CMG
LAS VEGAS 2004

Preliminary Agenda

The 30th International Conference for the Resource Management and Performance Evaluation of Enterprise Computing Systems

Paris
Las Vegas, Nevada

December 5–10, 2004

Letter From the CMG2004 General Chair, Dave Thorn

The Computer Measurement Group invites you to be part of CMG2004, the 30th Annual International Conference on Resource Management and Performance Evaluation. This year's conference will be held December 5-10 in Las Vegas, Nevada at the beautiful Paris Hotel.

Program Chair Shana Bereznay and her committee have assembled an outstanding array of sessions to provide the best possible educational opportunity for the systems management community. There will be insightful presentations from key industry executives, panel discussions, the return of the Business Showcase, and the best Sunday Workshop lineup CMG has ever offered. And of course, the usual technical sessions remain the heart of CMG. You won't be disappointed by what you hear and see!

Last year CMG introduced Short Presentations, which shared experiences and provided tips and techniques that often provided immediate benefit. They proved to be very popular and I'm glad to say that they will be back in this year's program.

We haven't stopped adding features to the conference, though. Thanks to the efforts of Ellen Friedman, this year we have a one-day track introducing attendees to The IT Infrastructure Library (ITIL), and on Sunday have a review program and an opportunity to take tests as part of the Institute for the Certification of Computing Professionals (ICCP). For more information on these great CMG additions and more program information, turn to page **8**.

As always, we have a Trade Show accompanying the conference. Stop by often and learn what solutions our exhibitors have for you and what their future plans are. Many of our exhibitors will also host Monday User Groups on December 6. As always, after regular sessions end there will be vendor and birds of a feather sessions. And at the end of the day don't forget **PARS** (Performance Analyst Relaxation Sessions), where we will relax, network, and enjoy some food and entertainment.

The Paris Hotel is an amazing place, and just one of many in Las Vegas. But the hotel's meeting space is ideally located away from the crowds and noise, ensuring an excellent learning environment for us all. We hope you enjoy this year's CMG location.

Please join us for the **Thirtieth** annual CMG Conference. The Conference Committee has worked very hard to put this together, and the Program Committee in particular has worked diligently to make this the most complete conference possible. Learning opportunities such as this are rare, so come to Las Vegas and see what CMG can do for you. Ask yourself this question: Can I afford to NOT attend this CMG conference?

Best Regards,

CMG2004 General Chairman

CMG

The Association of System Performance Professionals

WHAT IS CMG?

The Computer Measurement Group, Inc. is the professional association of technicians responsible for the management of computer systems. It is a volunteer organization whose primary mission is the education of its members and the advancement of the tools and techniques for computer performance evaluation.

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These are the areas of expertise that CMG builds, fosters and is chartered to advance:

PERFORMANCE MANAGEMENT
Managing performance involves monitoring and tuning. Monitoring a system's behavior utilizes a variety of tools and procedures to categorize, identify and report on the system with the goal of being proactive about performance issues. Tuning a system involves the skills required to change the system in order to improve its performance.

CAPACITY PLANNING
Capacity Planning provides a corporation with the ability to plan accurately for future IT purchases. The initial process involves a forecast of the corporation's workload to project future system requirements. This involves understanding how the workload on the system correlates to the business and how both of those things will change in the planning horizon. The next process involves understanding of how various purchasing decisions may meet those projected requirements. This can be accomplished through a variety of procedures including modeling and benchmarking.

MODELING, MATH AND STATISTICS
System models are a tool commonly used for managing the computing resources for an enterprise. The creation and use of models are addressed in this subject area. Models can employ either simulation or analytical techniques.

DATABASE MANAGEMENT
Corporations employ information technology for Information. Just saving bits and bytes is not sufficient. Collecting, correlating and bringing those bytes together in the proper context makes information out of data. This subject addresses the major tools employed to accomplish that.

SOFTWARE PERFORMANCE ENGINEERING
Most often, the biggest performance improvement gains achievable are those that address the design of the applications running on your systems. However, once an application is designed, changing it is nearly impossible and very expensive. This subject addresses the set of skills necessary to incorporate performance into the application design and build processes so that performance is not an afterthought.

STORAGE
Storage systems can be one small set of tape drives, one disk subsystem or a complex, geographically dispersed, networked system. Wherever information is stored, that is part of this topic.

MANAGEMENT AND CHARGEBACK
Managing computing resources involves significant monetary investment. The tools and techniques used for keeping track of this investment comprise this subject. Making this information useful for all the decision makers in a corporation is known as the set of practices called Chargeback.

NETWORK
The power of connectivity has eclipsed the power of the processor, leading to such incredible phenomena as the Internet. All the components of the Internet, from hubs, routers and switches to the systems and architectures (DNS, IP, proxies, redirection, content distribution and delivery, etc.) that make up the Internet are covered in this subject area.

FOCUS AREAS

These are the areas where CMG's expertise is focused:

- Open and Emerging Enterprise Operating Systems
- WebServices, WebSphere, e-Business
- z/OS

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Vice President, Sales Execution, On Demand Business

On Demand Business

Business is moving at an unprecedented pace with requirements to move quickly, to decide quickly and to sense and react quickly. Market trends, customer demands, intense competition, industry consolidations are demanding greater responsiveness from their organizations and delivered at a cost that will keep the shareholders satisfied. At IBM, we call this an on demand business - "an enterprise whose business processes - integrated end to end across the company and with key partners, suppliers and customers - can respond with speed to any customer demand, market opportunity or external threat." Rick will discuss these business trends and strategies to become an on demand business.

Rick is responsible for developing and deploying an effective worldwide cross-IBM sales execution model in support of our customers' transition to an on demand business model. This includes all aspects of our current sales model including sales support, sales execution, and streamlining access and coordination of all IBM resources --- whatever it takes to ensure that all of IBM is poised to help our customers achieve sustainable competitive advantage by moving to an on demand business model.

Prior to his current assignment, Rick was responsible for the strategy behind IBM's worldwide e-business on demand initiatives and ensuring that all of IBM's resources --- research, technology, services, consulting, hardware, software, financing, and sales --- were marshaled and coordinated with only one goal in mind: to help our customers gain competitive advantage by leveraging the benefits that e-business on demand can bring to them. He was also responsible for the day-to-day business operations of IBM's e-business on demand initiatives.

Rick has held numerous executive positions within IBM, most recently as Vice President of Operations for IBM's Americas Group where he was responsible for customer satisfaction; sales management; the end-to-end distribution and delivery management of all IBM products and offerings; implementation and support of I/T and related support systems; technical support programs for IBM's customers and business partners; and all aspects of daily operational support to IBM's sales organization across North, South, and Central America. Prior to that, he was for Vice President of Enterprise Server Sales for IBM's Americas Group with responsibility for zSeries and S/390 sales to IBM's largest customers in North, South, and Central America. Rick also established IBM's worldwide Server Consolidation Solutions Unit and was responsible for its solution framework and strategy in that marketspace, including the industry-leading ALIGN methodology. He has also served as the General Manager for both High End Server Sales and System 390 Sales for IBM Latin America.

In addition to holding various management positions in IBM's field sales and marketing organizations, Rick has held positions within IBM's Telecommunications and Media Industry Solutions Unit where he was responsible for sales and marketing programs and within the S/390 brand organization where he was responsible for S/390 sales support for all of North America.

Rick started his career with IBM in New Jersey in the United States where he was both a systems engineer and marketing representative serving customers in the Power Utilities, Higher Education, Telecommunications, and Health Industries. He is a graduate of Brown University where he received degrees in Electrical Engineering and Economics.

Mark S. Lewis
EMC Corporation
Executive Vice President, EMC Software

2010 IT: An Information Infrastructure Manifesto

The insatiable appetite for digital information is borne out of the same human curiosity, capacity for learning, and creativity which created and continues to drive our civilization. And just like our civilization which keeps changing and expanding, so is the industry built around information technologies. By 2010, IT's scope will be enlarged (again) to include consumer electronics, content-producing industries, and communications, all largely based on digital input and output. In addition, significant portions of non-commercial, information-driven sectors of the economy such as biotechnology research, healthcare, and education will be new sources of digital information creation and use.

While the IT industry will continue to expand as a result of new demand and innovation drivers, the IT deployment model will have to be adjusted, to accommodate new users, new uses, and new technologies. In particular, the new deployment model must solve the challenge of managing information efficiently and effectively throughout its life, from creation to deletion and, at the same time, provide a flexible infrastructure to support dynamic information creation, storage, transmission, and use.

With the new IT deployment model, rather than applying new information requirements manually, application-by-application, the IT manager will set enterprise-wide policies which will automatically move information and its associated resources to the most optimal storage and server platforms and to the right location at any given point in time. The IT manager will see resources as a single pool that can be allocated and provisioned on the fly and will respond to changes to the business in real time without service interruption. The Information Infrastructure will serve as the glue that binds all information technology components - servers, storage, networks, access devices - together, harnessing the power and the knowledge that is in the information about the business and in the information about IT resources, and delivering it widely with a lower total cost of ownership.

The most important transformation, however, will occur in the role of what today we call "IT managers." Running an efficient and flexible Information Infrastructure, they will become the organization's knowledge nodes, responsible for linking information assets with all stakeholders, and for developing and maintaining the enterprise's organizational memory and its unique and differentiating knowledge. In other words, they will be key drivers of their enterprises' success, growth, and influence on our civilization.

Mark Lewis is Executive Vice President of EMC Software at EMC Corporation, the world leader in information storage systems, software, networks and services, with 2003 revenues of $6.24 billion and more than 20,000 employees worldwide. EMC has dedicated itself to information lifecycle management (ILM): helping customers get the maximum value from their information, at the lowest overall cost, at every point in the information lifecycle.

Lewis shares with Executive Vice President Dave DeWalt the overall responsibility for the EMC Software Group and for accelerating EMC's evolution to a leading solutions-focused technology company. By providing best-of-breed software products and integrated ILM solutions, the EMC Software Group has elevated EMC to the ranks of the top software companies in the world. Lewis oversees the engineering, product management, program management, and business operations activities of all of EMC Software Group's development organizations: Storage Management Software Group, Storage Infrastructure Software Group, Information Management Software Group, and Content Management Software Group.

Lewis reports to Joe Tucci, EMC's President and CEO, and is based at EMC headquarters in Hopkinton, Massachusetts. He joined EMC in July 2002 from Hewlett-Packard/Compaq, where he was Vice President and General Manager of Compaq's Enterprise Storage Group, the second largest storage organization in the world after EMC, with total P&L responsibility for the $2 billion business segment. From 1998 to 1999, he led Compaq's Enterprise Storage Software Business after serving for two years as Director of Engineering for Multi Vendor Online Storage. Prior to that, he spent 13 years in storage-related engineering and product development at Digital Equipment Corporation.

Lewis holds eight U.S. patents in storage technology. He has a B.S. in Mechanical Engineering from University of Colorado, Boulder. He has studied Business Law, Marketing and Accounting for an MBA at University of Colorado, Colorado Springs, and he attended the Executive Education Program at the Harvard Business School.

Jim Grant
BMC Software
Vice President and General Manager of BMC's Remedy Business Unit

Business Service Management: Configuration, Change, Assets and IT Management

Practitioners of resource and performance management have, in many ways, led the early charge for acceptance of service management principles. As customers and vendors engage in building solutions that are service-centric in design and application we must challenge long-held ideas and approaches to solving the management problem. Is the integration of best of breed technologies a superior approach to what has been seen as the failure of frameworks? Is there something in between? Can standards really solve the problem? There are a number of parallels that can be instructive here and we should consider the implications as a way of ensuring our work is more relevant to the businesses we serve. Jim will explore these issues in the context of the evolving management software market and its likely directions in an effort to create context for the good work CMG attendees must do.

Currently Vice President and General Manager of BMC's Remedy Business Unit, Jim leads the business that is the dominant player in the Service Desk Market, worldwide. An integral layer of BMC's Business Service Management (BSM) strategy, Remedy's ITSM, CSS, Magic applications and the Action Request System deliver ITIL based service management software solutions for thousands of IT customers seeking to provide superior service to the businesses they support.

A graduate of the University of Colorado, after his Masters degree, Jim taught operations management at the University as well. Working at Hewlett Packard during this time and prior to joining BMC, he occupied a number of roles in management and General Management of software organizations, most recently the VP and GM of the OpenView business.

In these and his current role, he has been an industry advocate of Business Service Management approaches to achieving greater value for and from IT.

CMG2004 Conference Program Highlights

Shana Bereznay, Program Chair

Following on the very successful changes implemented in 2003 was, on the one hand easy – the stage and formula for success had been set, and on the other hand difficult. How do you follow on the successful footsteps of the previous year? We feel that we have kept the best of the best of the changes from last year, with a few additions unique to 2004. You will see a re-emergence of the acclaimed 30-minute 'short' sessions as well as a return of the 'How-To' sessions. The fortieth anniversary of the Mainframe is celebrated with the latest techniques in z/OS systems management and practical information about z/OS best practices. Many sessions are available answering the questions and issues that keep CIO's and other IT executives awake at night such as how to select and manage emerging enterprise computing platforms effectively, including the full range of Open Source, .NET, J2EE, and Web Services computing initiatives.

Showcases - The popular Business and Executive Management Showcases return with an excellent lineup of top Executives to give you a taste of the future technology trends and topics of importance to every business environment. In addition you will find a few new additions…

Workshops - We once again opened up the Sunday Workshop submission process with the "*Call for Workshops*" where we formally solicited topics and speakers. We had an overwhelming response to the Call for half-day and full-day workshops on topics of interest to conference attendees. It was a tough choice between many excellent topics but Dr. Bernie our Workshop Chair has made excellent choices! See page **13** for details!

ICCP – CMG is a recognized affiliate of the Institute for Certification of Computing Professionals (ICCP), and for the first time will offer member discounts for a Certified Computing Professional (CCP) Review program to help attendees prepare for the tests as a separate Sunday offering. You will have the opportunity to take up to three ICCP exams onsite at the conference: the IT Core exam, the IT Management exam, and the Business Information Systems exam. In addition, attendance at the CMG conference counts towards the Continuing Education hours required for maintaining an ICCP professional certification in good standing. See page **85** for more information.

ITIL - In an effort to promote professional standards among its members, CMG will highlight the IT Infrastructure Library (ITIL) best practices in a one-day track at CMG2004. ITIL is the most widely accepted approach to IT Service Management in the world and is rapidly being adopted as the global standard for best practices in the provision of IT service. - see page **28** for the *who* and the *what*!

Sessions and Subject Areas – The feedback from 2003 was overwhelming – everyone loved the Short Presentations and the 'How To' sessions and wanted to see more. We have added a morning session of just 30-minute presentations so you can get your fill! These come on the heels of our 90-minute tutorial and panel sessions and are an addition to our 'bread and butter' standard presentations. Across all the categories, you'll find tutorials on specific subjects, and of course the "How To" sessions showing how to apply popular tools and products to common performance and capacity problems. Based on your interests and input we have categorized the submissions into specific subject areas. Check out pages 2-3 for descriptions of the different subject areas, as well as the cross-reference index starting on page 59, that lists all the presentations in each different subject area.

CMG2004 Program Chair

EXECUTIVE MANAGEMENT SHOWCASE — TUESDAY

The highly successful Executive Management Showcase returns with Annie Shum bringing you top executives in the System Management industry, speaking on topical areas of interest such as RFID, Web Services and IT Service Management Best Practices to name just a few.

These sessions have been scheduled throughout the day on Tuesday and offer a unique opportunity to hear the technology trends of the Systems Management industry from several of the Industry leaders.

Fred Engel, Executive Vice President and CTO, *Concord Communications* — Tuesday 9:15 AM - 10:45 AM

Death, Taxes, and Your Network Infrastructure. How to Make Network Reliability One of Life's Few Guarantees.

Nothing in this world is certain, except death and taxes. But fault and performance management solutions have made network reliability pretty close to one of life's few guarantees. You do not have to wait for your network to break before you fix it, you can anticipate most of the failure and slowdown scenarios before they occur. To achieve the goal of full network availability, IT managers must be able to identify potential problems before they occur, analyze performance degradations as they happen, and rapidly recover from complete outages once they occur. Hear from a network industry veteran about best practices for ensuring uptime and optimizing performance across your entire IT infrastructure.

Dr. Jothy B. Rosenberg, Founder and CTO, *Service Integrity* — Tuesday 9:15 AM - 10:45 AM

See, Understand and Act in Real Time

New application integration technologies provide unprecedented access to precise, actionable business information flowing between application nodes running on all platforms including mainframes, application servers, and legacy packaged applications in XML format. Breakthrough technology is leveraging this capability to deliver DEEP VISIBILITY. The resulting TOTAL BUSINESS CONTEXT empowers business managers to SEE, UNDERSTAND & ACT in real time to improve their business.

Dr. Kenneth R. Traub, CTO, *ConnecTerra, Inc* — Tuesday 1:15 PM - 2:15 PM

Radio-Frequency Identification at Enterprise Scale

Radio-frequency Identification (RFID) is being rapidly adopted within many industry verticals, driven in part by mandates from leading retailers, regulatory agencies, and the federal government. Adoption will have significant impact on IT infrastructure for enterprises. For example, a nationwide retail chain may require ten million RFID readers, representing a manageability problem and a source of new data, orders of magnitude larger than anything deployed today. This talk will present the fundamentals of large-scale RFID deployments, with particular attention on the enterprise IT challenges. Topics discussed include architecture, software standards, management, and scalability.

Corey Ferengul, Sr. VP, *META Group* — Tuesday 2:45 PM- 3:45 PM

Assessing the Monitoring Market and Maturity

It's important to keep up with the market. There are numerous changes and countless offerings. Besides understanding tools, companies must understand their own deployments and maturity in use of the tools and processes. We will explore keys to assessing maturity, processes and an update on the overall monitoring market.

James R. Crew, Director, *Merrill Lynch* — Tuesday 2:45 PM - 3:45 PM

CICS Application Integration using Web Services

Merrill Lynch is using Web Services to tackle onerous application integration challenges and reduce the burden of proprietary coding. Merrill Lynch created an integration tool called XML for Merrill Lynch (X4ML)that exposes mainframe applications as standard Web Services interfaces. The tool lets CICS programs participate in Web Services by accepting Simple Object Application Protocol (SOAP) requests from the web, converting the SOAP requests into formats accepted by the legacy programs, and then converting the results into SOAP responses. X4ML runs completely within CICS, requiring no middle-tier hardware. Come and listen to this success story and learn why Merrill Lynch is bullish on Web Services.

Mary Nugent, Vice President and General Manager, *BMC Software* — Tuesday 4:00 PM - 5:00 PM

Embracing Best Practices: the IT-Business Alignment Cycle

An independent study of more than 240 IT executives, middle managers and staff found a very strong relationship exists between IT-Business Alignment Cycle maturity and the participants' assessment of their overall IT efficiency and alignment. Efficiency and alignment leaders had consistent management data, they modeled their IT infrastructures on an enterprise level, and they acted on integrated metrics and scorecards. Participants who rated high on IT efficiency and alignment showed a significant leadership in change management, and high quality management of the IT organization driven by a focus on service agreements. This session will encapsulate the findings of the study and best practices companies can embrace to move toward maturity. The session will also provide details on how companies can assess their organization's maturity in the cycle.

Dr. Werner Vogels, Director of Systems Research, *Amazon.com* — Tuesday 4:00 PM - 5:00 PM

Web Services Are Not Distributed Objects

The hype surrounding Web Services has generated many common misconceptions about the fundamentals of this emerging technology. In this presentation, I will clarify several common misconceptions about Web-Services technology. This clarification is essential to ensure that Web Service technologies can succeed as technology for solving business, architectural and implementation problems. Some of the misconceptions frequently heard are Web Services are just like Distributed Objects, Web Services are RPC for the Internet, or Web Services need HTTP. This presentation focuses on the core principles of Web Services technology to build an appropriate vision of Web Services and XML-document oriented computing, and the role of vendors in fueling current misconceptions.

BUSINESS MANAGEMENT SHOWCASE — WEDNESDAY

Sid Finehirsh brings back the ever popular Business Showcase with presentations from Business Specialists experienced in using IT solutions to solve business issues and discussing changes in IT strategy and management. These sessions have been scheduled all day Wednesday.

Bruce J. Rogow — Wednesday 9:15 AM - 10:45 AM

ViValdi Odyssey and Advisory Service

The IT Management Landscape…A View from the Odyssey: A New Set of Challenges Returns

Each year, Bruce makes over 120 independent, one-on-one Odyssey visits with senior IT and business executives. The interviews are used to gain a perspective on the mindset of these senior IT executives, what is working, what is not and the direction of IT management. These perspectives are presented as the OdysseyView of evolving IT management.

Over the past year, the OdysseyView has been seeing a major shift develop related to the underlying management premises for IT. Increasingly, IT strategy and management is about what is affordable and prudent. These changes have been brought about by a set of challenges that have made successful IT more problematic. Each of these challenges is discussed. As an example, many firms are shifting their business models to include a major service business offering. These service support applications often require different architectures than those currently installed. At the same time, most IT execs believe they should be taking over 10% a year out of their cost base.

