running in a 390 environment? This session discusses:

- The production obstacles that are unique to Java on 390
- The challenges in managing Java performance on mainframes
- A leading industry solution that monitors WebSphere Server J2EE applications on 390
- An innovative way of monitoring common mainframe Java connectors such as MQSeries and CICS Transaction Gateway

Session: X12

Title: Buying Cycles is Not Performance Management

Abstract:

Many sites attempt to solve their performance issues by purchasing cycles. Given the high cost of hardware and software for these upgrades it makes more sense to improve the performance of what you already have, by getting more work through, better response for online, and faster turnaround for batch. So where should you begin? This session presents a holistic, top-down approach to performance management, focusing on the least controlled area of your workload, batch. ThruPut Manager is introduced as a mechanism to give you the control you need, whether you re running with WLM or JES2 initiators.

Session: X50

Title: TCP/IP-TOOLS Update, Disaster Recovery using OPTI-TAPE, VSE2PDF Update

Speaker: Jeffrey Barnard, Barnard Software, Inc.

Speaker: Tony Thigpen, Thigpen Enterprises, Inc.

Abstract:

Jeffrey Barnard of Barnard Software, Inc. will discuss an overview of TCP/IP-TOOLS newest feature ... VSE/ESA File and Printer sharing. Now you can share VSE/ESA files and printers with Windows, Unix and Linux systems. Followed by an overview of using OPTI-TAPE's new Remote Tape Server for Disaster Recovery. Finally, Tony Thigpen will discuss the latest updates to VSE2PDF.

Session: X51

Title: tServer--The New Standard in <60 MIPS Computing

Speaker: Steve Friedman, T3 Technologies, Inc.

Abstract:

With over 150 installations to date in 13 different countries, the tServer, a FLEX-ES based mainframe, has become a new standard for the under 60 MIPS marketplace. In this session, the speaker will discuss the Technical and Business advantages of these 8-60+ MIPS systems. Programs provided in cooperation with the IBM PartnerWorld for Developers organization will also be detailed.

Session: X52

Title: Affordable Disaster Recovery Options for the <60 MIPS Community

Speaker: Jeffrey Barnard, Barnard Software, Inc.

Speaker: Steve Leser, T3 Technologies, Inc.

Abstract:

T3 Technologies, in cooperation with Barnard Software, introduces an affordable Disaster Recovery option for VSE users. Utilizing BSI's new OptiTape software, backups are sent off-site through a secure Internet connection to a managed Data Center for storage. Whenever needed, cutover to the Data Center's Multiprise 3000 takes just a few hours. The importance of good Disaster Recovery Planning will also be discussed.

Session: X53

Title: ZIP/390, ZIP/VSE and ZIP/CICS: Master Time and Space

Speaker: David Kennedy, Data 21

Abstract:

If your business relies on Mainframe FTP in its regular operations, currently has or is developing Mainframe based Web applications, looking for a better way to Email mainframe data, and/or looking to reduce data storage, this session

will be of value to you. The session is recommended for Operations & Programming Management (CICS & Batch) and Mainframe ISV's.

Session: X54

Title: JES2Mail and JES2FTP

Speaker: Bob LaBayne, Data 21

Abstract:

The session will announce new features for JES2Mail and JES2FTP. The products are designed to extract SYSOUT from JES, encode the printout as PDF, RTF, HTML, or text attachments, and deliver them via Internet Email or FTP. A powerful script language can be used to split reports and route the pieces independently.

Session: X55

Title: Using your Mainframe as a Server

Speaker: Mark Berkowitz, Decision Technology, Inc.

Abstract:

The presentation discusses why centric based data warehouses are more successful than datamarts and that the true objective of a data warehouse is to empower end users. This is done through the provision of 2 PC clients, a Windows Client and a Browser Client. Both clients are able to access all mainframe data like DB2, VSAM, IMS/DL1, ADABAS, sequential files on tape, and existing mainframe reports.
To successfully empower end users, two perspectives must be met:

1. provide the functionality users want in an ad-hoc reporting tool and
2. meet the needs of MIS for mainframe performance and control

The presentation will discuss how Decision Analyzer accomplishes both objectives. Topics include:

- creating extract files for today's popular PC tools
- creating fully-functional spreadsheets
- combining online and batch processing
- minimizing I/O
- supporting date and time fields
- supporting VSAM file lookups
- providing security on not only a file basis, but also on a field and record basis
- viewing output in JES and POWER, distributing reports to mainframe and/or PC printers or via e-mail

Session: X56

Title: Implementing the z800 and OSA the Right Way

Speaker: Andre Girard, PSR, Inc.

Abstract:

After a technical overview of the z800 this education session will review the setup, operation and functional exploitation of IBM s latest processor. Topics will include initial setup; IOCP coding; modifications to OAT Coding & OSA/SF; cabling considerations unique to the z800 and parallel device attachment. PSR will also review our approach on how we implement IBM zSeries processors in a turnkey solution that you can pre approve as fully tested ready to deliver your facility

Session: X58

Title: Web-Enabling and Web Services for z/OS, OS/390 and VSE/ESA Made Simple

Speaker: Eric Vaughan, IntelliWare Systems, Inc.

Abstract:

zSeries and S/390 systems are a proven, high performing, ultra-reliable platform. The Internet infrastructure has proven itself as the interface to connect the mainframe to the world. The question for organizations today is, "How do we leverage the two to our advantage?"
At this session, IntelliWare will show how easy it can be to provide immediate HTML and/or XML transformation of mainframe data. The session will include live demonstrations, and free demo-copies of software that runs natively on the mainframe, transforming *any* application (CICS or non-CICS) into HTML or XML documents without any changes to the underlying applications.

Session: X59

Title: Simplifying Server Consolidation with Linux on z/VM

Speaker: Brad Schwarz, Linuxcare, Inc.

Abstract:

The business case for server consolidation in the data center is compelling: reduce dozens or hundreds of distributed servers with a single big box running Linux on z/VM as virtual servers, resulting in improved service levels and reduced costs. However, in practice, successful Linux on z/VM implementations are hampered by the difficulty in deploying data center best practices, cultural conflict between infrastructure teams (mainframe/VM, Linux/UNIX, PC, networking), and high administration costs of the virtual servers.
This session will focus on these and other potential challenges (including network configuration, integration with existing process frameworks, managing user accounts across instances, change management and rollback, attempting to minimize DASD usage, and scheduling issues) of running Linux on z/VM and then discuss solutions. Levanta by Linuxcare has been developed to address these issues. Levanta enables enterprise data centers to successfully configure, deploy, and update virtual Linux servers on z/VM.