The changes in the underlying premises for IT, strategy and management will change the shape and nature of IT measurement and metrics. As an example, prudent firms are learning that readiness or assimilation assessment may be far more critical than an ROI analysis based on a basket of assumptions. End to end measurement of the application performance as well as user adoption become critical issues.

Amy Wohl — Wednesday 1:15 PM - 2:15 PM

Editor, Amy D. Wohl's Opinions, *Wohl Associates*

Editor and Publisher of Amy D. Wohl's Opinions, a weekly electronic newsletter. She also maintains a weblog at http://amywohl.weblogger.com. She is a well-known industry analyst and consultant. She is a contributing editor to Spectrum Middleware, and a frequent contributor to the trade and general business press on the Internet, software, computing, computer trends, and technology. Mrs. Wohl is a frequent speaker at industry conferences and seminars. She is especially well known for her keynotes on the future of IT.

Douglas Neal — Wednesday 2:45 PM - 3:45 PM

Research Fellow, *CSC's Research and Advisory Services*

The Consumerization of Information Technologies -
A New Source of Both Infrastructure and More Responsible Employees

The increasing consumerization of information technologies is providing employees with significant, but incomplete, education in many information technologies. It is now not uncommon to find half a dozen wireless LAN's within reach of a suburban house. This new education and capability could lead to insights and innovations in the use of technology within firms, just at a time when businesses are hungry for innovation. At the same time, consumerization is also leading to public infrastructure, such as email and backup, which are rapidly becoming attractive alternatives to our existing private infrastructure. However, if we pursue business as usual we will not capture the benefits of these relentless trends. To take advantage of these trends, organizations need to 1) create the ability to monitor the evolution of emerging public infrastructure, and 2) begin to trust users in ways that develop not just their technical understanding, but also their responsibility for how it is used.

Panel: Business Showcase Panel — Wednesday 4:00 PM - 5:00 PM

During the Business Showcase you heard separate presentations by three innovative and important Information Technology leaders with distinguished careers in analyzing the future of our industry. Now the Business Showcase brings them together for an interactive discussion with each other and the CMG community. This is not only your chance to see how they respond to each other's controversial visions of our IT future, but also to voice your own opinions, questions, and concerns.

Panelists include: Bruce J. Rogow and Douglas Neal

ROOKIE GUIDE

Suggested Sessions for New Conference Attendees

The following is a set of suggested sessions for attendees new to the national CMG conference, and for those that have not been at the the national conference in several years. These sessions were chosen primarily on the basis of their content being tutorial in nature. In some cases the speaker is well-known within CMG circles, and has consistently delivered high quality material in a very entertaining way.

We hope that this "Rookie Guide" heightens your CMG experience.
Dr. Bernie Domanski

SUBJECT	FOCUS	SESSION	PAPER	AUTHOR	TITLE
SPE		312	4247	Dr. Connie U. Smith	Introduction to Software Performance Engineering
Perf	EEOS	316	4036	Robert Andresen	Monitoring Linux with Native Tools
Mgmt		333	4083	Michael D. Maddox	A Performance Process Maturity Model
SPE		336	4110	Fred M. Richards	Performance Engineering throughout the Software Life Cycle
Stor	EEOS	344	4086	Joel B. Motzny	Establishing an Open Systems Storage Strategy for your Company
Perf	EEOS	346	4008	William S. Keezer	IT Web Reporting: All Things to All People
Stor	EEOS	354	4233	Mark B. Friedman	A Simplified Approach to Windows Disk Tuning
SPE		356	4011	Claire S. Cates	Where's Waldo: Uncovering Hard-to-Find Application Killers
Mgmt		411	4506	Bruce J. Rogow	The IT Management Landscape…A View from the Odyssey: A New Set of Challenges Returns
Mgmt	WEB	413	4241	Annie W. Shum	Journeying to the Land of On-Demand: Principles to Follow, Pitfalls to Avoid
Stor	EEOS	415	4041	Greg P. Schulz	Performance and Capacity Planning Basics for Storage Networks V2.0
Mgmt		416	4020	Denise P. Kalm	Perception is Reality - The Psychology of Performance Management
Net		417	4190	David J. Konz	A White Box Look at the Performance of 802.11 Wireless and its Variants
Mgmt		421	4244	David F. Redinbaugh	A Methodology for Tracking Capital Spending for IT
Perf	EEOS	423	4064	Andrew S. Duffen	Managing All of Your Application's Servers From a Single Web Page
Model	EEOS	434	4601	Joe Rich	Platinum Sponsor TeamQuest presents: the ABCs of Workloads
Stor	EEOS	435	4040	Greg P. Schulz	Storage Technology Primer & Update
Stor	z/OS	445	4005	H. Pat Artis	Understanding the Differences between z900 and z990 Service Time Measurements
		451	4537	Sid Finehirsh	Panel: Business Showcase Panel
Net	WEB	453	4186	Dr. Bernard Domanski	Turn Your Old Unused PC At Home Into A Fully Functional Web Server That Runs From Your Kitchen
Perf	EEOS	512	4101	Ronald R. Kaminski	Automating Workload Characterization by Policy
Perf		513	4535	Charles W. Hopf	MXG for Dummies
Perf		517	4242	Richard Gimarc	Moving Beyond Test and Guess - Using Modeling with Load Testing to Improve Web Application Readiness
Perf		523	4046	Adam Grummitt	Corporate Performance Management as a Pragmatic Process in an ITIL World.
Perf		532	4002	Linwood Merritt	Seeing the Forest AND the Trees: Capacity Planning for a Large Number of Servers
Mgmt		533	4536	Cathy Wright	ITIL: Make it So
Net	WEB	535	4235	Sidney W. Soberman	Web Bandwidth Management using Homemade Tools and Freeware
Perf	EEOS	545	4176	Chris Molloy	Best Practices for Server Virtualization
Perf		552	4264	Rick Lebsack	Facilitated Discussion: The Future of The Performance Field
SPE		604	4013	Claire S. Cates	How's Your Memory?
Perf	WEB	661	4010	Dr. Bernard Domanski	Performance Issues of Web Services
SPE	z/OS	676	4115	Thomas A. Halinski	Performance Improvements from the "Things I Wish They'd Told Me 8 Years Ago" - Visualized
Perf		677	4003	Linwood Merritt	A Finger in the Wind: Forecasting Techniques for Capacity Planning

INVITED SPEAKERS

SESSION	SUBJECT	FOCUS	AUTHOR	TITLE
301	Mgmt	WEB	Rick Fuchs	On Demand Business
311	Mgmt	WEB	Dr. Jothy B. Rosenberg	See, Understand and Act in Real Time
311	Net		Fred Engel	Death, Taxes, and Your Network Infrastructure. How to Make Network Reliability One of Life's Few Guarantees.
314	SPE		Marc J. Fleury	Professional Open Source and the Future of JBoss
331	Net		Dr. Kenneth R. Traub	Radio-Frequency Identification at Enterprise Scale
332	Perf	z/OS	Glenn R. Anderson	A z/OS WLM Update for DB2 Environments
335	Stor		Randy Kerns	iSCSI - Understanding the Issues
341	Perf		Corey Ferengul	Assessing the Monitoring Market and Maturity
342	SPE	WEB	James R. Crew	CICS Application Integration using Web Services
351	Mgmt	WEB	Mary Nugent	Embracing Best Practices: the IT-Business Alignment Cycle
352	Perf	WEB	Glenn R. Anderson	WebSphere for z/OS Ver 5 Performance Tuning
353	Net	WEB	Dr. Werner Vogels	Web Services Are Not Distributed Objects
401	Mgmt		Mark S. Lewis	2010 IT: An Information Infrastructure Manifesto
411	Mgmt		Bruce J. Rogow	The IT Management Landscape…A View from the Odyssey: A New Set of Challenges Returns
414	Stor	EEOS	Prem Mehra	SQL Server 2000 and Large Storage Deployment
415	Stor	EEOS	Greg P. Schulz	Performance and Capacity Planning Basics for Storage Networks V2.0
431	Mgmt		Amy Wohl	TBD
435	Stor	EEOS	Greg P. Schulz	Storage Technology Primer & Update
441	Mgmt		Douglas Neal	The Consumerization of Information Technologies - A New Source of Both Infrastructure and More Responsible Employees
442	Perf	z/OS	Kathy Walsh	WLM Myths, Truths, and Half Truths
452	Perf	z/OS	Kathy Walsh	Introduction and Overview of zAAPs on z/OS
501	Perf	z/OS	Jim Grant	Business Service Management: Configuration, Change, Assets and IT Management
531	Stor		Fred G. Moore	Storage Navigator

FOCUS AREAS

EEOS = Open and Emerging Enterprise Operating Systems
WEB = WebServices, WebSphere, e-Business
z/OS = z/OS

SUBJECT AREAS

Mgmt = Management and Chargeback
Model = Modeling, Math and Statistics
Net = Network
Perf = Performance and Capacity Management
SPE = Software Performance Engineering
Stor = Storage

CMG2004 SUNDAY WORKSHOP SCHEDULE

BREAKFAST	7:30 AM – 8:30 AM
MORNING WORKSHOPS	8:30 AM – 12:00 PM
LUNCH	12:00 PM – 1:00 PM
AFTERNOON WORKSHOPS	1:00 PM – 4:30 PM

Please note that each workshop is only presented once and will not be repeated.

Morning Workshops

Michael Bitterman
The "Real" Question is What to Measure and How to Measure IT!

Joe Chang
SQL Server Quantitative Performance Analysis

Adrian Cockcroft
Grid Computing

Daniel Menasce
Fundamental Concepts in Performance Engineering

Henry S. Newman
Trials and Tribulations of Shared File Systems in a Heterogeneous Environment

Susan Schreitmueller
IBM's Virtualization Engine Workshop

Afternoon Workshops

Ron R. Kaminski
Real World Modeling and Capacity Planning Techniques

Randy Kerns
Data Replication -Techniques, Technology, and Implementations

Dr. Odysseas I. Pentakalos
Tuning the Performance of Java and J2EE Applications

Dr. Porter D. Sherman
If You Can't Measure it, You Can't Manage it" - A Tutorial on the ITIL Process Driven Framework for Service Management

Sam F. White
Server Consolidation in the *Nix and Windows Environments

Dr. Lloyd G. Williams & Dr. Connie U. Smith
Making The Business Case For Software Performance Engineering

Michael Bitterman
IT Performance Management Group

Morning Only

The Real Question is: What to Measure and How to Measure IT?

BI, CPM, BPM, portfolio management, CRM, EVA, BSC and on and on and on. These are all great tools now available to the IT professional for analyzing and reporting on process and performance. However, much like a builder with all the necessary tools, he can't build the house without a set of plans. Or, better said, he can build a house, but it may not turn out to be the house you had in mind.

At this session you will learn how to determine and select the "right" set of measures for your organization in order to utilize the tools that have been made available. Without an understanding of "what" to measure, most of these tools will simply allow you to more quickly and elegantly, come to the wrong conclusions.

Michael Bitterman is a founder of the IT Performance Management Group and an active consultant within the IT performance management practice. He currently works with senior business and IT executives in performing high-level engagements focused on establishing the current performance of the IT organizations and the synergy/alignment between the business and IT. He employs the tools, techniques and methodologies he developed specifically for these assessments. Prior to founding ITPMG Mr. Bitterman was a vice president at Gartner Group where he held a number of positions and established the IT Transformation and IT Performance Management practice.

Joe Chang

Morning Only

SQL Server Quantitative Performance Analysis

Most modern database systems use sophisticated cost based optimizers, for which only a general or even vague description of the details are provided. In theory, this allows the developer to focus on the business logic of their application and leaves the performance considerations to the optimizer. Considering the effort actually spent on performance tuning, it is clear that the advanced developer and DBA cannot ignore performance issues in the design of a database application. An examination of the cost formulas used by SQL Server's optimizer enables the developer to understand why a particular execution plan is used for a query. This in turn allows the developer to understand when an index is used and why a certain table structure allows more efficient join operations without guess work. A detailed model for the true cost structure of the basic SQL operations allows the developer to predict performance early in the development phase and make critical design decisions based on knowledge of the expected performance impact. It is also possible to estimate performance expectations by processor architecture (Xeon, Itanium and Opteron) and system architecture (2, 4, 8-way+ SMP).

Joe Chang is a consultant specializing in SQL Server, database architecture, design, performance tuning, and scalability analysis. Joe has more than 12 years experience in software development, including performance and scalability analysis, for microprocessors, server systems and database applications. Much of Joe's published work can be found at:
www.sql-server-performance.com/joe_chang.asp

Adrian Cockcroft

Morning Only

Grid Tutorial

Evolution of Grids in Scientific, Technical and now Commercial arenas Analogies to clarify the concepts Definitions of Cluster Grids, Enterprise Grids and Global Grids Grid standards from the Global Grid Forum, Enterprise Grid Alliance and OASIS Interconnect, visualization and storage technologies for Cluster Grids Management and policy based automation of Enterprise Grids Web services and resource brokering for Global Grids Existing performance management tools Challenges for capacity planning.

Adrian has been a CMG Member since 1994. Although currently unemployed, Adrian has been a Sun Distinguished Engineer in the field of performance analysis as well as Chief Architect for High Performance Technical Computing working on a range of Grid technologies and solutions.

Ron R. Kaminski
Safeway Inc.

Afternoon Only

Real World Modeling and Capacity Planning Techniques

This seminar will assume that you already understand how to create and maintain workloads, (or that you attended my morning seminar or papers last year) and will focus instead on both basic and advanced ways to forecast and/or model future resource consumption. We'll examine the good, the bad and the ugly methods of setting up test runs to get an accurate sample for your models. Via what-if studies based on real world data and real business metrics, we'll cover simple growth models, the power of scenario plans, solving the mysteries of black box process or workload resource forecasting, as well as hints and tricks for forecasting applications that span several machines and some spreadsheet tricks that will increase your speed, accuracy and piece of mind. There will also be a section on modeling oddities where we'll explain some of the stranger things you will see on your journey.

We'll also cover what to look for in commercial products and home-brew tools that will make modeling and results reporting easier. There will be no marketing, salespeople or purchase pressure, just great ideas, spreadsheets, open source code, and advice from someone who has been there. If time permits, we will also play "Stump the Modeler", where you can ask any performance and capacity planning question that you may have.

Ron Kaminski has been a capacity planner and performance analyst since the mid 1980s, on probably every platform you can name besides a mainframe. A dedicated workload characterization junkie, Ron enjoys using multiple vendor and "home-grown" tools to collect, reduce, analyze, display and manage large-scale performance and capacity planning, as well as sharing ideas with fellow capacity planners and performance analysts.

Ron was honored to receive both a Best Paper and The Mullen Award at CMG2003 in Dallas Texas.

Randy Kerns
Evaluator Group

Afternoon Only

Data Replication - Techniques, Technology, and Implementations

Data replication is a very basic function in all IT operations. There are many reasons for replication: protection of data, creation of test data, allowing for independent processing, etc. Many solutions are now available to provide copy services for data. These solutions include point-in-time copy of data, remote copy, mirroring, and migration of data. Data replication has major impacts on business operations and the performance of the replication can mean the difference in application availability, risk of data loss in a disaster situation, or the speed at which transactions may occur.

Another factor for data replication that has a significant contribution to the performance of data replication is where the replication is done. Originally replication was done as another program running on the host. Advanced features were added for storage systems to provide data replication there under certain limitations. With the progression of storage area networks, new capabilities have been added to elements in the storage network to perform data replication functions.

This workshop will take a detailed look at data replication and where replication can be performed. The attributes of replication in a storage system, at the host or server, and in the storage network will be examined for both functionality and performance implications. The different data replication functions of point-in-time copy, remote copy, mirroring, and data migration will each be explained with in-depth examination. The more popular vendor offerings in each category will be discussed with comparative information supplied.

From this workshop, the attendee should be able to understand all the options and make an informed decision when choosing a solution. The rationale for the solutions and the individual vendor offerings should be the take-away information for the attendee.

Daniel A. Menasce, Ph.D.
George Mason University

Morning Only

Fundamental Concepts in Performance Engineering

This example-driven workshop presents fundamental concepts that are key to everyone involved with performance engineering, performance measurement, application performance management, load testing, and capacity planning. These concepts, based on Operational Laws of computer performance and on easy-to-understand and easy-to-solve performance models, are presented within the context of several case studies including Web servers, e-commerce sites, and Internet data centers. Open and closed queuing network models are discussed in light of easy-to-follow examples. Workshop attendees are encouraged to bring laptops loaded with MS Excel to this hands-on workshop.

Daniel A. Menasce is a Professor of Computer Science at George Mason University, the director of GMU's MS in E-commerce program, and the co-director of GMU's E-Center for E-Business. Menasce received a PhD in Computer Science from UCLA in 1978. He is the recipient of the 2001 A. A. Michelson Award from CMG and a Fellow of the ACM. He is the author of 160 refereed papers and several books including "Performance by Design," "Capacity Planning for Web Services," "Scaling for E-Business," and "Capacity Planning and Performance Modeling," published by Prentice Hall in 2004, 2002, 2002, and 1994. Menasce is the Vice-Chair of ACM's Special Interest Group in E-commerce (SIGecom), a member of the editorial board of IEEE Internet Computing, and an Associate Editor of the Electronic Commerce Research and Applications journal. He has consulted extensively in the areas of Web and e-commerce performance and scalability and software performance engineering.

CMG LAS VEGAS 2004

Henry S. Newman
Instrumental Inc

Morning Only

Trials and Tribulations of Shared File Systems in a Heterogeneous Environment

The workshop will cover solutions for multi-vendor heterogeneous shared file system and HSM/backup solutions and point out caveats in architecting a heterogeneous file system solution. As part of this we will identify applications areas that can take advantaged of shared file systems, create several architectures based on the various solutions. Performance and interoperability will be an underlying theme throughout the workshop.

Distributed applications and requirements for data sharing in large environments necessitate a mechanism for coherent data sharing between users, applications and platforms. Network architectures can no longer support the sheer bandwidth of current large environments and therefore must look towards other means to efficiently store and share data.

Mr. Newman has worked in the IT industry for over 23 years. In positions with Instrumental and Cray Research, Mr. Newman has provided expertise in systems architecture and performance analysis to customers in government, scientific research, and industry around the world.

Dr. Odysseas I. Pentakalos
SYSNET International, Inc.

Afternoon Only

Tuning the Performance of Java and J2EE Applications

This workshop will provide a comprehensive overview on the development of high-performance Java-based applications and on the tuning of existing applications. Particular emphasis will be placed on enterprise and server-side applications.

The workshop will begin by reviewing the execution process of a Java application moving next to coverage of Java virtual machines and their impact on the performance of an application. This section will include a discussion of the HotSpot JVM, critical parameters that affect the operation of the JVM, and especially garbage collection algorithms. We will describe how JVM garbage collection works, how it impacts the performance of an application, what parameters are available for tuning its operation and how to tune the parameters.

The next section will cover tuning tips that may be used during development of an application, covering different areas of the Java programming language such as the object lifecycle, I/O performance, serialization, the choice of collections and parsing.

The workshop will describe some of the benchmarks that are available to assist you with building a high-performance Java application and load-testing tools for helping you detect bottlenecks.

After we cover the basics, we will dig deeper into the performance of applications built on top of the J2EE framework. We will investigate the impact of the life-cycle of each Enterprise Bean type on the performance of an application and look at some of the tunable parameters available on most application servers. We will discuss what to consider in terms of performance when you incorporate the use of Web Services in you Java applications.

Finally we will review some of the core design patterns for J2EE applications that have direct impact on the performance of the application.

Susan Schreitmueller
IBM

Morning Only

IBM Virtualization Engine Workshop

The IBM Virtualization Engine Workshop will begin with a platform neutral lecture of the Virtualization Engine. We will review the five components: Virtualization Console, eWorkload Manager (eWLM), Storage Productivity, Multi-platform Director, and the Tivoli Systems Provisioning Manager. After our overview lecture and introduction, we will cover platform specifics. Attendees will then work with a demonstration of VE and be able to view functionality.

Susan Schreitmueller is a Sr. Consulting I/T Specialist with IBM. She joined IBM 8 years ago as a professional hire, specializing in pSeries, AIX and technical competitive positioning against SOLARIS and HP-UX. Susan has been a system administrator on Zseries, Iseries and pSeries platforms and has expertise in system administration and resource management. She travels extensively to customer locations and has a passion for mentoring new hires and working to create a cohesive technical community that shares information at IBM.

Dr. Porter D. Sherman
Unilever Inc.

Afternoon Only

"If You Can't Measure IT, You Can't Manage IT"- An ITIL Service Management Tutorial

ITIL is an internationally established organization with the goal of perpetuating IT Service Management "Best Practices". The ITIL Framework first gained prominence in Europe over a decade ago and is now making in-roads into North America, driven by such mandatory audit programs as Sarbanes-Oxley.

This workshop introduces the key concepts that make up the ITIL framework, why ITIL is relevant and how to measure process performance. An implementation roadmap will be presented including a discussion on tools. The workshop will be concluded with an overview of what it takes to change culture and a summary of future considerations.

Outline:

- Introduction to the 6 perspectives of the ITIL framework
- Overview of the 10 ITIL Service Mgmt processes
- Using KPI's & Balanced Scorecards to manage processes
- Implementation roadmap
- Tools
- Evoking culture change
- Future Considerations: COBIT & Sarbanes-Oxley

Dr. Sherman has spent 25+ years in IT. He taught Computer Engineering before working at UTC, GE & Oxford Healthcare. He is currently the North American Program Manager for a Service Management Improvement Initiative at Unilever Inc. He presented an ITIL Implementation Workshop at the itSMF conference in September 2004, is a co-author for a book on Business-IT interfacing (to be published by the UK TSO department), and presented a paper on ITIL Capacity Management (CMG 2003).

Sam F. White
Coca-Cola Enterprises Inc.

Afternoon Only

Server Consolidation in the *Nix and Windows Environments

Server Consolidation continues to gain momentum as a method for better utilizing today's more cost efficient hardware and continually higher priced software, labor and other costs. While a long time staple in the Mainframe world, the sharing of *Nix or Windows computing resources is still a relatively a new concept. This workshop examines Consolidation from both the Technical and Political aspects. The goal is to equip those considering or starting consolidation projects with practical points of exploration in their particular environment.

Topics include:

Technical
- Choosing or Discounting applications for consolidation
- Methods on how to assure applications will "fit" technically.
- Forward and Legacy Consolidation
- Approaches for Shared, Workload, Logical, and Virtual Consolidation
- Necessary (but not readily available) system monitoring

Political
- Consolidation Options
- Methods on how to assure applications will "fit" politically.
- Required Policies and Procedures
- Social Engineering
- Recommended Reporting
- Thoughts on Costs, ITIL, Capacity Planning

Sam F. White is a Capacity and Performance Specialist presently employed at Coca-Cola Enterprises Inc. in Atlanta Georgia. He has 20 years experience in the IT field working at several Fortune 500 companies. Sam has enjoyed diverse opportunities with experiences including Capacity Planning, Performance Analysis, Systems Architecture, Application Modeling and Server Consolidation.

Dr. Lloyd G. Williams & Dr. Connie U. Smith
Software Engineering Research

Afternoon Only

Making The Business Case For Software Performance Engineering

Shrinking budgets and increased fiscal accountability mean that management needs a sound financial justification before committing funds to software process improvements such as Software Performance Engineering (SPE). Preparing a business case for SPE can demonstrate that the commitment is financially worthwhile and win support for an SPE initiative. This workshop presents an introduction to the use of business case analysis to justify investing in SPE to reduce costs due to performance failures.

Topics include:
- SPE Overview
- Business Case Basics
- Cost/Benefit Analysis
- Financial Analysis Tools
- Case Studies
- Making SPE Happen

Emphasis will be on helping attendees build their own business case. We will provide a spreadsheet-based tool and lead exercises to reinforce the concept.

Dr. Lloyd G. Williams, a principal consultant at Software Engineering Research, is internationally recognized for his work in the development and evaluation of software architectures to meet quality objectives including performance, reliability, modifiability, and reusability.

Dr. Connie U. Smith, a principal consultant of the Performance Engineering Services Division of L&S Computer Technology, Inc., is known for her work in defining the field of SPE and integrating SPE into the development of new software systems.

CMG2004 Monday Schedule

Meeting Schedule

Vice President's Regional, International Officers, and Advisory Council Meeting	9:00 AM -	12:00 PM
International Officers Meeting	1:00 PM -	3:00 PM
Session Monitors & Chairs Meeting	4:30 PM -	5:30 PM
First-Time Attendee Orientation	4:30 PM -	5:30 PM
Annual Business Meeting / Opening Session	6:00 PM -	
PARS	Immediately Following Business Meeting	

Monday User Groups

Axios Products, Inc.	1:00 PM -	5:00 PM
BMC Software	8:30 AM -	5:30 PM
Demand Technology Software, Inc.	9:00 AM -	4:00 PM
ISM (the Information Systems Manager)	8:30 AM -	3:00 PM
MVS Solutions Inc.	8:00 AM -	4:30 PM
SAS Institute Inc.	9:00 AM -	5:00 PM
TeamQuest Corporation	1:00 PM -	5:00 PM

Axios Products, Inc.

1373-10 Veterans Highway Hauppauge, NY 11788
Phone: 631-979-0100 Fax: 631-979-0537
www.axios.com

Axios Products, Inc., invites you to its SmartProduction Batch Analysis and Tuning User Group Meeting on Monday, December 6, 2004 at 1:00 pm. Product specialists will discuss Batch performance and tuning issues, as well as successful implementation techniques and strategies.

Lunch will be served. SmartProduction customers and those interested in improving Batch performance while reducing processing costs, are welcome!

To reserve your space at this event, or for more information, contact the Marketing Department at Axios Products, Inc., (631) 979-0100
or e-mail info@axiosproducts.com.

BMC Software

2101 CityWest Blvd Houston, TX 77042
Phone: 713-918-8800 Fax: 713-918-3460
www.bmc.com

BMC Software will hold its Annual Performance Conference at CMG on Monday, December 6, at Bally's Las Vegas. The Conference features the latest products for performance and capacity management of enterprise-wide applications. BMC Software will present how our solutions ensure the performance and availability of business-critical applications in today's environment. You will learn how to proactively identify system bottlenecks; monitor, manage and automate system performance, and manage the capacity of existing and future systems. Join us at our Annual Performance Conference on Monday, December 6th!

Demand Technology Software, Inc.

1020 8th Ave. S. Suite #6 Naples, FL 34102
Phone: 239-261-8945 Fax: 239-261-5456
www.demandtech.com

Demand Technology Software, the developer of NTSMF, is proud to sponsor its sixth annual Windows Performance Symposium, a half-day event devoted exclusively to a discussion of topics of interest to CMGers responsible for managing Microsoft Windows 2003 Server environments. The full agenda for this event will not be finalized until this fall so that we can showcase the latest technology and developments. Please check the conference Final Agenda for complete details.

ISM (the Information Systems Manager)

One Bethlehem Plaza Bethlehem, PA 18018-5784
Phone: 610-865-0300 Fax: 610-868-6277
www.perfman.com

ISM's PerfMan® performance and capacity management offerings provide a sophisticated, yet easy to use environment to bring clarity to even the most complex multi-platform data centers; and for 17 years has assured IT agility.

Customers join ISM each year at CMG to meet other users, interact with PerfMan designers and developers, understand new PerfMan features, and learn about PerfMan's exciting enhancements and futures.

A general session with information for all will be followed by dual-track sessions (z/Architecture & Linux/UNIX/Windows). These sessions will be followed by lunch.

If you'd like to attend ISM's 2004 User Group Meeting, please pre-register at our website:
http://www.perfman.com/CMGregistration

MVS Solutions Inc.

8300 Woodbine Avenue 4th Floor Markham, ON L3R9Y7
Ontario Canada
Phone: 905-940-9404 Fax: 905-940-5308
www.mvssol.com

You're invited to the annual ThruPut Manager CMG User Group session, be held from 9:00 am to 4:30 pm. We can promise you a day of ThruPut Manager technical news, 'how to' sessions, an update on Version 6 and its implementation, and a chance to meet and talk to other ThruPut Manager users.

All our customers are invited to meet with Jose Danobeitia, the chief architect of ThruPut Manager, Nancy and Martin for an interesting day of discussions on ThruPut Manager now and in the future.

To reserve your space please contact Martin Wills at 905 940 9404 or email CMGUser@mvssol.com

SAS Institute Inc.

100 SAS Campus Drive Cary, NC 27513
Phone: 919-677-8000 Fax: 919-677-4444
www.sas.com

Join us Monday, Dec. 6, to learn how SAS® IT Management Solutions help you manage your IT organization and service delivery, control costs, and make informed decisions that directly affect the bottom line. SAS IT Management Solutions provide:

- Integrated, intuitive products for enterprisewide IT management.
- Sophisticated analytic reporting and data visualization.
- Reliable information on IT usage and costs.
- A comprehensive understanding of IT security information.

Discover how SAS can help your IT organization align with corporate goals and prove the value you add.

TeamQuest Corporation

One TeamQuest Way Clear Lake, IA 50428
Phone: 641-357-2700 Fax: 641-357-2778
www.teamquest.com

Join TeamQuest at its annual CMG Users Meeting on Monday, December 6 from 1 to 5 PM. Customers and anyone interested in performance management and capacity planning is invited to hear:

- TeamQuest technical staff and customers address specific performance management and capacity planning issues
- Product managers and engineers discuss the latest release of TeamQuest Performance Software and a road map for the future
- Customers who have saved significant dollars using capacity planning to consolidate servers and predict resources requirements

CONFERENCE AT-A-GLANCE

DECEMBER • 5-10

Tuesday, December 7th At-a-Glance

Time	Subject	Focus	Session	Author	Title
8:00 AM	Mgmt	WEB	301	Rick Fuchs	On Demand Business
9:15 AM	Net		311	Fred Engel	Death, Taxes, and Your Network Infrastructure. How to Make Network Reliability One of Life's Few Guarantees.
9:15 AM	Mgmt	WEB	311	Dr. Jothy B. Rosenberg	See, Understand and Act in Real Time
9:15 AM	SPE		312	Dr. Connie U. Smith	Introduction to Software Performance Engineering
9:15 AM	Perf	z/OS	313	Len Jejer	WLM - Our Experiences Implementing Goals By Online Transaction Response Time
9:15 AM	SPE		314	Marc J. Fleury	Professional Open Source and the Future of JBoss
9:15 AM	Stor	EEOS	315	Bruce Naegel	Panel: (SNIA) Tools for Performance Measurements
9:15 AM	Perf	EEOS	316	Robert Andresen	Monitoring Linux with Native Tools
9:15 AM	Mgmt	EEOS	317	Susan Schreitmueller	AIX Best Practices
11:00 AM	Perf	z/OS	322	Dr Rich Olcott	Shared Disk in a Distributed Storage Environment – A Drag on Performance
11:00 AM	Net		323	Felix Hernandez-Campos	Generating Realistic TCP Workloads
11:00 AM	Model	EEOS	324	James Holtman	Using a Discrete Simulation Tool for Modeling
11:00 AM	Perf	WEB	325	Alexandre Polozoff	Performance Testing Protocol
11:00 AM	Perf	EEOS	326	Russell A. Rogers	Ubiquitous Data Collection in a Large Distributed Environment
11:00 AM	Mgmt	z/OS	327	Dr Fabio M. Ottaviani	CMG-Italia Best Paper: 7 Deadly Sins in WLC
1:15 PM	Net		331	Dr. Kenneth R. Traub	Radio-Frequency Identification at Enterprise Scale
1:15 PM	Perf	z/OS	332	Glenn R. Anderson	A z/OS WLM Update for DB2 Environments
1:15 PM	Mgmt		333	Michael D. Maddox	A Performance Process Maturity Model
1:15 PM	Model	EEOS	334	Dr Neil J. Gunther	Linux Load Average Revealed
1:15 PM	Stor		335	Randy Kerns	iSCSI - Understanding the Issues
1:15 PM	SPE		336	Fred M. Richards	Performance Engineering throughout the Software Life Cycle
1:15 PM	Perf	WEB	337	Dr. Pierre M. Fiorini	The Performance Impact of Security Attacks on Enterprise Computing Systems
2:45 PM	Perf		341	Corey Ferengul	Assessing the Monitoring Market and Maturity
2:45 PM	SPE	WEB	342	James R. Crew	CICS Application Integration using Web Services
2:45 PM	Perf	z/OS	343	Richard S. Ralston	z/Series, Sub Capacity Workload License Charges, Soft-Caps, and WLM
2:45 PM	Stor	EEOS	344	Bruce McNutt	SAN Virtualization Layout and Performance
2:45 PM	Stor	EEOS	344	Joel B. Motzny	Establishing an Open Systems Storage Strategy for your Company
2:45 PM	Stor	z/OS	345	Frank M. Bereznay	Reporting on I/O Configurations using RMF Data: Connecting the Logical to the Physical
2:45 PM	Perf	EEOS	346	William S. Keezer	IT Web Reporting: All Things to All People
2:45 PM	Perf	z/OS	347	Anthony J. Ruberry	z/OS Performance Management in the Real World
4:00 PM	Mgmt	WEB	351	Mary Nugent	Embracing Best Practices: the IT-Business Alignment Cycle
4:00 PM	Perf	WEB	352	Glenn R. Anderson	WebSphere for z/OS Ver 5 Performance Tuning
4:00 PM	Net	WEB	353	Dr. Werner Vogels	Web Services Are Not Distributed Objects
4:00 PM	Stor	EEOS	354	Mark B. Friedman	A Simplified Approach to Windows Disk Tuning
4:00 PM	Stor	EEOS	355	Alan Phelan	Application Performance has Significantly Degraded, It Must be the I/O Subsystem, Please Upgrade It!
4:00 PM	SPE		356	Claire S. Cates	Where's Waldo: Uncovering Hard-to-Find Application Killers
4:00 PM	Perf		357	Thomas Bodenheimer	DB2 Performance Monitoring using Snapshots
4:00 PM	SPE	EEOS	357	Dr. Serg Mescheryakov	Performance Comparison of Various Hierarchical Structures in Database Systems

SUBJECT AREAS

Mgmt = Management and Chargeback
Model = Modeling, Math and Statistics
Net = Network
Perf = Performance and Capacity Management
SPE = Software Performance Engineering
Stor = Storage

Wednesday, December 8th At-a-Glance

Time	Subject Focus		Session	Author	Title
8:00 AM	Mgmt		401	Mark S. Lewis	2010 IT: An Information Infrastructure Manifesto
9:15 AM	Mgmt		411	Bruce J. Rogow	The IT Management Landscape…A View from the Odyssey: A New Set of Challenges Returns
9:15 AM	Perf	EEOS	412	Daniel A. Menasce	Quality of Service Aspects and Metrics In Grid Computing
9:15 AM	Mgmt	WEB	413	Annie W. Shum	Journeying to the Land of On-Demand: Principles to Follow, Pitfalls to Avoid
9:15 AM	Stor	EEOS	414	Prem Mehra	SQL Server 2000 and Large Storage Deployment
9:15 AM	Stor	EEOS	415	Greg P. Schulz	Performance and Capacity Planning Basics for Storage Networks V2.0
9:15 AM	Mgmt		416	Denise P. Kalm	Perception is Reality - The Psychology of Performance Management
9:15 AM	Net		417	David J. Konz	A White Box Look at the Performance of 802.11 Wireless and its Variants
11:00 AM	Mgmt		421	David F. Redinbaugh	A Methodology for Tracking Capital Spending for IT
11:00 AM	SPE		422	Dr. Carl J. De Pasquale	Collecting Java Performance Measurements Using Byte Code Engineering
11:00 AM	Perf	EEOS	423	Andrew S. Duffen	Managing All of Your Application's Servers From a Single Web Page
11:00 AM	Perf	EEOS	424	Giuseppe Cassone	Performance Integration: from Development to Delivery All at Once
11:00 AM	Perf	WEB	425	Prof. Robert D. van der Mei	Overload Control for Web Services: Web Admission Control
11:00 AM	SPE	WEB	426	Henry H. Liu	An Analytic Model for Predicting the Performance of SOA-Based Enterprise Software Applications
11:00 AM	Perf	EEOS	427	Douglas A. Tapscott	UNIX Update and Compile Performance Resolution
1:15 PM	Mgmt		431	Amy Wohl	TBD
1:15 PM	Perf	z/OS	432	Ivan L. Gelb	Panel: z/OS and WLM Q & A
1:15 PM	Model	WEB	433	Lloyd G. Williams	Web Application Scalability: A Model-Based Approach
1:15 PM	Model	EEOS	434	Joe Rich	Platinum Sponsor TeamQuest presents: the ABCs of Workloads
1:15 PM	Stor	EEOS	435	Greg P. Schulz	Storage Technology Primer & Update
1:15 PM	SPE	EEOS	436	James Holtman	The Use of ''R'' for System Performance Analysis
1:15 PM	Perf	z/OS	437	Robert E. Chaney	DB2 DDF, Life in the Fast Lane
2:45 PM	Mgmt		441	Douglas Neal	The Consumerization of Information Technologies - A New Source of Both Infrastructure and More Responsible Employees
2:45 PM	Perf	z/OS	442	Kathy Walsh	WLM Myths, Truths, and Half Truths
2:45 PM	Model		443	Scott Johnson	Platinum Sponsor TeamQuest presents: Modeling Multi-Tiered Applications That Access Legacy Systems
2:45 PM	Perf	EEOS	444	Dr. Insung Park	Event Tracing for Windows: Best Practices
2:45 PM	Stor	z/OS	445	H. Pat Artis	Understanding the Differences between z900 and z990 Service Time Measurements
2:45 PM	Perf	WEB	446	Yefim Somin	Workload Characterization for Websphere Application Server
2:45 PM	Mgmt		447	Elaine Weston	UK CMG Best Paper: Business Continuity and Disaster Recovery - Managing the Pain
4:00 PM			451	Sid Finehirsh	Panel: Business Showcase Panel
4:00 PM	Perf	z/OS	452	Kathy Walsh	Introduction and Overview of zAAPs on z/OS
4:00 PM	Net	WEB	453	Dr. Bernard Domanski	Turn Your Old Unused PC At Home Into A Fully Functional Web Server That Runs From Your Kitchen
4:00 PM	Perf	EEOS	454	Jaqui Lynch	Planning for Partitioned AIX Systems
4:00 PM	Stor	EEOS	455	Mel Boksenbaum	Panel: Storage Performance Council Status Update Panel Discussion
4:00 PM	Stor	EEOS	456	Robert Rogers	Business Process Mapping, Data Classification, and Service Level Objectives
4:00 PM	Perf	z/OS	457	Joseph L. Babcock	Care and Feeding of SMF in the Large System Environment

FOCUS AREAS
EEOS = Open and Emerging Enterprise Operating Systems
WEB = WebServices, WebSphere, e-Business
z/OS = z/OS

Thursday, December 9th At-a-Glance

Time	Subject Focus		Session	Author	Title
8:00 AM	Perf	z/OS	501	Jim Grant	Business Service Management: Configuration, Change, Assets and IT Management
9:15 AM	Mgmt	EEOS	511	David Rowley	Utility Pricing - Software Licensing Strategies for an On Demand World
9:15 AM	Perf	EEOS	512	Ronald R. Kaminski	Automating Workload Characterization by Policy
9:15 AM	Perf		513	Charles W. Hopf	MXG for Dummies
9:15 AM	Stor		514	Chao Li	A Multi-tiered Model for Performance Analysis of Storage Area Network
9:15 AM	Perf	WEB	515	Mark W. Johnson	Monitoring and Diagnosing Applications with ARM 4.0
9:15 AM	SPE	WEB	515	David Carter	ARMing Apache
9:15 AM	Mgmt		516	Christopher P. Strasser	Evaluating IT Management Practice
9:15 AM	Perf		517	Richard Gimarc	Moving Beyond Test and Guess - Using Modeling with Load Testing to Improve Web Application Readiness
11:00 AM	Perf		521	Baoning Wu	Implementing an Evaluation Architecture for Web Proxies
11:00 AM	Perf	z/OS	522	Igor A. Trubin	Mainframe Global and Workload Level Statistical Exception Detection System, Based on MASF
11:00 AM	Mgmt		523	Jerry L. Rosenberg	Service Management - The ITIL Framework
11:00 AM	Model	WEB	524	David Mc Guinness	Issues in Developing a Simulation Model of an EJB Application Server
11:00 AM	Mgmt		525	John H. Silver	Why Develop a Storage Strategy?
11:00 AM	Mgmt	EEOS	526	Michael A. Salsburg	Self-Aware Business Processes
11:00 AM	Perf	EEOS	527	Dr. Curtis Hrischuk	Capacity Planning of Voice Response Middleware
1:15 PM	Stor		531	Fred G. Moore	Storage Navigator
1:15 PM	Perf		532	Linwood Merritt	Seeing the Forest AND the Trees: Capacity Planning for a Large Number of Servers
1:15 PM	Perf		533	David F. Pultorak	Service Level Management: More Than Just SLAs
1:15 PM	Perf	EEOS	534	Rich Fronheiser	Too Many Servers, Not Enough Eyes (or – Where Did All These Servers Come From?!?)
1:15 PM	Net	WEB	535	Sidney W. Soberman	Web Bandwidth Management using Homemade Tools and Freeware
1:15 PM	Net	WEB	535	Nikhil Venugopal	Network Bandwidth Estimations Based on Use-Case Scenarios
1:15 PM	Mgmt		536	Rick Lebsack	Panel: Metering and Billing in an On Demand World
1:15 PM	Model		537	Jorge D. Xifra	Performance Analysis: Converting Data Into Information Using One Simple Statistic Function
2:45 PM	Stor		541	Fred G. Moore	Panel: Storage - The Next Dimension (Part 1)
2:45 PM	Mgmt	z/OS	542	Nalini J. Elkins	TCP/IP Chargeback to Enforce Performance Targets
2:45 PM	Perf		543	Adam Grummitt	Corporate Performance Management as a Pragmatic Process in an ITIL World.
2:45 PM	Mgmt		543	Cathy Wright	ITIL: Make it So
2:45 PM	SPE	EEOS	544	Peter Johnson	How's My Performance? Dial 1-800-I-AM-FAST
2:45 PM	Perf	EEOS	545	Chris Molloy	Best Practices for Server Virtualization
2:45 PM	Stor	EEOS	546	Michael A. Salsburg	Is a PetaByte More Than We Can Chew?
2:45 PM	Model		547	Tom A. Thompson	Optimize Server Consolidations with End-to-End Modeling
4:00 PM	Stor		551	Fred G. Moore	Panel: Storage - The Next Dimension (Part 2)
4:00 PM	Perf		552	Rick Lebsack	Facilitated Discussion: The Future of The Performance Field
4:00 PM	Mgmt		553	Ellen M. Friedman	Panel: ITIL Discussion
4:00 PM	SPE	EEOS	554	Peter Johnson	Java Garbage Collection Statistical Analysis 101
4:00 PM	Model	WEB	555	Yiping Ding	Performance Impact of Load Balancers on Server Farms
4:00 PM	Perf		556	TBD	CMG Australia Best Paper: TBD
4:00 PM	Perf	z/OS	557	Richard Kephart	The Job You Save

SUBJECT AREAS

Mgmt = Management and Chargeback
Model = Modeling, Math and Statistics
Net = Network
Perf = Performance and Capacity Management
SPE = Software Performance Engineering
Stor = Storage

TIME	SUBJECT	FOCUS	SESSION	AUTHOR	TITLE
8:00 AM	Mgmt	WEB	602	Larry Reeve	Adapting the TileBar Interface for Visualizing Resource Usage
8:00 AM	Perf	EEOS	603	Mike Tsykin	Beyond Thresholds: New Directions in QoS Monitoring and Alerting
8:00 AM	SPE		604	Claire S. Cates	How's Your Memory?
8:00 AM	Stor	z/OS	605	Charles T. McGavin Jr	ESCON to FICON Migration Planning
8:00 AM	Mgmt	WEB	606	Dr. Yong-Soo Kim	Performance Metrics in IT Operation Outsourcing
8:00 AM	Model		607	Christopher A. Newland	Projecting Large Scale Deployments with Multiple Year Rollouts
9:15 AM	Perf	EEOS	661	Tony Catone	Configuring and Maintaining Highly Available UNIX Systems
9:15 AM	Perf	WEB	662	James Cusick	Developing and Applying a Distributed Systems Performance Approach for a Web Platform
9:15 AM	Mgmt	z/OS	663	Mp Welch	Software Licensing Cost Reduction Strategies for Large Mainframe Environments
9:15 AM	Perf	EEOS	664	Scott B. Small	Supersizing Capacity and Performance
9:15 AM	Stor	EEOS	665	Dr. Xianneng Shen	Study of I/O Performance Characteristics for Volume Managers and File Systems on Intel Servers
9:15 AM	Model		666	Judson E. Veazey	More CPUs or more DIMMs? Finding the Optimal Balance between System Components
9:15 AM	Perf	EEOS	667	Shanti Subramanyam	Principles of Good Benchmark Construction
10:30 AM	Mgmt		673	John H. Silver	Asset Management as a Prerequisite for Capacity Planning
10:30 AM	Perf	EEOS	674	James A. Yaple	A Practical Implementation of Guerrilla Monitoring
10:30 AM	Net		675	Dr. Jozo J. Dujmovic	A Network Benchmark for the .NET Framework
10:30 AM	SPE	z/OS	676	Thomas A. Halinski	Performance Improvements from the "Things I Wish They'd Told Me 8 Years Ago" - Visualized
10:30 AM	Perf		677	Linwood Merritt	A Finger in the Wind: Forecasting Techniques for Capacity Planning

FOCUS AREAS

EEOS = Open and Emerging Enterprise Operating Systems
WEB = WebServices, WebSphere, e-Business
z/OS = z/OS

Session Descriptions

DECEMBER • 5-10

CMG LAS VEGAS 2004

SESSION 301 **TUESDAY 8:00 AM - 9:00 AM**
PAPER 4510 No Paper
MANAGEMENT AND CHARGEBACK NON-SPECIFIC
WEBSERVICES, WEBSPHERE, E-BUSINESS

On Demand Business

Rick Fuchs, *IBM Corp.*

Business is moving at an unprecedented pace with requirements to move quickly, to decide quickly and to sense and react quickly . Market trends, customer demands, intense competition, industry consolidations are demanding greater responsiveness from their organizations and delivered at a cost that will keep the shareholders satisfied. At IBM, we call this an on demand business - "an enterprise whose business processes - integrated end to end across the company and with key partners, suppliers and customers - can respond with speed to any customer demand, market opportunity or external threat." Rick will discuss these business trends and strategies to become an on demand business.

EXECUTIVE MANAGEMENT SHOWCASE

SESSION 311 **TUESDAY 9:15 AM - 10:45 AM**
PAPER 4513 No Paper
NETWORK NON-SPECIFIC

Death, Taxes, and Your Network Infrastructure. How to Make Network Reliability One of Life's Few Guarantees.

Fred Engel, *Concord Communications*

Nothing in this world is certain, except death and taxes. But fault and performance management solutions have made network reliability pretty close to one of life's few guarantees. You do not have to wait for your network to break before you fix it, you can anticipate most of the failure and slowdown scenarios before they occur. To achieve the goal of full network availability, IT managers must be able to identify potential problems before they occur, analyze performance degradations as they happen, and rapidly recover from complete outages once they occur. Hear from a network industry veteran about best practices for ensuring uptime and optimizing performance across your entire IT infrastructure.

SESSION 311 **TUESDAY 9:15 AM - 10:45 AM**
PAPER 4500 No Paper
MANAGEMENT AND CHARGEBACK NON-SPECIFIC
WEBSERVICES, WEBSPHERE, E-BUSINESS

See, Understand and Act in Real Time

Jothy B. Rosenberg, *Service Integrity*

New application integration technologies provide unprecedented access to precise, actionable business information flowing between application nodes running on all platforms including mainframes, application servers, and legacy packaged applications in XML format. Breakthrough technology is leveraging this capability to deliver DEEP VISIBILITY. The resulting TOTAL BUSINESS CONTEXT empowers business managers to SEE, UNDERSTAND & ACT in real time to improve their business.

SESSION 312 **TUESDAY 9:15 AM - 10:45 AM**
PAPER 4247 HOW-TO
SOFTWARE PERFORMANCE ENGINEERING NON-SPECIFIC

Introduction to Software Performance Engineering

Connie U. Smith, *Performance Engineering Services*
Lloyd G. Williams, *Software Engineering Research*

This session presents a systematic, quantitative approach for cost-effectively building performance into software systems. It reviews the purpose of Software Performance Engineering (SPE) and the steps for applying the SPE methods throughout the life cycle of new systems. It describes the data required for SPE studies. It reviews software and system execution models for assessing the performance of alternatives and for capacity planning for new applications. It illustrates with a case study.

SESSION 313 **TUESDAY 9:15 AM - 10:45 AM**
PAPER 4187 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT Z/OS
Z/OS

WLM - Our Experiences Implementing Goals By Online Transaction Response Time

Len Jejer, *The Hartford Ins Group*
Raymond J. Smith, *The Hartford Ins Group*

Given a 100% utilized processor, how do you meet your SLA's for your loved onlines? This session relates the story of one shop's experiences in implementing CICS and IMS transaction response time goals with Workload Manager. Processing 1.5 million CICS transactions a day, these folks went from ''sometimes'' meeting the SLA to always exceeding the SLA. In the IMS world, WLM enabled them to over achieve aggressive response time goals for 3 million transactions a day on a saturated processor. The session reviews the tools, resources and methodologies used to get the job done.

SESSION DESCRIPTION LEGEND

SESSION NUMBER **DAY START TIME - END TIME**
PAPER NUMBER SESSION TYPE
SUBJECT AREA PLATFORM
FOCUS AREA No Paper *

Title

Author, *Company*
Co-Author, *Company*
Co-Author, *Company*

Abstract....

**** Session Handouts may be available on the CMG website following the conference: www.cmg.org/membersonly***

SESSION 314 **TUESDAY 9:15 AM - 10:45 AM**
PAPER 4509 No Paper
SOFTWARE PERFORMANCE ENGINEERING NON-SPECIFIC

Professional Open Source and the Future of JBoss

Marc J. Fleury, *JBoss, Inc.*

Marc Fleury, founder and president of JBoss Inc. will describe the Professional Open Source model and what the future means for key open source Java products such as JBoss Application Server, Hibernate, JBoss Cache, and others. This talk will also include detailed technical discussions about the Aspect-Oriented Programming (AOP) framework and the role the Microkernel plays within the JBoss Application Server. We will move beyond just simple logging examples to cover all standard reusable aspect technologies present in JBoss such as persistence, caching, invocations, transactions, and acidity. As a bonus, this session will also include detailed coverage of key additional open source Java products such as Hibernate, the world's most popular open source O/R Mapping and Transparent Object Persistence product and JBoss Cache, a unique transactional replicated cache. This session will also give attendees the chance to ask questions of two of the most recognized leaders in open source Java software.

SESSION 315 **TUESDAY 9:15 AM - 10:45 AM**
PAPER 4159 PANEL
STORAGE UNIX/LINUX
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS
No Paper

Panel: (SNIA) Tools for Performance Measurements

Bruce Naegel, *VERITAS*
Bill Zahavi, *EMC Corporation*
Jim Nagler, *VERITAS Software*

The SNIA (Storage Network Industry Association) has released SMI-S. 1.0 as a standards based method to manage disk arrays and switches on a storage network. The next revision of the specification, 1.1, due out at the end of the year, will contain a new set of performance measurements for disk arrays. This session will describe usage cases, proposed measurement methods and parameters, and the current status of prototype construction.

SESSION 316 **TUESDAY 9:15 AM - 10:45 AM**
PAPER 4036 HOW-TO
PERFORMANCE AND CAPACITY MANAGEMENT UNIX/LINUX
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Monitoring Linux with Native Tools

Robert Andresen, *BMC Software*

Linux is gaining interest as a solution across many hardware platforms. But once applications are ported to an open source operating system what options are available to monitor their performance and availability? Performance monitoring traditionally has audiences ranging from systems administration, concerned with solving current performance problems, through capacity planners, concerned with predicting growth over time. Native Linux solutions are available to help both disciplines, from monitoring real-time performance through collecting statistics for capacity planning.

SESSION 317 **TUESDAY 9:15 AM - 10:45 AM**
PAPER 4205 TECHNICAL
MANAGEMENT AND CHARGEBACK UNIX/LINUX
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

AIX Best Practices

Susan Schreitmueller, *IBM*
Jaqui Lynch, *Mainline Information Systems*

This session/paper is intended to provide technical guidance in the form of best practices and general rules of thumb when setting up and managing an AIX/pSeries environment. It covers initial tuning suggestions, monitoring, recovery, maintenance and testing practices. The content herein will cover current AIX versions 5.1 and 5.2. The AIX administrator should receive valuable information about managing an infrastructure that has a pSeries/AIX component. Initial tuning values and monitoring suggestions for database or application servers or web servers will be discussed.

SESSION 322 **TUESDAY 11:00 AM - 11:30 AM**
PAPER 4236 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT Z/OS
Z/OS

Shared Disk in a Distributed Storage Environment – A Drag on Performance

Rich Olcott, *IBM Global Services*

Ship- and airframe designers have long been aware of "drag" – reduced performance arising from random activity distributed across the entire interface between the vehicle and its environment. The same phenomenon affects disk I/O in a distributed storage environment, except the interference is from competing data packets instead of air or water molecules. The MVS operating system offers three metrics that can highlight performance degradation at specific devices and storage network components.

SESSION 323 **TUESDAY 11:00 AM - 11:30 AM**
PAPER 4132 TECHNICAL
NETWORK NON-SPECIFIC

Generating Realistic TCP Workloads

Felix Hernandez-Campos, *Univ. of North Carolina*
F. Donelson Smith
Kevin Jeffay

The workload of a network is usually a heterogeneous aggregate of services and applications, driven by a large number of users. This complexity makes it challenging to evaluate the performance of network mechanisms and configurations. This session proposes a new methodology for transforming anonymized traces of packet headers into application-neutral models of network traffic. These models are suitable for synthetic traffic generation in simulations and testbeds, preserving the end-to-end nature of network traffic. Our approach provides a tool for studying and tuning the realism of synthetic traffic.

SESSION 324 **TUESDAY 11:00 AM - 11:30 AM**
PAPER 4127 HOW-TO
MODELING, MATH AND STATISTICS UNIX/LINUX
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Using a Discrete Simulation Tool for Modeling

James Holtman, *Convergys*

For the mathematically challenged, a discrete simulation model is sometimes easier to understand and bears a close relationship to the model created graphically. This paper will describe how open and closed models are created and will compare the simulation results to the analytical results.

SESSION 325 **TUESDAY 11:00 AM - 11:30 AM**
PAPER 4033 ADVANCED
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC
WEBSERVICES, WEBSPHERE, E-BUSINESS

Performance Testing Protocol

Alexandre Polozoff, *IBM*

This session provides a protocol for conducting performance testing to determine the optimal environmental settings for an application in a variety of load scenarios. Topics include planning the performance environment, performing the actual testing, and measuring the application's performance characteristics.

SESSION 326 **TUESDAY 11:00 AM - 11:30 AM**
PAPER 4240 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT Z/OS
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Ubiquitous Data Collection in a Large Distributed Environment

Russell A. Rogers, *Bank of America*

A significant challenge for many companies with a large number of distributed systems is finding a performance data collector that will scale to the size of the enterprise and not cost a bundle to buy and maintain. This session discusses a new data collection approach developed in-house at Banc of America. It compares some of the features of this new approach to commercial applications, and summarizes some key benefits.

SESSION 327 **TUESDAY 11:00 AM - 11:30 AM**
PAPER 4221
MANAGEMENT AND CHARGEBACK Z/OS
Z/OS

CMG-Italia Best Paper: 7 Deadly Sins in WLC

Fabio M. Ottaviani, *D.T.S. Italia*

In mainframe environments the software product prices have been historically based on the computing capacity of the central processor complex (CPC). The WLC policy allows paying software licenses based on the CPU usage (the maximum monthly value of the 4-hour rolling average) instead of the CPC capacity. It's important to be aware that a cultural change in the way systems are managed is required in order to take full advantage of a WLC contract. Otherwise some of the current behaviors will become deadly sins not allowing to get the cost savings expected from company management.

EXECUTIVE MANAGEMENT SHOWCASE

SESSION 331 **TUESDAY 1:15 PM - 2:15 PM**
PAPER 4504 No Paper
NETWORK NON-SPECIFIC

Radio-Frequency Identification at Enterprise Scale

Kenneth R. Traub, *ConnecTerra, Inc*

Radio-Frequency Identification (RFID) is being rapidly adopted within many industry verticals, driven in part by mandates from leading retailers, regulatory agencies, and the federal government. Adoption will have significant impact on IT infrastructure for enterprises. For example, a nationwide retail chain may require ten million RFID readers, representing a manageability problem and a source of new data, orders of magnitude larger than anything deployed today. This talk will present the fundamentals of large-scale RFID deployments, with particular attention on the enterprise IT challenges. Topics discussed include architecture, software standards, management, and scalability.

SESSION 332 **TUESDAY 1:15 PM - 2:15 PM**
PAPER 4215 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT Z/OS
Z/OS No Paper

A z/OS WLM Update for DB2 Environments

Glenn R. Anderson, *IBM*

Begin this fast-paced session with a review of how DB2 exploits WLM on z/OS, including advanced WLM functions such as enclaves and application environments. The relationship between the different types of DB2 work and WLM will be explained. Then move into a look at the most recent updates to WLM functionality and their relationship to DB2, including a look at WLM reporting capabilities. If you are at all interested in the powerful combination of DB2 and WLM, this session is for you. It does assume a basic knowledge of the z/OS Workload Manager.

SESSION 333 **TUESDAY 1:15 PM - 2:15 PM**
PAPER 4083 INTRODUCTORY
MANAGEMENT AND CHARGEBACK NON-SPECIFIC

A Performance Process Maturity Model

Michael D. Maddox, *MCI*

Computer performance science is very well developed, yet the state of the practice somewhat lags the state of the art. This session presents a model of computer performance process maturity including signposts of each maturity stage, suggests types of benefits accruing from advancing in maturity, and offers basic guidelines for advancing from stage to stage.

SESSION 334 **TUESDAY 1:15 PM - 2:15 PM**
PAPER 4016 TECHNICAL
MODELING, MATH AND STATISTICS UNIX/LINUX
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Linux Load Average Revealed

Neil J. Gunther, *Performance Dynamics*

The Linux kernel code responsible for calculating the load average in the 'uptime' and 'procinfo' commands is dissected. It is shown to be a fixed-point representation of an exponentially damped moving average (not your average average) of process queueing as defined by Little's law. We then show how the intended trending information could be improved by relating it to more familiar capacity planning techniques. The historical connection with other UNIX performance instrumentation and the SCO law suit are also discussed.

SESSION 335 **TUESDAY 1:15 PM - 2:15 PM**
PAPER 4034 INTRODUCTORY
STORAGE NON-SPECIFIC

iSCSI - Understanding the Issues

Randy Kerns, *Evaluator Group*

For the last three years there has been a large amount of information about iSCSI in the technical media and a great deal of promotion by vendors. Now that there are real solutions available, and more importantly, real customers, what are the opportunities and the implications for customers deploying storage systems. What are the implications to performance in using the layered protocol and program stack implementation for IP storage? This session will introduce iSCSI and explain the various performance implications and other issues.

SESSION 336 **TUESDAY 1:15 PM - 2:15 PM**
PAPER 4110 HOW-TO
SOFTWARE PERFORMANCE ENGINEERING NON-SPECIFIC

Performance Engineering throughout the Software Life Cycle

Fred M. Richards, *The MITRE Corporation*
Robert N. Will, *The MITRE Corporation*

The Internal Revenue Service (IRS) is in the midst of an enterprise modernization effort, which is being guided by its Enterprise Life Cycle (ELC) process that goes from concept to deployment for the different business functions supported by the modernized environment. This paper discusses how the neglect of performance engineering in IRS modernization created cost and schedule problems and how this is being addressed by modifications to the ELC to include capacity planning and performance engineering in the early phases of the life cycle. Also discussed are several important lessons learned.

SESSION 337 **TUESDAY 1:15 PM - 2:15 PM**
PAPER 4251 INTRODUCTORY
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC
WEBSERVICES, WEBSPHERE, E-BUSINESS

The Performance Impact of Security Attacks on Enterprise Computing Systems

Pierre M. Fiorini, *University of Southern Maine*
Yiping Ding, *BMC Software*

This session considers the following issues from enterprise performance assurance perspective: 1) How can performance analysts and capacity planners assess the impact on the performance of applications during a security attack? and 2) How systems can be designed and configured so that Quality of Service (QoS) objectives can be met during a security attack for mission critical applications. We develop analytic techniques that can ascertain performance measures for a wide class of computing systems when security attacks occur.

EXECUTIVE MANAGEMENT SHOWCASE

SESSION 341 **TUESDAY 2:45 PM - 3:45 PM**
PAPER 4501 No Paper
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC

Assessing the Monitoring Market and Maturity

Corey Ferengul, *META Group*

It's important to keep up with the market. There are numerous changes and countless offerings. Besides understanding tools, companies must understand their own deployments and maturity in use of the tools and processes. We will explore keys to assessing maturity, processes and an update on the overall monitoring market.

EXECUTIVE MANAGEMENT SHOWCASE

SESSION 342 **TUESDAY 2:45 PM - 3:45 PM**
PAPER 4502 No Paper
SOFTWARE PERFORMANCE ENGINEERING Z/OS
WEBSERVICES, WEBSPHERE, E-BUSINESS

CICS Application Integration using Web Services

James R. Crew, *Merrill Lynch*

Merrill Lynch is using Web Services to tackle onerous application integration challenges and reduce the burden of proprietary coding. Merrill Lynch created an integration tool called XML for Merrill Lynch (X4ML)that exposes mainframe applications as standard Web Services interfaces. The tool lets CICS programs participate in Web Services by accepting Simple Object Application Protocol (SOAP) requests from the web, converting the SOAP requests into formats accepted by the legacy programs, and then converting the results into SOAP responses. X4ML runs completely within CICS, requiring no middle-tier hardware. Come and listen to this success story and learn why Merrill Lynch is bullish on Web Services.

SESSION 343 **TUESDAY 2:45 PM - 3:45 PM**
PAPER 4261 HOW-TO
PERFORMANCE AND CAPACITY MANAGEMENT Z/OS
Z/OS

z/Series, Sub Capacity Workload License Charges, Soft-Caps, and WLM

Richard S. Ralston, Humana Inc.

With the advent of zSeries processors and z/OS, IBM decided to offer a new software cost structure. The new pricing structure, Sub-Capacity Workload License Charges, attempts to reduce the cost of key IBM software in the z/OS environment. This session discusses the author's experiences with Sub-Capacity License Charges, the tools available to help manage the LPAR's running sub-capacity WLC, results and benefits.

SESSION 344 **TUESDAY 2:45 PM - 3:45 PM**
PAPER 4109 INTRODUCTORY
STORAGE NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

SAN Virtualization Layout and Performance

Bruce McNutt, IBM

A number of products now offer the promise of virtualization to SAN-based storage customers. This paper compares the SAN layout typical of in-band virtualization with that of traditional storage, with an emphasis on performance and scalability. The session also examines the performance and scalability of IBM's SAN Volume Controller based upon SPC-1 and other performance tests.

SESSION 344 **TUESDAY 2:45 PM - 3:45 PM**
PAPER 4086 HOW-TO
STORAGE NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Establishing an Open Systems Storage Strategy for your Company

Joel B. Motzny, EDS
Jeffry A. Smith, EDS

Open systems storage has traditionally been purchased as needed by the department or project needing storage. These purchases are often made without regard to other storage needs in the company. Establishing an Open Systems Storage Services strategy for your company can greatly reduce your storage costs and increase your storage utilization. Outlined in this session is a series of steps and processes that can be followed to create a leveraged storage services infrastructure that can provide storage for your entire company.

SESSION 345 **TUESDAY 2:45 PM - 3:45 PM**
PAPER 4253 HOW-TO
STORAGE Z/OS
Z/OS

Reporting on I/O Configurations using RMF Data: Connecting the Logical to the Physical

Frank M. Bereznay, Kaiser Permanente
Shana J. Bereznay, ACS

Storage equipment in a zSeries environment contains hundreds of control units and channels. Logical mappings between channels and control units are well documented but the summarization of these entities into physical subsystems is not as straightforward. A hardware identifier is needed and it does not appear as a variable in any of the RMF record types. However, the Type 74 record does contain a field, SMF74DCT, which has a serial number within it. Extracting this data permits the mapping of logical entities to physical subsystems. A technique is demonstrated to perform this summarization

SESSION 346 **TUESDAY 2:45 PM - 3:45 PM**
PAPER 4008 HOW-TO
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

IT Web Reporting: All Things to All People

William S. Keezer, SAS Institute, Inc.

The audience for IT reports published on an internal web has three distinct groups with different needs for information and presentation. Part of the challenge of IT reporting is for people who create the reports to meet the needs of the executives and managers, and their own needs as well. This includes both determining the correct information and selecting the correct format. This session will address who is in what group, what their needs are and how they are to be met, what data to report, what types of reports, what formats work best, and a suggested gallery structure.

SESSION 347 **TUESDAY 2:45 PM - 3:45 PM**
PAPER 4223 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT Z/OS
Z/OS

z/OS Performance Management in the Real World

Anthony J. Ruberry, John Lewis Partnership

At John Lewis, our zSeries mainframe is at the heart of our computing infrastructure. Far from being the dinosaur of myth, the last few years have seen many changes both in system software, and in the applications that we are running. This session describes some of the challenges encountered in trying to manage a very diverse workload in an environment where we are striving to do more with less. In particular, this sessions describes our experiences in using WLM, IRD and LPAR defined capacity on our z900 and z990 machines to improve our end-user service whilst reducing our costs.

EXECUTIVE MANAGEMENT SHOWCASE

SESSION 351 **TUESDAY 4:00 PM - 5:00 PM**
PAPER 4505 No Paper
MANAGEMENT AND CHARGEBACK NON-SPECIFIC
WEBSERVICES, WEBSPHERE, E-BUSINESS

Embracing Best Practices: the IT-Business Alignment Cycle

Mary Nugent, *BMC Software*

An independent study of more than 240 IT executives, middle managers and staff found a very strong relationship exists between IT-Business Alignment Cycle maturity and the participants' assessment of their overall IT efficiency and alignment. Efficiency and alignment leaders had consistent management data, they modeled their IT infrastructures on an enterprise level, and they acted on integrated metrics and scorecards. Participants who rated high on IT efficiency and alignment showed a significant leadership in change management, and high quality management of the IT organization driven by a focus on service agreements. This session will encapsulate the findings of the study and best practices companies can embrace to move toward maturity. The session will also provide details on how companies can assess their organization's maturity in the cycle.

SESSION 352 **TUESDAY 4:00 PM - 5:00 PM**
PAPER 4214 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT Z/OS
WEBSERVICES, WEBSPHERE, E-BUSINESS No Paper

WebSphere for z/OS Ver 5 Performance Tuning

Glenn R. Anderson, *IBM*

Now that you've installed WebSphere Application Server for z/OS Ver 5, how do you know that your system has been tuned for optimal performance? This session will provide performance tuning recommendations for WebSphere on z/OS, including application topology and configuration considerations, WLM settings, WebSphere tuning, JVM tuning, and z/OS system tuning . The session will also provide information about tools and techniques which can be used for performance analysis, such as RMF and various tracing options.

EXECUTIVE MANAGEMENT SHOWCASE

SESSION 353 **TUESDAY 4:00 PM - 5:00 PM**
PAPER 4503
NETWORK NON-SPECIFIC
WEBSERVICES, WEBSPHERE, E-BUSINESS

Web Services Are Not Distributed Objects

Werner Vogels, *Amazon.com*

The hype surrounding Web Services has generated many common misconceptions about the fundamentals of this emerging technology. In this presentation, I will clarify several common misconceptions about Web-Services technology. This clarification is essential to ensure that Web Service technologies can succeed as technology for solving business, architectural and implementation problems. Some of the misconceptions frequently heard are Web Services are just like Distributed Objects, Web Services are RPC for the Internet, or Web Services need HTTP. This presentation focuses on the core principles of Web Services technology to build an appropriate vision of Web Services and XML-document oriented computing, and the role of vendors in fueling current misconceptions.

SESSION 354 **TUESDAY 4:00 PM - 5:00 PM**
PAPER 4233 TECHNICAL
STORAGE WINDOWS NT/XP/ETC.
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

A Simplified Approach to Windows Disk Tuning

Mark B. Friedman, *Demand Technology Software*

The basic elements of disk hardware performance are common across all platforms. What complicates disk tuning today on every platform, including Windows, is virtualization technology that hides the true nature of the physical disk from the host operating system. This session discusses a simple procedure to measure the performance of the physical disk entity and establish reasonable service time expectations for any virtual or physical device. If actual measured performance exceeds these service expectations, you can then decide on an appropriate disk tuning strategy.

SESSION 355 **TUESDAY 4:00 PM - 5:00 PM**
PAPER 4092 TECHNICAL
STORAGE UNIX/LINUX
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Application Performance has Significantly Degraded, It Must be the I/O Subsystem, Please Upgrade It!

Alan Phelan, *(i)Structure*
Bill Zahavi, *EMC Corporation*

(i)Structure was presented with a performance problem from one of its clients. An I/O analysis was undertaken. The conclusions eliminated the I/O subsystem as the application performance bottleneck. This resulted in a win-win situation, saving both companies significant dollars from revamping an I/O infrastructure, which would have made little difference to application performance. This session includes a review of the tools used in the analysis including EMC's Workload Analyzer. We will review I/O subsystem performance from server to disk array to the physical disks. This analysis can be applied to all I/O infrastructures.

SESSION 356 **TUESDAY 4:00 PM - 5:00 PM**
PAPER 4011 INTRODUCTORY
SOFTWARE PERFORMANCE ENGINEERING WINDOWS NT/XP/ETC.

Where's Waldo: Uncovering Hard-to-Find Application Killers

Claire S. Cates, *SAS Institute, Inc*

How do you find performance anti-pattern problems in your system? Having used Rational Quantify for over 7 years and having learned many tips and tricks to help uncover many common anti-patterns. This paper will describe the wealth of data generated by Quantify and how to use this data to uncover software performance problems such as: Excessive Memory Allocation, The Ramp, Unnecessary Processing, One Lane Bridge, Unbalanced Processing and More is Less.

SESSION 357 **TUESDAY 4:00 PM - 5:00 PM**
PAPER 4204 INTRODUCTORY
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC

DB2 Performance Monitoring using Snapshots

Thomas Bodenheimer, *IBM-Tivoli*

DB2 snapshot monitors and simple Perl tools help identify database performance bottlenecks. Integrating these tools into test automation during the software development process eliminates late-cycle discovery of performance problems. Two cases studies illustrate the value snapshot diagnostics add. One demonstrates how snapshots helped improve application performance from 3 ½ hours to 15 minutes. The other shows runtime reduced from 20 hours to 12 minutes for SQL code. DB2 snapshot tools address database performance without requiring the software performance engineer to become a DBA.

SESSION 357 **TUESDAY 4:00 PM - 5:00 PM**
PAPER 4217 TECHNICAL
SOFTWARE PERFORMANCE ENGINEERING NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Performance Comparison of Various Hierarchical Structures in Database Systems

Serg Mescheryakov, *St.Petersburg State Polytechnic University*

This session describes both classical and non-traditional approaches to handle hierarchies in database management systems (DBMS) of Relational (R) and Object-Relational (OR) type. Before tests, all structure variants are grouped by criterion of using recursive relations. The advantage of recursiveness-free structures is discussed. Group comparison based on performance test results for multi-platform environment is presented. The measurement procedure is considered that is useful for developers to avoid the weakness of database structures.

SESSION 401 **WEDNESDAY 8:00 AM - 9:00 AM**
PAPER 4512 No Paper
MANAGEMENT AND CHARGEBACK NON-SPECIFIC

2010 IT: An Information Infrastructure Manifesto

Mark S. Lewis, *EMC Corporation*

The insatiable appetite for digital information is borne out of the same human curiosity, capacity for learning, and creativity which created and continues to drive our civilization. And just like our civilization which keeps changing and expanding, so is the industry built around information technologies. By 2010, IT's scope will be enlarged (again) to include consumer electronics, content-producing industries, and communications, all largely based on digital input and output. In addition, significant portions of non-commercial, information-driven sectors of the economy such as biotechnology research, healthcare, and education will be new sources of digital information creation and use.

*See page **6** for complete abstract.*

BUSINESS SHOWCASE

SESSION 411 **WEDNESDAY 9:15 AM - 10:45 AM**
PAPER 4506 No Paper
MANAGEMENT AND CHARGEBACK NON-SPECIFIC

The IT Management Landscape…A View from the Odyssey: A New Set of Challenges Returns

Bruce J. Rogow, *ViValdi Odyssey and Advisory Service*

Each year, Bruce makes over 120 independent, one-on-one Odyssey visits with senior IT and business executives. The interviews are used to gain a perspective on the mindset of these senior IT executives, what is working, what is not and the direction of IT management. These perspectives are presented as the OdysseyView of evolving IT management.

Over the past year, the OdysseyView has been seeing a major shift develop related to the underlying management premises for IT. Increasingly, IT strategy and management is about what is affordable and prudent. These changes have been brought about by a set of challenges that have made successful IT more problematic. Each of these challenges is discussed. As an example, many firms are shifting their business models to include a major service business offering. These service support applications often require different architectures than those currently installed. At the same time, most IT execs believe they should be taking over 10% a year out of their cost base.

The changes in the underlying premises for IT, strategy and management will change the shape and nature of IT measurement and metrics. As an example, prudent firms are learning that readiness or assimilation assessment may be far more critical than an ROI analysis based on a basket of assumptions. End to end measurement of the application performance as well as user adoption become critical issues.

SESSION 412 **WEDNESDAY 9:15 AM - 10:45 AM**
PAPER 4238 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Quality of Service Aspects and Metrics In Grid Computing

Daniel A. Menasce, *George Mason University*
Emiliano Casalicchio, *Univ. Roma Tor Vergata*

Grid computing promises to become the future computing paradigm for enterprise applications. Large scale grids are composed of a large number of components belonging to disjoined domains. These components are generally autonomous and join the grid as part of a loose federation. This session investigates some of the relevant issues that must be considered in designing grid applications that deliver appropriate QoS: definition of metrics, relationship between resource allocation and SLAs, and QoS-related mechanisms.

SESSION 413 **WEDNESDAY 9:15 AM - 10:45 AM**
PAPER 4241 ADVANCED
MANAGEMENT AND CHARGEBACK NON-SPECIFIC
WEBSERVICES, WEBSPHERE, E-BUSINESS

Journeying to the Land of On-Demand: Principles to Follow, Pitfalls to Avoid

Annie W. Shum, *BMC Software*
Jeffrey P. Buzen, *Independent Consultant*

The land of On-Demand is a magical metropolis where agile enterprises abound and IT dreams come true. The pixie-dust that makes all this possible includes a strategic amalgam of Web services, SOA, EDA (Event Driven Architecture), BI (Business Intelligence/Insights) and BPM (Business Process Management), built on XML, standards-based componentized software services and security/policy/orchestration standards. Will you need a "Wizard of Oz" to reach this land? Follow us as we attempt to provide a balanced view, separate fact from misconception, and paint a realistic picture of the road ahead.

SESSION 414 **WEDNESDAY 9:15 AM - 10:45 AM**
PAPER 4017 TECHNICAL
STORAGE WINDOWS NT/XP/ETC.
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

SQL Server 2000 and Large Storage Deployment

Prem Mehra, *Microsoft*
Art Ullman, *CSC*

This paper describes Best Practices in deploying SQL Server 2000 on a large SAN. Topics covered include: planning, deployment and performance considerations. The session is based on various implementations in high availability and high volume environments.

SESSION 415 **WEDNESDAY 9:15 AM - 10:45 AM**
PAPER 4041 ADVANCED
STORAGE NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS
No Paper

Performance and Capacity Planning Basics for Storage Networks V2.0

Greg P. Schulz, *Evaluator Group*

This session looks at performance and capacity planning for storage networks. Related topics including measurement, design and topology considerations, local/metropolitan/wide area ramifications for survivability, and scaling are covered. The attendee will gain insight into the various metrics and resources available to track usage of ports, devices, and links on a local, metropolitan, and global basis for different topologies and environments.

SESSION 416 **WEDNESDAY 9:15 AM - 10:45 AM**
PAPER 4020 INTRODUCTORY
MANAGEMENT AND CHARGEBACK NON-SPECIFIC

Perception is Reality - The Psychology of Performance Management

Denise P. Kalm, *BMC Software*

The CP/SM field is rife with tools for managing performance and planning for capacity: data collectors, monitors, modeling engines. But no response time number accurately measures the user's perception of the responsiveness of the system. To manage effectively, you need to learn to manage people too. Learn the tricks of the trade in 'performance psychology.'

SESSION 417 **WEDNESDAY 9:15 AM - 10:45 AM**
PAPER 4190 TECHNICAL
NETWORK NON-SPECIFIC

A White Box Look at the Performance of 802.11 Wireless and its Variants

David J. Konz, *PerfGen*

If you're trying to understand what the key underlying factors controlling the performance of 802.11, a, b or g - buying books on these variants, searching the web, or using benchmarking alone are practically wasted endeavors. This session presents information about these underlying performance issues based on using the core IEEE specifications for 802.11 (the white box) and is supplemented by lab results. Focus will be on 802.11 and the still very popular 802.11b implementations. 802.11a & g will be touched upon. Also some new and key information about managing wireless will be presented.

SESSION 421 **WEDNESDAY 11:00 AM - 11:30 AM**
PAPER 4244 INTRODUCTORY
MANAGEMENT AND CHARGEBACK NON-SPECIFIC

A Methodology for Tracking Capital Spending for IT

David F. Redinbaugh, *Federal Reserve Info. Tech.*

The processes described in the session brings together the individual work of capacity planners in separate technical areas into a single database that enables consistent financial reporting in terms recognized by both customers and non-technical management.

SESSION 422 **WEDNESDAY 11:00 AM - 11:30 AM**
PAPER 4220 HOW-TO
SOFTWARE PERFORMANCE ENGINEERING NON-SPECIFIC

Collecting Java Performance Measurements Using Byte Code Engineering

Carl J. De Pasquale, *ADP*

The objective of this session is to introduce a method to gather Java performance and modeling measurements using the Byte Code Engineering Library (BCEL). An overview of the Java class file and provides a simple BCEL class that inserts method timing and counting code will be presented. The timing measurements generated when the instrumented java class is run can be extremely useful to (1) a software engineer who is attempting to identify performance hotspots or (2) a performance engineer who is trying to collect Java performance measurements to build analytical or simulation models.

SESSION 423 **WEDNESDAY 11:00 AM - 11:30 AM**
PAPER 4064 HOW-TO
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Managing All of Your Application's Servers From a Single Web Page

Andrew S. Duffen, *Disney Worldwide Services*

One of the most difficult challanges a performance analyst has today is pouring through the mountains of information being collected. This session will show how to organize and implement the reporting of several performance metrics from multiple servers on a single, easy to read web page. It will allow the viewer to quickly spot anomalies and provides a jumping-off point to analyze the problem server's metrics in more detail.

SESSION 424 **WEDNESDAY 11:00 AM - 11:30 AM**
PAPER 4216 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Performance Integration: from Development to Delivery All at Once

Giuseppe Cassone, *Telecom Italia Lab*
Andrea Pinnola, *Telecom Italia Lab*

In the past, competition landscape of TELCO/IT industries has undergone a radical change. Time-to-market forced companies to squeeze their software processes, reducing performance testing in order to get to market on time. Services have been deployed in the field without the necessary performance verifications, and so with less quality (from the performance point of view). In this session we suggest a methodology based on an incremental model called Performance Integration and present a case study where this methodology was applied on the large complex system of the OSS application of Telecom Italia.

Sessions continued on page: 45

The Paris Hotel in Las Vegas: The Place to be for CMG2004

Conference hotels base meeting space charges on the number of hotel sleeping rooms purchased by conference attendees. In locations where there are other alternatives, it's easy to see that not staying in the conference hotel can have a significant financial impact on conference costs, and that these costs are ultimately passed on to attendees.

Please remember to help CMG keep costs under control by staying at the Paris Hotel when you come to CMG2004. In addition to helping CMG, you will be close to all the CMG activities: sessions, meals, the exhibit area, and PARS. This will help CMG keep costs at a reasonable level and keep you close to everything that's going on.

The city of Paris is reflected everywhere you go in the hotel. Outside, the hotel is anchored by scaled-down replicas of the Eiffel Tower and the Arc de Triomphe. Inside, the shops and restaurants of "Le Boulevard" sit on an actual cobblestone "street". And if you look up, you will see "sky"!

The nearly 3,000 guest rooms are spacious, nicely appointed and full of amenities: two-line phones and data ports are of particular interest to CMGers! There is also fine dining, a European-style health spa, and the convention and meeting areas are absolutely fabulous. Dining rooms are cozy, the shops small and humble; even the buffet is broken into a series of smaller dining rooms, with fireplaces, mirrors and mantels.

This will be the most unique venue for a CMG conference in many years. We are sure you will enjoy your stay here almost as much as you will enjoy CMG2004. Please come to take advantage of the CMG learning experience in a hotel you will not soon forget.

3 EASY WAYS TO REGISTER FOR CMG2004

1. **Register online.** Visit the CMG Homepage, www.cmg.org. Click the “Register for CMG2004” button, complete the forms, and submit. Online registration requires a valid Visa, Mastercard, or American Express account.

2. **Register by fax.** Complete the CMG2004 Registration Form and fax it back to CMG HQ at 856-401-1708.

3. **Register by mail.** Complete the CMG2004 Registration Form and mail it back to Computer Measurement Group, Inc., P.O. Box 8500-5545, Philadelphia, PA 19178-8500.

For more information, call 1 800 4ForCMG or 856-401-1700

HOTEL RESERVATION FORM

December 5-10, 2004 in Las Vegas, NV

Convention Group Code: SPCMG4

It's time to start planning for CMG2004! Complete this form and mail or fax it to the Paris Las Vegas. The CMG hotel discounted rates below apply. Be sure to mention CMG when you register! To guarantee your room reservation at the CMG rate you must reserve your room ***before Tuesday, November 2, 2004 @ 5:00PM Pacific Time***.

Mail or fax this Hotel Registration Form to the hotel.

Please type or print clearly and make a copy for your records.

First Name:_____ M.I.:___ Last Name:_____

Title:_____

Company:_____

Address:_____

City:_____ State/Province:____ Zip/Postal Code:_____

Country:_____ E-Mail:_____

Phone:_____ Fax:_____

For International numbers, please include country code.

Room Rates:

❑ Single / ❑ Double	$129 +9% tax
❑ Triple	$159 +9% tax
❑ Government Rate	$98.75

(Proper identification required. If calling the hotel directly, please ask for Government rate block SPCMG4B)

Preferences: ❑ King Size Bed ❑ Non-Smoking Room ❑ Double Queen Beds

Number of persons in party:_____ Number of rooms needed:_____

Attendee Name:_____ Arriving:_____ Departing:_____

Sharing With:_____ Arriving:_____ Departing:_____

Sharing With:_____ Arriving:_____ Departing:_____

CREDIT CARD INFORMATION

❑ Visa ❑ MasterCard ❑ American Express ❑ Other_____

Acct.#:_____ Exp. Date:_____

Name of Cardholder:_____

(Please print as it appears on the credit card)

Signature of Cardholder:_____

(Signifies authorization to charge credit card account)

IMPORTANT POINTS

- Contact the Paris Las Vegas directly by phone, or fax this completed form to the hotel to reserve your room.
- Print or type clearly to ensure correct processing.
- Use one form per room reservation.
- All reservations will require a one (1) night advance deposit per room, plus tax to guarantee room. All non-guaranteed reservations will be cancelled two (2) weeks after the date the reservation is made. Reservations must be guaranteed with a credit card or advanced deposit.
- To reserve your room with a cash deposit, mail a check or money order for the first night's room and tax along with this form directly to the Paris Las Vegas for the first night's room & tax rate.
- All cancellations must be made 48 hours prior to your check-in or you will be charged one night's room and tax.
- Check-in time is 3:00 pm & Check-out time is 11:00 am

Paris Las Vegas
3655 Las Vegas Blvd.
Las Vegas, NV 89109-4343 USA
Tel: 702-946-7000
Toll Free: 1-888-Bonjour
Fax: 702-967-3848
www.parislasvegas.com

For CMG Information, call 1-800-4 FOR CMG

REGISTRATION FORM

3 Easy Ways to Register!

CMG LAS VEGAS 2004

December 5-10, 2004
Paris Las Vegas
Las Vegas, NV

1. **Internet:** www.cmg.org/conference
2. **Fax:** 856-401-1708
3. **Mail:** Computer Measurement Group, Inc. P.O. Box 8500-5545 Philadelphia, PA 19178-8500

For more information call 1-800-4 FOR CMG or 856-401-1700

Membership Number

Important: Please provide your Membership Number. New members will be assigned a number by CMG. If unsure, please leave blank.

Please Note: Your badge will read ***exactly*** as indicated on this form. Please print or type all information clearly. Keep a copy of the completed form for your records

Name: _____
For Corporate Badges (options 6 & 7) indicate the person to receive CMG literature

Job Title: _____

Company: _____

Address: _____
Please include mail code

City: _____ State: _____ Zip: _____

Country: _____

Phone: _____ Fax: _____
Please include country code

E-mail address: _____
Your email address is required for a copy of the conference attendee list

❑ Please do not include my name for special offers or promotions from CMG partners.

Your Badge Name: _____
Corporate Badges (options 6 & 7) will list company name as badge name

Guest Name: _____

Guest Badge Name: _____

Special Meal Needs: ❑ Vegetarian ❑ Kosher

CMG2004 Attendance Options: Please mark the appropriate option and price. Complete this form and return it to the address at the top of the form. To take advantage of the Early Bird discount rate, your registration ***must be received at CMG Headquarters*** *by the date listed below*.

Registration Fees: Options 1-2 and 6-7 include attendance to all sessions, BOFs, Exhibitor Presentations, Exhibit access Tuesday-Thursday, Breakfasts and Lunches Tuesday-Friday, and PARS (Options 3 & 4 include the same functions for those days registered). Options 1, 5 & 6 include attendance to the Sunday Workshops, Breakfast and Lunch on Sunday. All registration options (EXCEPT options 6, 7, and 8) include a one year CMG membership for the year immediately following the conference.

Refund Policy: All cancellations must be in writing on company letterhead and must be received at CMGHQ **by November 19, 2004**. CMG will deduct the cost of a one-year membership plus a $150 processing fee from all refunds. *No refunds will be issued after that date.*

Cancellation: If the CMG conference cannot be conducted due to acts of God, war, government regulation, disaster, strikes, civil disorder, curtailment of transportation facilities or other emergencies making it inadvisable, illegal or impossible to provide the facilities or to hold the meeting, each prepaid registrant will receive a copy of the conference Proceedings and any other gifts. Membership dues of pre registrants and other fixed conference expenses will be paid from the pre registration funds. Any remaining funds will be refunded to pre registrants. CMG is not responsible for any other costs incurred by pre registrants in connection with the conference.

Choose one option from 1-7. Option 8 may be an additional option.		Early Bird by 10/15/04		Registration after 10/15/04	
		Member	Non-Member	Member	Non-Member
Option 1	Full Week Conference & Sunday Workshops	$1,650.00❑	$1,850.00❑	$1,900.00❑	$2,100.00❑
Option 2	Full Week Conference Only	$1,375.00❑	$1,575.00❑	$1,525.00❑	$1,825.00❑
Option 3	One Day Conf. (exhibits when open) ❑Tue. ❑Wed. ❑Thu. ❑Fri.	$475.00❑	$525.00❑	$550.00❑	$600.00❑
Option 4	Two Day Conf. (exhibits when open) ❑Tue. ❑Wed. ❑Thu. ❑Fri.	$775.00❑	$875.00❑	$900.00❑	$1,000.00❑
Option 5	Sunday Workshops Only	$475.00❑	$475.00❑	$475.00❑	$475.00❑
Option 6	Corporate (shared) Badge - Full Week & Workshops	N/A	$1,850.00❑	N/A	$2,100.00❑
Option 7	Corporate (shared) Badge - Full Week	N/A	$1,575.00❑	N/A	$1,825.00❑
Option 8	Guest Registration: Breakfast and PARS tickets				$350.00❑
Add ICCP Certification *(This program will run on Sunday. It is only available WITH options 2, 3, 4 or 7.)*					$595.00❑
CMG2004 CD-Rom Proceedings: All registered attendees will receive on site with their collectibles					*FREE* ☒
CMG2004 Printed Proceedings - 2 Volume					$60.00❑
				GRAND TOTAL	

Payment Options: Full payment in US dollars, check, money order or credit card must accompany the registration form or the registration cannot be processed.

❑ Check Enclosed (payable to The Computer Measurement Group, Inc.) ❑ VISA ❑ Mastercard ❑ American Express

Credit Card #: _____ Expiration Date: _____ Zip Code: _____

Name of Cardholder (*please print*) _____ Signature of Cardholder (*signifies authorization to charge credit card account*)

Note: Monies paid to the Computer Measurement Group are not deductible as charitable contributions but may be deductible as ordinary & necessary business expenses. See your tax consultant for advice.

Registration Options

Option 1 Full Conference & Sunday Workshops

Includes entry to all **CMG2004** sessions, BOFS, exhibitor presentations, exhibit hall access, meals/PARS, Proceedings, Sunday Workshops, and 2005 CMG membership.

Option 2 Full Week Conference

Includes entry to all **CMG2004** sessions, BOFS, exhibitor presentations, exhibit hall access, meals/PARS, Proceedings, and 2005 CMG membership. (Sunday Workshops are not included)

Option 3 One-Day Conference

Includes entry on the day specified to all **CMG2004** sessions, BOFS, exhibitor presentations, exhibit hall access, meals/PARS, Proceedings, and 2005 CMG membership. (Sunday Workshops are not included)

Option 4 Two-Day Conference

Includes entry on the days specified to all **CMG2004** sessions, BOFS, exhibitor presentations, exhibit hall access, meals/PARS, Proceedings, and 2005 CMG membership. (Sunday Workshops are not included)

Option 5 Sunday Workshop Only

Includes entry to Sunday Workshops including handouts for the Sunday Workshops, breakfast and lunch on Sunday, Proceedings, and a 2005 CMG Membership.

Option 6 Corporate Badge – Full Week and Sunday Workshops

Each Corporate Badge specifies a company name, not an attendee name. Includes entry to all **CMG2004** sessions, BOFS, exhibitor presentations, exhibit hall access, meals/PARS, Proceedings, and Sunday Workshops. This provides local companies and **CMG2004** exhibitors the opportunity to send more associates to a variety of conference sessions at different times during conference week. **There is no 2005 CMG membership with this option.**

Option 7 Corporate Badge – Full Week

Each Corporate Badge specifies a company name, not an attendee name. Includes entry to all **CMG2004** sessions, BOFS, exhibitor presentations, exhibit hall access, meals/PARS, and Proceedings (Sunday Workshops are not included). This provides local companies and **CMG2004** exhibitors the opportunity to send more associates to a variety of conference sessions at different times during conference week. **There is no 2005 CMG membership with this option.**

Option 8 Guest Registration

Includes Full Breakfast and evening PARS. Guests are only permitted in Exhibit Hall on Thursday.

ICCP Certification

(Available only along with Options 2, 3, 4, or 7.)

The Institute for Certification of Computing Professionals (ICCP) was established to credential the highest level of professional for the following professions: computer scientists, system analysts, IT manager, IT consultants, data management professionals and others.

CMG along with ICCP is pleased to offer discount to our members for a one-day examination cramming session followed by a series of up to 3 examinations. We will be offering preparation and testing for the IT Core Exam, IT Management Exam and the Business Information Systems exam.

Additionally, CMG is a recognized affiliate organization and as such, conference attendance can count towards continuing education hours required for recertification.

For additional preparation the ICCP website offers sample tests and content for their review courses as well as suggested reading lists.
Visit http://www.iccp.org/iccpnew/training.html for this specific information.

Includes breakfast and lunch on Sunday.

Cancellation & Refund Instructions

All cancellations must be in writing on company letterhead and be received at CMG HQ by November 19, 2004. CMG will deduct the cost of a one-year membership and a $150.00 processing fee from all refunds.

Substitution Instructions

Requests must be in writing on company letterhead, identifying the pre-registered attendee and the substitute. The substituted individual must complete a registration form. You can make a substitution at anytime. CMG allows only one substitution per registration.

CMG LAS VEGAS 2004

SESSION 425 **WEDNESDAY 11:00 AM - 11:30 AM**
PAPER 4169 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC
WEBSERVICES, WEBSPHERE, E-BUSINESS

Overload Control for Web Services: Web Admission Control

Robert D. van der Mei, Centre for Mathematics and Computer Science
Bart M. Gijsen, TNO Telecom
Pieter J. Meulenhoff, TNO Telecom

Nowadays, web services are ''hot'' and e-commerce revenue is growing fast. In this context it is striking that popular web servers often suffer from severe temporary overload, causing web browsing performance to degrade dramatically. Therefore controlling browsing performance is essential in the e-commerce market. Server capacity planning is important for controlling browsing performance, but more is required to resolve the problem of a total performance collapse during temporary server overload. In this session we present a novel intelligent request discard mechanism that resolves this problem.

SESSION 426 **WEDNESDAY 11:00 AM - 11:30 AM**
PAPER 4131 TECHNICAL
SOFTWARE PERFORMANCE ENGINEERING NON-SPECIFIC
WEBSERVICES, WEBSPHERE, E-BUSINESS

An Analytic Model for Predicting the Performance of SOA-Based Enterprise Software Applications

Henry H. Liu, DST Innovis, Inc.
Pat V. Crain, DST Innovis, Inc.

Cost control and time-to-market demand driving complexities out of today's mission-critical, large-scale enterprise software applications. In the meanwhile, SLAs require that adequate performance be built-in up front, in order to meet stringent business operational requirements. These forces have led to a more disciplined approach to building software by adopting Service-Oriented Architecture (SOA). In this session, we present an analytic model that is helpful for facilitating performance prediction of SOA-based enterprise software applications built with commonly used design patterns and hardware systems.

SESSION 427 **WEDNESDAY 11:00 AM - 11:30 AM**
PAPER 4039 INTRODUCTORY
PERFORMANCE AND CAPACITY MANAGEMENT UNIX/LINUX
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

UNIX Update and Compile Performance Resolution

Douglas A. Tapscott, Siemens Medical Solutions

At Siemens Medical Solutions Health Services, several of my fellow Unix System Administrators and I noticed significant performance issues during updates and compiles of our ERP application environments. Some detective work identified the bottleneck as access to the /tmp file system on the SCSI based internal drives. We noticed that the performance during updates and compiles was the same on all our Unix hardware. This session describes the increased system resource utilization efficiency we achieved with a 74 percent decrease in compile times by resolving this performance bottleneck.

BUSINESS SHOWCASE

SESSION 431 **WEDNESDAY 1:15 PM - 2:15 PM**
PAPER 4507 No Paper
MANAGEMENT AND CHARGEBACK NON-SPECIFIC

Amy Wohl, Wohl Associates

SESSION 432 **WEDNESDAY 1:15 PM - 2:15 PM**
PAPER 4259 PANEL
PERFORMANCE AND CAPACITY MANAGEMENT Z/OS
Z/OS

Panel: z/OS and WLM Q & A

Ivan L. Gelb, Gelb Information Systems Corp.
Peter Enrico, Enterprise Perf Strategies, Inc.

If you have a general z/OS or WLM question, this is the panel to ask. Some of the many performance topics the panel of experts can answer questions on include zSeries processors and processor configurations, general sysplex and z/OS system performance, WLM anything, Workload License Charges, WebSphere, and a great many other topics. Come prepared with questions. Panel Moderator: Ivan L. Gelb. Panelists: Peter Enrico, Kathy Walsh

SESSION 433 **WEDNESDAY 1:15 PM - 2:15 PM**
PAPER 4246 INTRODUCTORY
MODELING, MATH AND STATISTICS UNIX/LINUX
WEBSERVICES, WEBSPHERE, E-BUSINESS

Web Application Scalability: A Model-Based Approach

Lloyd G. Williams, Software Engineering Research
Connie U. Smith, Performance Engineering Services

Scalability is one of the most important quality attributes of today's software systems. Yet, despite its importance, scalability in applications is poorly understood. This session presents a model-based view of scalability in Web and other distributed applications that is aimed at removing some of the myth and mystery surrounding this important software quality. We review four models of scalability and show how they relate to Web and other distributed applications. The applicability of these models is demonstrated with a case study.

SESSION 434 **WEDNESDAY 1:15 PM - 2:15 PM**
PAPER 4601 No Paper
MODELING, MATH AND STATISTICS
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Platinum Sponsor TeamQuest presents: the ABCs of Workloads

Joe Rich, TeamQuest

This presentation will take the audience through the basics of what workloads are. How one goes about creating or characterizing them. Why they are necessary for proper business oriented resource monitoring and provisioning. And, how you would use workloading with respect to the IBM AIX Workload Manager Environment and the Solaris Resource Manager.

SESSION 435 **WEDNESDAY 1:15 PM - 2:15 PM**
PAPER 4040 INTRODUCTORY
STORAGE NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS
No Paper

Storage Technology Primer & Update

Greg P. Schulz, *Evaluator Group*
Randy Kerns, *Evaluator Group*

There is a confusing wealth of new terminology in storage networking: iSCSI, FC, FCIP, iFCP, DAFS, SAN, NAS, CAS, DAS, SAS, SATA/ATA, SRM, Virtualization, ILM, Thin provisioning and InfiniBand. This session and material is intended for those who plan to utilize storage networks or who are seeking a greater understanding of the technology and concepts associated with storage networking. Information provided will aid in selection, planning, implementation, and understanding tradeoffs for storage networks various storage networking technologies and techniques.

SESSION 436 **WEDNESDAY 1:15 PM - 2:15 PM**
PAPER 4055 HOW-TO
SOFTWARE PERFORMANCE ENGINEERING UNIX/LINUX
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

The Use of ''R'' for System Performance Analysis

James Holtman, *Convergys*

"R" is the GNU version of the S programming language. This is a complete programming environment that can support the most complex data analysis requirements and provides great graphical output. This session will be an overview of "R" and examples of how we use both system performance data (e.g., sar, vmstat, iostat, mpstat) and application logs to create output on the web for review by production staff. We will show how we manipulate data structures with millions of entries (e.g., transaction start/end times) to determine response times and categorize by time of day and transaction type.

SESSION 437 **WEDNESDAY 1:15 PM - 2:15 PM**
PAPER 4087 INTRODUCTORY
PERFORMANCE AND CAPACITY MANAGEMENT Z/OS
Z/OS

DB2 DDF, Life in the Fast Lane

Robert E. Chaney, *Delta Technology, Inc.*

When the I/T pundits proclaimed in the early '90s, ''The Mainframe is Dead'', they didn't tell us it would die from overuse! IBM's DB2 Distributed Data Facility (DDF), along with DB2 Connect, have formed the great data bridge of the new millenium, facilitating remote access to the company's most widely used critical databases. This session explores the intricacies of DB2 Connect, DDF and Workload Manager (WLM) in support of an enterprise-critical workload.

BUSINESS SHOWCASE

SESSION 44 **WEDNESDAY 2:45 PM - 3:45 PM**
PAPER 4508 No Paper
MANAGEMENT AND CHARGEBACK NON-SPECIFIC

The Consumerization of Information Technologies - A New Source of Both Infrastructure and More Responsible Employees

Douglas Neal , CSC's Research and Advisory Services

The increasing consumerization of information technologies is providing employees with significant, but incomplete, education in many information technologies. It is now not uncommon to find half a dozen wireless LAN's within reach of a suburban house. This new education and capability could lead to insights and innovations in the use of technology within firms, just at a time when businesses are hungry for innovation. At the same time, consumerization is also leading to public infrastructure, such as email and backup, which are rapidly becoming attractive alternatives to our existing private infrastructure. However, if we pursue business as usual we will not capture the benefits of these relentless trends. To take advantage of these trends, organizations need to 1) create the ability to monitor the evolution of emerging public infrastructure, and 2) begin to trust users in ways that develop not just their technical understanding, but also their responsibility for how it is used.

SESSION 442 **WEDNESDAY 2:45 PM - 3:45 PM**
PAPER 4518 No Paper
PERFORMANCE AND CAPACITY MANAGEMENT Z/OS
Z/OS

WLM Myths, Truths, and Half Truths

Kathy Walsh, *IBM Corporation*

WLM folklore has grown and many misconceptions are all about us. Come to this session where the speaker will discuss the most frequently discussed WLM myths, mysteries, truths, and half truths. Understand why the answer to almost all performance questions is: It Depends. Do you think WLM can only have 30-35 service classes, must every system have discretionary work, must you run CICS using transaction goals, TSO still needs to have 4 periods, and DB2 must be the highest service class in the system? If so, then come and review the reasons why some of these answers must always begin with: Well it depends on.

SESSION 443 **WEDNESDAY 2:45 PM - 3:45 PM**
PAPER 4600 No Paper
MODELING, MATH AND STATISTICS

Platinum Sponsor TeamQuest presents: Modeling Multi-Tiered Applications That Access Legacy Systems

Scott Johnson, *TeamQuest*

Many new applications are implemented using a multi-tier architecture. While the presentation, business logic, and database layers are often implemented using Unix or Windows servers, the application may still require some information from legacy applications and databases on the mainframe. This presentation discusses modeling approaches for this type of application and looks at an example model for an application.

SESSION 444 **WEDNESDAY 2:45 PM - 3:45 PM**
PAPER 4188 ADVANCED
PERFORMANCE AND CAPACITY MANAGEMENT WINDOWS
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Event Tracing for Windows: Best Practices

Insung Park, *Microsoft Corp.*

Event Tracing for Windows (ETW) is a general instrumentation and tracing facility which has been available since Windows 2000 and is widely used in various OS components. This session summarizes ways to make the most out of this technology taking advantage of the abundance of natve OS events. Different usage scenarios are discussed for different user profiles, specifically server administrators, diagnostic tool developers, and developers of performance-critical applications.

SESSION 445 **WEDNESDAY 2:45 PM - 3:45 PM**
PAPER 4005 ADVANCED
STORAGE Z/OS
Z/OS

Understanding the Differences between z900 and z990 Service Time Measurements

H. Pat Artis, *Performance Associates, Inc.*

With the introduction of the z990, IBM increased the precision of the timing measurements provided by the I/O subsystem from 128 to 0.5 microseconds. This paper will explore the benefits and impacts of this change and answer the question “did my service time really increase?”.

SESSION 446 **WEDNESDAY 2:45 PM - 3:45 PM**
PAPER 4207 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC
WEBSERVICES, WEBSPHERE, E-BUSINESS

Workload Characterization for Websphere Application Server

Yefim Somin, *BMC Software*

WebSphere Application Server is a complex Java-based environment widely used as a business tier for critical applications accessed through the web. It is important to understand what resources are consumed within WebSphere by different types of business activities. Using OS level process information or other non-process statistics presents certain problems. The session discusses benefits and problems inherent in various approaches.

SESSION 447 **WEDNESDAY 2:45 PM - 3:45 PM**
PAPER 4523
MANAGEMENT AND CHARGEBACK NON-SPECIFIC

UK CMG Best Paper: Business Continuity and Disaster Recovery - Managing the Pain

Elaine Weston, *BT*

Consider a business with over 100,000 employees; 20 million plus customers and an IT estate with a business value in excess of £2 billion? Consider how to protect that business from the risk and impact of a major incident affecting the IT systems which manage that business, whilst taking account of the optimists view - ‘it’ll never happen’. Developing a strategic approach for a cost-effective business response to risk, with highest level company buy-in, is one challenge. Taking it from strategy through implementation, testing, managing, changing, & communicating is a very significant, and achievable, challenge. Let’s talk about it.

BUSINESS SHOWCASE

SESSION 451 **WEDNESDAY 4:00 PM - 5:00 PM**
PAPER 4537 PANEL
No Paper

Panel: Business Showcase Panel

Sid Finehirsh

During the Business Showcase you heard separate presentations by three innovative and important Information Technology leaders with distinguished careers in analyzing the future of our industry. Now the Business Showcase brings them together for an interactive discussion with each other and the CMG community. This is not only your chance to see how they respond to each other’s controversial visions of our IT future, but also to voice your own opinions, questions, and concerns. Panelists include: Bruce J. Rogow and Douglas Neal

SESSION 452 **WEDNESDAY 4:00 PM - 5:00 PM**
PAPER 4520 No Paper
PERFORMANCE AND CAPACITY MANAGEMENT Z/OS
Z/OS

Introduction and Overview of zAAPs on z/OS

Kathy Walsh, *IBM Corporation*

This session will introduce the new zSeries Application Assist Processor (zAAP). The session will introduce the zAAP technology and will review the impact on CPU time recording and how it impacts down stream activities such as performance reporting, capacity planning, and accounting. Information on how to configure zAAPs from an LPAR perspective will be covered, as will zAAP impact on WLM metrics.

SESSION 453 **WEDNESDAY 4:00 PM - 5:00 PM**
PAPER 4186 HOW-TO
NETWORK WINDOWS NT/XP/ETC.
WEBSERVICES, WEBSPHERE, E-BUSINESS

Turn Your Old Unused PC At Home Into A Fully Functional Web Server That Runs From Your Kitchen

Bernard Domanski, *The City University of New York-CSI*
Rob Domanski

Many of us have older PCs that still work but have been replaced with faster, bigger behemoths. Often, the kids or Aunt Sophie is the recipient of these working dinosaurs. This How-To session will take you through configuring your dinosaur to be a fully functional web server that is absolutely on the Internet, is fully legal, and will cost you absolutely nothing but a little bit of time. So if you have Windows, have an account with an ISP, and can think of what you would do with your own web server, this session is an absolute must-attend!

SESSION 454 **WEDNESDAY 4:00 PM - 5:00 PM**
PAPER 4200 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT UNIX/LINUX
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Planning for Partitioned AIX Systems

Jaqui Lynch, *Mainline Information Systems*

This session will be an introduction to Planning for Partitioning the pSeries. It will include an introduction to partitioning and will also cover some of the 'gotchas' when designing partitioned systems.

SESSION 455 **WEDNESDAY 4:00 PM - 5:00 PM**
PAPER 4019 PANEL
STORAGE NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Panel: Storage Performance Council Status Update Panel Discussion

Mel Boksenbaum, *Hitachi Data Systems*

The first cross-vendor team of storage performance experts has built the industry's first benchmark for storage which has become the standard for decision making. The Storage Performance Council (SPC) has sought a real-world workload to become the first benchmark that is vendor-neutral, platform independent, network storage capable. More than two dozen SPC-1 results have been published to date. This panel session will discuss the status of the Storage Performance Council and the Storage Industry standard performance benchmarks available and under development.

SESSION 456 **WEDNESDAY 4:00 PM - 5:00 PM**
PAPER 4001 TECHNICAL
STORAGE NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Business Process Mapping, Data Classification, and Service Level Objectives

Robert Rogers, *Application Matrix*

This session describes a methodology for information lifecycle management (ILM). ILM is the discipline of ensuring that applications get the resources they are allotted in a resource constrained environment. Almost every enterprise has established priorities for their applications. The question is how to determine who deserves service (i.e., what constitutes the critical "business process"); how are the data objects of that business process classified, how are service level objectives applied to the entity, and finally, how does the management system steer data to devices and services?

SESSION 457 **WEDNESDAY 4:00 PM - 5:00 PM**
PAPER 4141 HOW-TO
PERFORMANCE AND CAPACITY MANAGEMENT Z/OS
Z/OS

Care and Feeding of SMF in the Large System Environment

Joseph L. Babcock, *Bank One*

In large z/OS systems today, SMF generates data at a rate which requires some changes to our old sequential processing pattern, otherwise we will not complete daily SMF processing before the following day, putting us that much further behind in SMF processing. This session describes the processes used to deliver timely summaries and reports in a 10K –12K MIPS z / OS installation. We will cover SMF dump processing to the delivery to online reporting access points.

SESSION 501 **THURSDAY 8:00 AM - 9:00 AM**
PAPER 4511
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC
Z/OS No Paper

Business Service Management: Configuration, Change, Assets and IT Management

Jim Grant, *BMC Software*

Practitioners of resource and performance management have, in many ways, led the early charge for acceptance of service management principles. As customers and vendors engage in building solutions that are service-centric in design and application we must challenge long-held ideas and approaches to solving the management problem. Is the integration of best of breed technologies a superior approach to what has been seen as the failure of frameworks? Is there something in between? Can standards really solve the problem? There are a number of parallels that can be instructive here and we should consider the implications as a way of ensuring our work is more relevant to the businesses we serve. Jim will explore these issues in the context of the evolving management software market and its likely directions in an effort to create context for the good work CMG attendees must do.

SESSION 511 **THURSDAY 9:15 AM - 10:45 AM**
PAPER 4022 INTRODUCTORY
MANAGEMENT AND CHARGEBACK NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Utility Pricing - Software Licensing Strategies for an On Demand World

David Rowley, *Macrovision*

This session discusses the challenges that must be overcome by software publishers and their customers as they move towards utility pricing models. It gives a detailed analysis of where the demand for utility pricing is coming from and why it can change the future of software pricing and licensing. It goes in-depth into describing utility pricing models in demand and in use today, citing actual case studies that provide strategic perspectives behind decisions to offer usage-based pricing models. Finally, it demonstrates a good model implementation.

SESSION 512 **THURSDAY 9:15 AM - 10:45 AM**
PAPER 4101 ADVANCED
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Automating Workload Characterization by Policy

Ronald R. Kaminski, *Safeway Inc.*

The shift from dozens to hundreds or even thousands of machines per analyst is in progress, and scaling issues are forcing us to abandon our traditional handcrafted techniques. Workload characterized views of consumption are vital, but creating and maintaining them by hand is time consuming, error prone, and the looming prospect of keeping thousands of heterogeneous machines consistent can pale the most battle hardened practitioner. Join the author as he explores how to use policies to create workload characterizations dynamically from collected data, policy choices and historical hints.

SESSION 513 **THURSDAY 9:15 AM - 10:45 AM**
PAPER 4535 No Paper
PERFORMANCE AND CAPACITY MANAGEMENT

MXG for Dummies

Charles W. Hopf

So you can't figure out how to customize BUILDPDB? Can't get your hands around ANALCNCR or VMXGSUM? And what is this UTILBLDP thing anyway? What do I do when BUILDPDB for a day takes 2 days to run? The answers to these and many other MXG questions can be found in this session.

SESSION 514 **THURSDAY 9:15 AM - 10:45 AM**
PAPER 4123 TECHNICAL
STORAGE NON-SPECIFIC

A Multi-tiered Model for Performance Analysis of Storage Area Network

Chao Li, *Tsinghua University*
Li-zhu Zhou, *Tsinghua University*
Chun-xiao Xing, *Tsinghua University*

The infrastructure of a SAN is complex , and finding a modeling method is very important for SAN designers and performance tuners. This session discusses a multi-tier, multi-server queing network SAN model. The model validation demonstrates an error range of less than 10% which is adequate for quick decision making and design comparisons.

SESSION 515 **THURSDAY 9:15 AM - 10:45 AM**
PAPER 4239 ADVANCED
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC
WEBSERVICES, WEBSPHERE, E-BUSINESS

Monitoring and Diagnosing Applications with ARM 4.0

Mark W. Johnson, *IBM*

The ARM (Application Response Measurement) standard provides a way to manage business transactions. By embedding simple calls to an agent supporting ARM an application can be managed for availability, service level agreements, and capacity planning. ARM provides a way for applications to provide additional information about transactions, including the relationship between parent and child transactions end-to-end. This session describes the API, and then explores how ARM information can be used to monitor and diagnose application response time.

SESSION 515 **THURSDAY 9:15 AM - 10:45 AM**
PAPER 4163 TECHNICAL
SOFTWARE PERFORMANCE ENGINEERING UNIX/LINUX
WEBSERVICES, WEBSPHERE, E-BUSINESS

ARMing Apache

David Carter, *OPNET Technologies*

In the past, the only applications that were able to use ARM were those with ARM coded in. By building it into the Apache application platform, The benefits of ARM has been brought to a wider audience. Two approaches to adding ARM to Apache are examined: one is a request-based transaction monitor that treats each page as a request, and the second approach is through a series of APIs exposed to users of PHP and similar modules.

SESSION 516 **THURSDAY 9:15 AM - 10:45 AM**
PAPER 4243 HOW-TO
MANAGEMENT AND CHARGEBACK NON-SPECIFIC

Evaluating IT Management Practice

Christopher P. Strasser, *National Security Agence*

Are there unique management practices for IT managers? Are there considerations that managers of an enterprise should give uniquely to IT? The session will discuss the evaluation of IT management practices using very specific criteria similar in approach to the Capability Maturity Model, but focused strictly on IT management at the enterprise level. It will show how IT management effectiveness can be evaluated to promote better returns from IT investments across the enterprise. It also offers evidence that effective IT management translates directly to business value for the enterprise.

SESSION 517 **THURSDAY 9:15 AM - 10:45 AM**
PAPER 4242 HOW-TO
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC

Moving Beyond Test and Guess - Using Modeling with Load Testing to Improve Web Application Readiness

Richard Gimarc, *HyPerformix, Inc.*
Amy C. Spellmann, *HyPerformix, Inc.*
James Reynolds, *HyPerformix, Inc.*

This session will discuss and demonstrate how performance modeling compliments load testing to improve the readiness of an application before deployment. After a discussion of the benefits and challenges of modeling, a case study of an actual load testing and modeling effort is presented. The case study walks through the entire model construction process, from data collection, through model construction, and model validation. The case study concludes with a description of how the model was used to guide and improve the load testing effort.

SESSION 521 **THURSDAY 11:00 AM - 11:30 AM**
PAPER 4130 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT UNIX/LINUX

Implementing an Evaluation Architecture for Web Proxies

Baoning Wu, *Lehigh Univ.*
Brian D. Davison, *Lehigh Univ*

The evaluation of Web proxy performance can be complex. In this session, we present the lessons learned and results of our implementation of a novel simultaneous proxy evaluation technique. In this architecture, we send the same requests to several proxies simultaneously and then measure their performance (e.g. response time). With this approach, we can test proxies using a live network with real content, and additionally be able to evaluate prefetching proxies.

SESSION 522 **THURSDAY 11:00 AM - 11:30 AM**
PAPER 4179 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT Z/OS
Z/OS

Mainframe Global and Workload Level Statistical Exception Detection System, Based on MASF

Igor A. Trubin, *Capital One*
Linwood Merritt, *Capital One Services, Inc.*

The session describes one site's experience of using Multivariate Adaptive Statistical Filtering (MASF) to produce web based exception reports against SAS/ITRM performance databases for MVS, Unisys and Tandem mainframe platforms. In addition to global exceptions, the system can capture workload level detail. The advantages of using a home made SAS based Statistical Exception Detection System for this purpose vs. usage of MASF build into BMC Visualizer are discussed.

ITIL

SESSION 523 **THURSDAY 11:00 AM - 11:30 AM**
PAPER 4184 INTRODUCTORY
MANAGEMENT AND CHARGEBACK NON-SPECIFIC

Service Management - The ITIL Framework

Jerry L. Rosenberg, *SRM Associates, Ltd.*

The ITIL framework is becoming more accepted world-wide as the standard for conducting service management within the organization. This paper will explain the basics of the ITIL framework and illustrate how one can perform an assessment of corporate readiness/compliance with ITIL standards.

SESSION 524 **THURSDAY 11:00 AM - 11:30 AM**
PAPER 4098 TECHNICAL
MODELING, MATH AND STATISTICS NON-SPECIFIC
WEBSERVICES, WEBSPHERE, E-BUSINESS

Issues in Developing a Simulation Model of an EJB Application Server

David Mc Guinness, *Performance Engineering Laboratory*

Despite the fact that EJB is such a widely used technology research in the area of modeling EJB application servers in terms of performance characteristics is quite sparse. This session will describe how Ptolemy II, a discrete event simulator, can be used to build a scalable model of an EJB system that allows users to input variables that describe interactions and their constituent methods, as well as system parameters. The model will output the average time for each given user interaction and allow users to seek system improvements by changing the system parameters and workloads.

SESSION 525 **THURSDAY 11:00 AM - 11:30 AM**
PAPER 4222 TECHNICAL
MANAGEMENT AND CHARGEBACK NON-SPECIFIC

Why Develop a Storage Strategy?

John H. Silver, *StorageTek Corp.*

The challenge faced by IT is how to cope with the growth in both the quantity and complexity of storage infrastructure. Even though the unit cost for data storage has continued to decrease, this has been more than offset by data growth. Add to this the new regulatory requirements and the emphasis on data lifecycle management storage has moved to center stage. This session takes the position that the best first step in managing storage growth and protection is to develop a storage strategy.

SESSION 526 **THURSDAY 11:00 AM - 11:30 AM**
PAPER 4093 TECHNICAL
MANAGEMENT AND CHARGEBACK NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Self-Aware Business Processes

Michael A. Salsburg, Unisys

For highly automated business processes, Business Process Management (BPM) cannot be realized until the business processes are self-aware regarding cost, service levels and availability. Self-awareness at the business process level enables a new dimension of management so that the priorities and goals of the business can be realized and deployed through all layers of the supporting IT infrastructure.

SESSION 527 **THURSDAY 11:00 AM - 11:30 AM**
PAPER 4174 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Capacity Planning of Voice Response Middleware

Curtis Hrischuk, IBM

Voice recognition and text to speech capabilities are pervasive and ubiquitous. Simple voice navigation applications have now become different modes for users to interact with enterprise applications via cell phone, Voice over IP, or POTS. Voice enabling middleware (VEM) is opening up with standards like SIP, VoiceXML, and others. Capacity planning of VEM crosses technology boundaries and models that are the subject of this paper. The VEM capacity planning is based on real-life issues and technical challenges with providing sizing information, covering several generations of technology.

SESSION 531 **THURSDAY 1:15 PM - 2:15 PM**
PAPER 4522 No Paper
STORAGE NON-SPECIFIC

Storage Navigator

Fred G. Moore, Horison, Inc.

The next phase of evolution in data storage has begun. Emerging from an economic slump, IT is beginning to display glimpses of the innovation of years past. Recent events have raised interest in data protection, security and disaster recovery to unprecedented levels. Growth continues at 40-60% annually. Tape cartridge capacity has surpassed magnetic disk and appears poised to hold that lead. The consolidation of storage vendors is well underway with 5 or fewer companies having over 85% of the revenue in their segment. The stampede to offshore outsourcing offers a savings in labor rates but with all the competitors offshore, the advantage is soon nullified. A more sustainable strategy to reduce costs while securing competitive advantage remains an elusive goal for many businesses.

The new economics of the storage industry have created a new game with new rules that are reshaping traditional methods of managing data. Beyond addressing the fundamentals of disk, tape and storage architectures, Storage Navigator will address emerging trends and future directions in data storage, storage networking, and storage management. The disruption in the storage industry over the past few years assures us that there is no security, only opportunities.

SESSION 532 **THURSDAY 1:15 PM - 2:15 PM**
PAPER 4002 INTRODUCTORY
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC

Seeing the Forest AND the Trees: Capacity Planning for a Large Number of Servers

Linwood Merritt

This author's capacity planning learning expertise was built on a limited number of servers. Specifically, it involved analyzing and reporting workloads on a few mainframe footprints and, eventually, a few dozen distributed (Unix and NT) servers. His environment today includes hundreds of distributed servers along with larger mainframe footprints. The challenge in this increasingly common environment is to manage the complexity of capacity planning and reporting for this explosion in the numbers and types of data processing platforms.

ITIL

SESSION 533 **THURSDAY 1:15 PM - 2:15 PM**
PAPER 4260 INTRODUCTORY
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC

Service Level Management: More Than Just SLAs

David F. Pultorak, Fox IT

A major source of IT Service Management (ITSM) best practices is the IT Infrastructure Library (ITIL®). One key instrument for recording business requirements and IT's capabilities is the Service Level Agreement (SLA). This paper talks about the realities SLAs. Key characteristics of SLAs (availability, reliability, support, performance, charging, reviews, etc.) are covered in this paper. Guidelines for SLA development are presented. Lastly, sample SLA Checklist, Agreement, and SLA Report are presented in an appendix.

SESSION 534 **THURSDAY 1:15 PM - 2:15 PM**
PAPER 4037 INTRODUCTORY
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Too Many Servers, Not Enough Eyes (or – Where Did All These Servers Come From?!?)

Rich Fronheiser, Metron

This paper is based on the Author's experiences in formal Capacity Planning and Performance Management departments – starting with a large company that had few servers and many analysts and concluding with an even larger company that better reflected the title of this paper. The paper outlines a methodology that allows analysts and planners to target their limited resources at systems (and more importantly, applications) that require the most attention as the number of servers grows and the number of analysts decrease.

SESSION 535 **THURSDAY 1:15 PM - 2:15 PM**
PAPER 4235 HOW-TO
NETWORK UNIX/LINUX
WEBSERVICES, WEBSPHERE, E-BUSINESS

Web Bandwidth Management using Homemade Tools and Freeware

Sidney W. Soberman, *H W Wilson*

This session describes network performance problems encountered during the operation of a web service. Faced with a limited capital budget for networking monitoring software, we depend on homemade tools and open source software to monitor and detect internal and external network bottlenecks. This allows network operations staff to diagnose response time problems experienced by our customers. Over time, we've gained an understanding of the components of end-to-end response time and bandwidth usage. Thus, better service is provided to our customers.

SESSION 535 **THURSDAY 1:15 PM - 2:15 PM**
PAPER 4121 INTRODUCTORY
NETWORK NON-SPECIFIC
WEBSERVICES, WEBSPHERE, E-BUSINESS

Network Bandwidth Estimations Based on Use-Case Scenarios

Nikhil Venugopal, *Infosys Technologies Limited*
Gaurav Caprihan, *Infosys Technologies Ltd.*

Shoe-string budgets, coupled with increasing performance requirements have become the bane of IT departments the world over. With networking capabilities becoming the norm for most applications, bandwidth is crucial for performance. Bandwidth sizing is thus gaining importance as IT managers insist on getting indicative sizing estimates as part of the requirements gathering phase to enable them to get a "heads up" for budgeting and procurement. This session presents a novel method for analyzing use-case information to determine application bandwidth requirements.

SESSION 536 **THURSDAY 1:15 PM - 2:15 PM**
PAPER 4262 PANEL
MANAGEMENT AND CHARGEBACK NON-SPECIFIC
No Paper

Panel: Metering and Billing in an On Demand World

Rick Lebsack, *IBM*

This panel will be an interactive discussion on approaches to metering and billing in on demand environment. Is it necessary? How can we approach it? Is this back to the future?

SESSION 537 **THURSDAY 1:15 PM - 2:15 PM**
PAPER 4069 TECHNICAL
MODELING, MATH AND STATISTICS NON-SPECIFIC

Performance Analysis: Converting Data Into Information Using One Simple Statistic Function

Jorge D. Xifra, *BMC Software Argentina*

This session focuses on the statistic function Correlation Coefficient (CC), and the way it helps IT specialist to solve performance problems by transforming lots of data into meaningful information. A quick overview of CC is provided and many real performance problems are presented in the paper along with their resolution using CC. Some of the problems include: finding which process is using a particular disk, finding which server in the network is overloading another server and understanding the behavior of a new production server.

SESSION 541 **THURSDAY 2:45 PM - 3:45 PM**
PAPER 4521 PANEL
STORAGE NON-SPECIFIC
No Paper

Panel: Storage - The Next Dimension (Part 1)

Fred G. Moore, *Horison, Inc.*

Leading storage industry luminaries are probed to find out what new capabilities are emerging to ease the storage management burden, improve availability, more effectively address data security, and to scale in order to meet the resource and financial needs of the customers in the future. These experts will also debate new breakthroughs that lie ahead in storage devices, networking, and storage management as posed by the audience.

Panel members will identify what they see as the upcoming storage challenges and opportunities. Topics such as intelligent storage switched; disk & tapes with capacities beyond a terabyte; replication; technology such as SATA, MAID, D2D, D2D2T; Open, Interoperability & System Managed Storage - Reality and/or Promise have been used to prime the panels comments. They will also address what will be hot 2-3 years from now and what will new storage architectures look like.

SESSION 542 **THURSDAY 2:45 PM - 3:45 PM**
PAPER 4048 INTRODUCTORY
MANAGEMENT AND CHARGEBACK Z/OS
Z/OS

TCP/IP Chargeback to Enforce Performance Targets

Nalini J. Elkins, *Inside Products*

Many companies are curious about billing for TCP/IP usage on the z/OS platform to users or applications for their usage of associated resources. TCP/IP started tasks and the services which rely on TCP/IP use scarce and expensive resources such as CPU usage and network traffic. TCP/IP resource usage seems to be growing exponentially. This session will discuss topics such as: what are the factors which may be monitored and billed? What is ''fair?'' Chargeback should be for the most scarce resources and help to automatically enforce performance targets.

ITIL

SESSION 543 **THURSDAY 2:45 PM - 3:45 PM**
PAPER 4046 INTRODUCTORY
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC

Corporate Performance Management as a Pragmatic Process in an ITIL World.

Adam Grummitt, *Metron*

This session introduces Corporate Performance Management for the effective dashboard presentation of business metrics in conjunction with traditional computer performance management metrics to provide an effective business tool. It introduces a variety of IT good practices such as ITIL. It discusses a case study showing the need for a flexible tool for managers to define their own metrics with the ability to drill down to the level of detail appropriate to each user. This requires not just the corporate business metrics but also the underlying detail in the computer performance database.

SESSION 543 **THURSDAY 2:45 PM - 3:45 PM**
PAPER 4536 No Paper
MANAGEMENT AND CHARGEBACK

ITIL: Make it So

Cathy Wright, *British Telecom*

This session gives an overview of the ITIL Service Delivery and Service Support frameworks, It discusses user experience detailing the various challenges experienced at the start of a journey towards ITIL in a multinational ICT company with a large and well established IT Systems Support set up. The session covers the initial technical and cultural barriers that existed, looks at how these were tackled and what lessons were learned from this. The session will cover in some depth the Capacity Management and Configuration Management disciplines.

SESSION 544 **THURSDAY 2:45 PM - 3:45 PM**
PAPER 4031 TECHNICAL
SOFTWARE PERFORMANCE ENGINEERING WINDOWS NT/XP/ETC.
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

How's My Performance? Dial 1-800-I-AM-FAST

Peter Johnson, *Unisys*

The .Net Framework includes a set of classes that enable an application developer to declare application-specific performance counters. This paper describes those classes and provides concrete examples for how to use them in your code to provide performance monitoring of your application.

SESSION 545 **THURSDAY 2:45 PM - 3:45 PM**
PAPER 4176 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT WINDOWS NT/XP/ETC.
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Best Practices for Server Virtualization

Chris Molloy, *IBM*

Logical Partitioning of the mainframe environment has existed for several years. Logical partitioning of the distributed environment using products such as VMWare's ESX or Microsoft's Virtual Server is gaining momentum as companies look to improve their return on investment with server consolidation projects. This session reviews some of the virtualization techniques now available in the server environment, and what best practices should be put in place to maximize the benefits of virtual servers.

SESSION 546 **THURSDAY 2:45 PM - 3:45 PM**
PAPER 4009 ADVANCED
STORAGE WINDOWS NT/XP/ETC.
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Is a PetaByte More Than We Can Chew?

Michael A. Salsburg, *Unisys*

Computer systems have always been an essential tool for scientific research. In the past, computers have aided research by providing faster and faster processing capabilities. A number of research groups are now embarking on explorations that can only be realized by large, data-driven projects. This session will discuss the issues involved in the configuration, administration, performance estimations and expectations regarding data-driven research that requires a Petabyte or more for data storage.

SESSION 547 **THURSDAY 2:45 PM - 3:45 PM**
PAPER 4119 INTRODUCTORY
MODELING, MATH AND STATISTICS NON-SPECIFIC

Optimize Server Consolidations with End-to-End Modeling

Tom A. Thompson, *OPNET Technologies*

Consolidation or relocation of servers can have a large impact on end-user response times and on the cost of the network. This session will present best-practice methodologies that leverage current modeling techniques, utilizing server workloads, router configurations, and application traces. These methodologies are used to proactively ensure: adequate server capacity, adequate network capacity and end-to-end application performance. With this approach the user can estimate the costs associated with consolidation and gain valuable ROI insights – before significant expenses are incurred.

SESSION 551 **THURSDAY 4:00 PM - 5:00 PM**
PAPER 4538 PANEL
STORAGE NON-SPECIFIC
No Paper

Panel: Storage - The Next Dimension (Part 2)

Fred G. Moore, *Horison, Inc.*

Continuation of the previous session: 541.

SESSION 552 **THURSDAY 4:00 PM - 5:00 PM**
PAPER 4264 PANEL
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC
No Paper

Facilitated Discussion: The Future of The Performance Field

Rick Lebsack, *IBM*
Thomas E. Bell, *Rivendel Consultants*

Decreases in the cost of hardware are no longer being cited as the reason that the performance field will disappear. But will it continue to evolve, or will it wither as other topics capture management attention? The topic of this facilitated discussion will be perceptions of the future, and how individuals should focus their attention to survive and prosper. Opinions of CMG attendees will be interchanged on a number to topics, and senior members of the profession will offer their ideas.

ITIL

SESSION 553 **THURSDAY 4:00 PM - 5:00 PM**
PAPER 4539 PANEL
MANAGEMENT AND CHARGEBACK No Paper

Panel: ITIL Discussion

Ellen M. Friedman, *SRM Associates, Ltd.*

SESSION 554 **THURSDAY 4:00 PM - 5:00 PM**
PAPER 4032 TECHNICAL
SOFTWARE PERFORMANCE ENGINEERING NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Java Garbage Collection Statistical Analysis 101

Peter Johnson, *Unisys*

There are various command line arguments to the Java runtime environment that produce garbage collection statistics. This session describes those arguments and the data that they produce. The session also describes how to analyze the data to tune the application. A simple application is presented that can be used to gather the data for analysis by a spreadsheet application.

SESSION 555 **THURSDAY 4:00 PM - 5:00 PM**
PAPER 4227 INTRODUCTORY
MODELING, MATH AND STATISTICS NON-SPECIFIC
WEBSERVICES, WEBSPHERE, E-BUSINESS

Performance Impact of Load Balancers on Server Farms

Yiping Ding, *BMC Software*

Server Farms have gained popularity for providing scalable and reliable computing/Web services. A load balancer plays a key role in this architecture. It serves as a “traffic cop” to direct requests to suitable servers. Selecting and using a proper load balancer to match the characteristic of the servers has a significant performance impact. This session examines commonly used load-balancing algorithms for server farms, and introduces a performance model as a basis for the analysis. This session shows how to select a load balancer to maximize the performance potential of the server farms.

SESSION 556 **THURSDAY 4:00 PM - 5:00 PM**
PAPER 4524
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC

CMG Australia Best Paper: TBD

SESSION 557 **THURSDAY 4:00 PM - 5:00 PM**
PAPER 4226 INTRODUCTORY
PERFORMANCE AND CAPACITY MANAGEMENT Z/OS
Z/OS

The Job You Save

Richard Kephart, *Convergys*

What do you do when faced with having to perform a large system upgrade in tough financial times? This company decided to pull together all of their performance resources to avoid it. This session depicts the course of actions taken from identifying the situation at a Capacity Council meeting through the end results of more than a dozen recommendations. What worked, what didn’t, and what happened along the way.

SESSION 602 **FRIDAY 8:00 AM - 9:00 AM**
PAPER 4077 TECHNICAL
MANAGEMENT AND CHARGEBACK NON-SPECIFIC
WEBSERVICES, WEBSPHERE, E-BUSINESS

Adapting the TileBar Interface for Visualizing Resource Usage

Larry Reeve, *CIMS Lab, Inc.*

Visualizing resource use is important for discovering patterns of system component usage over time. This session describes how the TileBar interface, originally developed for use in information retrieval, can be adapted for visually analyzing resource usage. The 1-dimensional TileBar can show up to four attributes simultaneously, allowing analysts to quickly determine what is being used, how much, when, and by whom. TileBar displays can also be used as a navigation interface for drilling down into resource usage detail.

SESSION 603 **FRIDAY 8:00 AM - 9:00 AM**
PAPER 4084 ADVANCED
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Beyond Thresholds: New Directions in QoS Monitoring and Alerting

Mike Tsykin, *Fujitsu Australia Limited*
James Bouhana, *Performance International, Inc.*

Traditional approaches to monitoring performance, capacity, and quality of service rely on fixed numeric thresholds for generating alerts. Static alert generation fails to handle situations where system operation varies by time or by application context. This session discusses several extensions to alerting that convey more information by adjusting alert thresholds according to time of day, re-occurrence frequency, and correlation to other alert conditions. It also discusses strategies for predictive alerting that assesses likelihood of achieving QoS objectives, as derived from historical baseline data.

SESSION 604 **FRIDAY 8:00 AM - 9:00 AM**
PAPER 4013 INTRODUCTORY
SOFTWARE PERFORMANCE ENGINEERING WINDOWS NT/XP/ETC.

How's Your Memory?

Claire S. Cates, *SAS Institute, Inc*

Detailed memory analysis of a system, especially a large complex system, can be very beneficial. The analysis may uncover performance issues or misuse of this limited system resource. Obtaining the analysis data though is often difficult. This session describes how SAS® uses RootCause™, along with a custom probe, to gather data from the SAS System memory management routines. The type of data collected is described, along with the types of problems that can be uncovered by analyzing this data.

SESSION 605 **FRIDAY 8:00 AM - 9:00 AM**
PAPER 4160 TECHNICAL
STORAGE Z/OS
Z/OS

ESCON to FICON Migration Planning

Charles T. McGavin Jr, *EMC Corporation*
Tony Mungal, *EMC Corporation*

There have been many papers, published at CMG and elsewhere, which have discussed FICON technology concepts and new FICON installations. However, many data centers find themselves in the situation of already having extensive ESCON channel configurations which they must now upgrade to FICON. FICON technology is still evolving, but some concepts and guidelines are emerging for planning ESCON-to-FICON migrations. This session will describe several of these new methodologies.

SESSION 606 **FRIDAY 8:00 AM - 9:00 AM**
PAPER 4060 HOW-TO
MANAGEMENT AND CHARGEBACK NON-SPECIFIC
WEBSERVICES, WEBSPHERE, E-BUSINESS

Performance Metrics in IT Operation Outsourcing

Yong-Soo Kim, *Kyungwon University*

For successful IT operation outsourcing, there needs to be appropriate metrics on which both service clients and provider agree. A study of metrics is necessary for the following reasons: First, most of the metrics used today were introduced in the early years of computers and are not satisfactory to both of the service providers and clients. Second, the metrics represent the performance of system components, but not end-user satisfaction. Third, because the service provider usually leads the outsourcing agreement, the objectives specified are more favorable to the provider.

SESSION 607 **FRIDAY 8:00 AM - 9:00 AM**
PAPER 4146 HOW-TO
MODELING, MATH AND STATISTICS NON-SPECIFIC

Projecting Large Scale Deployments with Multiple Year Rollouts

Christopher A. Newland, *Nationwide*

This session describes a methodology which allows the planner to project the number of servers and Total Cost of Ownership (TCO) including amortization, for a multi-tiered distributed application having a multi-year rollout. The methodology incorporates Moore's Law, production high availability targets, Disaster Recovey high availability targets, Disaster Recovery levels, and different disaster recovery approaches. It includes a server purchase schedule, a staggered rollout of different applications on the same servers, OS efficiencies, TCO, costs, projections of usage and populations, and allows for what-if scenarios with variables.

SESSION 661 **FRIDAY 9:15 AM - 10:15 AM**
PAPER 4219 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT UNIX/LINUX
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS
No Paper

Configuring and Maintaining Highly Available UNIX Systems

Tony Catone, *Philadelphia Stock Exchange*

While current generation UNIX systems from HP, IBM and SUN are not fault tolerant, they can be configured to be highly available. However, it is incumbent upon the system administrator to know the characteristics of the default vendor configurations and add the required hardware and software to achieve high availability. This session will focus on educating system administrators on the characteristics of the basic UNIX hardware systems, the additional hardware components required for high availability and the additional software support required to exploit hardware redundancy.

SESSION 662 **FRIDAY 9:15 AM - 10:15 AM**
PAPER 4014 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT WINDOWS
NT/XP/ETC.
WEBSERVICES, WEBSPHERE, E-BUSINESS

Developing and Applying a Distributed Systems Performance Approach for a Web Platform

James Cusick, *Wolters Kluwer*

This session describes the steps taken to develop and apply a performance engineering model to an existing commercial web site. The approach to developing the performance model is presented along with the detailed results of the baseline data. A metric is developed to determine the transaction cost of orders being placed on the system. A comparison of forecasts to actual performance results is also presented.

SESSION 663 **FRIDAY 9:15 AM - 10:15 AM**
PAPER 4113 HOW-TO
MANAGEMENT AND CHARGEBACK Z/OS
Z/OS

Software Licensing Cost Reduction Strategies for Large Mainframe Environments

Mp Welch, *Sprint*
Chris P. Schreck, *Sprint*

In large complex IBM Mainframe environments Software Licensing is the fastest growing but most controllable cost. If this trend continues, the large systems platform we know (and love) will be unable to compete for limited enterprise expenditures in the future. Product replacements, Sub-Capacity Pricing, Per Seat, and usage based pricing offer opportunities to reduce cost. This session shares the implementation of the Penalty Box concept used to control ISV software costs. Its advantages, disadvantages and implementation challenges will be explored.

SESSION 664 **FRIDAY 9:15 AM - 10:15 AM**
PAPER 4106 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT UNIX/LINUX
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Supersizing Capacity and Performance

Scott B. Small, *Acxiom Corporation*

There may be significant performance and capacity advantages to running some types of applications in a “supercomputer” type architecture. This paper will concentrate on the enterprise possibilities of open source Linux based clustering software used to implement ‘‘supercomputing’’ clusters. Particularly, the possible performance and capacity advantages and disadvantages will be analyzed.

SESSION 665 **FRIDAY 9:15 AM - 10:15 AM**
PAPER 4138 TECHNICAL
STORAGE UNIX/LINUX
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Study of I/O Performance Characteristics for Volume Managers and File Systems on Intel Servers

Xianneng Shen, *Veritas Software*
Clark MacDonald
Randy Taylor, *Veritas Software*

This session investigates the I/O performance characteristics of raw volumes and file systems in a Linux environment running on Intel Xeon and Itanium 2 architectures. Both sequential and random I/O performance is measured using various logical volume managers and file systems. Standard I/O performance benchmark tools and other tools are run to generate an I/O intensive workload. System tools are used to monitor the system resources and I/O statistics data. The session presents the system configuration, testing environment, measurement results, and performance analysis.

SESSION 666 **FRIDAY 9:15 AM - 10:15 AM**
PAPER 4201 INTRODUCTORY
MODELING, MATH AND STATISTICS WINDOWS NT/XP/ETC.

More CPUs or more DIMMs? Finding the Optimal Balance between System Components

Judson E. Veazey, *Hewlett-Packard*
Blaine Gaither, *Hewlett-Packard*
Larry J. Thayer, *Hewlett-Packard*

In configuring a server, which is better, an additional CPU or a few more DIMMs? What’s the optimal balance between the I/O and memory configuration? IT staff and capacity planners face these sorts of questions all the time, but there appears to be no general solution or accepted methodology for making sub-system tradeoffs. This session presents such a methodology, based on both modeled performance and sub-system cost for an OLTP workload. Analysis of results indicates that memory configuration plays a crucial role in optimizing for price-performance.

SESSION 667 **FRIDAY 9:15 AM - 10:15 AM**
PAPER 4078 TECHNICAL
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

Principles of Good Benchmark Construction

Shanti Subramanyam, *Sun Microsystems Inc.*

With multi-tier middleware technologies, benchmarks are becoming increasingly complex and creating them is non-trivial. Understanding how to construct benchmarks correctly can dramatically improve a product by providing accurate performance data. This session examines the principles of good benchmark construction and covers various issues such as user load emulation, arrival rates and performance metrics. These issues are addressed by using a real Java 2 Enterprise System (J2EE) platform benchmark example.

SESSION 673 **FRIDAY 10:30 AM - 11:30 AM**
PAPER 4167 TECHNICAL
MANAGEMENT AND CHARGEBACK NON-SPECIFIC

Asset Management as a Prerequisite for Capacity Planning

John H. Silver, *StorageTek Corp.*

It has been said that if you can't measure, then you can't manage. To take that one more step, before you can measure, you need to be able to count. More than just a count or inventory, IT Asset Management (ITAM) is essential for capacity planning. Capacity planning is no longer a matter of processor utilization or disk storage utilization, but needs to be concerned with multiple components working together and how change will impact the working of these components. This session takes the position that only with effective ITAM can capacity planning be complete and successful.

SESSION 674 **FRIDAY 10:30 AM - 11:30 AM**
PAPER 4111 HOW-TO
PERFORMANCE AND CAPACITY MANAGEMENT UNIX/LINUX
OPEN AND EMERGING ENTERPRISE OPERATING SYSTEMS

A Practical Implementation of Guerrilla Monitoring

James A. Yaple, *Austin Automation Center - Dept. of Veteran' Affairs*

This is a real-world report of ''guerrilla'' monitoring and capacity planning (see the MeasureIT article by Neil J Gunther) for Sun systems at a federal enterprise hosting facility. This includes a review of concepts, issues, risks and open source toolsets employed to deliver results at a low cost. Specific configurations will be reviewed, including using the SE toolkit to collect data from hosts and web presentation using Orca. Results are aggregated and uploaded to a z900 mainframe enabling SAS processing of data.

SESSION 675 **FRIDAY 10:30 AM - 11:30 AM**
PAPER 4209 TECHNICAL
NETWORK WINDOWS NT/XP/ETC.

A Network Benchmark for the .NET Framework

Jozo J. Dujmovic, *San Francisco State University*
Zoran Avramov, *San Francisco State University*

This paper presents a multithreaded architecture of a Network Performance Measurement Sharp (NPM#) benchmark designed for the .NET framework. Main components of the NPM# benchmark architecture are: (1) Distributed Client/Server Pair (DCSP) nodes and (2) a Network Workload Control System (NWCS). DCSP node modules of NPM# are used for network workload generation and gathering of measured performance indicators. The NWCS provides user input, workload control, and display of results. We present the design concepts of the NPM# benchmark architecture and its implementation in the .NET environment.

SESSION 676 **FRIDAY 10:30 AM - 11:30 AM**
PAPER 4115 TECHNICAL
SOFTWARE PERFORMANCE ENGINEERING Z/OS
Z/OS

Performance Improvements from the "Things I Wish They'd Told Me 8 Years Ago" - Visualized

Thomas A. Halinski, *Compuware Corporation*

Pearls of wisdom for application performance improvements using DB2 sound good and make a lot of sense. But how do we know how well they work and to what extent. This session will take some of the performance tips from Bonnie Baker and measure them using STROBE. It will explain the theory, and show the actual before and after results of implementing tips like: synchronous vs. asynchronous I/O, index usage and stage 1 vs. stage 2 predicates. After seeing the actual performance improvements, IT personnel will be much more confident that theory and reality can go hand in hand.

SESSION 677 **FRIDAY 10:30 AM - 11:30 AM**
PAPER 4003 INTRODUCTORY
PERFORMANCE AND CAPACITY MANAGEMENT NON-SPECIFIC

A Finger in the Wind: Forecasting Techniques for Capacity Planning

Linwood Merritt

Robust capacity planning entails the analysis of data to project future demand. This analysis can be as simple as a linear trend of historical demand data, and can be as complex as multivariate regression using business drivers combined with analysis of changing business functionality. This session explores the use of Excel and SAS to perform simple trend analyses of computer resources and produce capacity planning forecasts.

Session Cross Reference

Subject Areas

- Performance and Capacity Management
- Management and Chargeback
- Modeling, Math and Statistics
- Network
- Software Performance Engineering
- Storage

Focus Areas

- Open and Emerging Enterprise Operating Systems
- WebServices, WebSphere, e-Business
- z/OS

Platforms

- Unix/Linux
- Windows NT/XP etc.
- z/OS
- Non-Specific

PERFORMANCE AND CAPACITY MANAGEMENT

FOCUS	PLATFORM	SESSION	AUTHOR	TITLE
z/OS	z/OS	313	Len Jejer	WLM - Our Experiences Implementing Goals By Online Transaction Response Time
z/OS	z/OS	322	Dr Rich Olcott	Shared Disk in a Distributed Storage Environment – A Drag on Performance
z/OS	z/OS	332	Glenn R. Anderson	A z/OS WLM Update for DB2 Environments
z/OS	z/OS	343	Richard S. Ralston	z/Series, Sub Capacity Workload License Charges, Soft-Caps, and WLM
z/OS	z/OS	347	Anthony J. Ruberry	z/OS Performance Management in the Real World
z/OS	z/OS	432	Ivan L. Gelb	Panel: z/OS and WLM Q & A
z/OS	z/OS	437	Robert E. Chaney	DB2 DDF, Life in the Fast Lane
z/OS	z/OS	442	Kathy Walsh	WLM Myths, Truths, and Half Truths
z/OS	z/OS	452	Kathy Walsh	Introduction and Overview of zAAPs on z/OS
z/OS	z/OS	457	Joseph L. Babcock	Care and Feeding of SMF in the Large System Environment
z/OS	Non	501	Jim Grant	Business Service Management: Configuration, Change, Assets and IT Management
z/OS	z/OS	522	Igor A. Trubin	Mainframe Global and Workload Level Statistical Exception Detection System, Based on MASF
z/OS	z/OS	557	Richard Kephart	The Job You Save
WEB	Non	325	Alexandre Polozoff	Performance Testing Protocol
WEB	Non	337	Dr. Pierre M. Fiorini	The Performance Impact of Security Attacks on Enterprise Computing Systems
WEB	z/OS	352	Glenn R. Anderson	WebSphere for z/OS Ver 5 Performance Tuning
WEB	Non	425	Prof. Robert D. van der Mei	Overload Control for Web Services: Web Admission Control
WEB	Non	446	Yefim Somin	Workload Characterization for Websphere Application Server
WEB	Non	515	Mark W. Johnson	Monitoring and Diagnosing Applications with ARM 4.0
WEB	Win	662	James Cusick	Developing and Applying a Distributed Systems Performance Approach for a Web Platform
EEOS	*nix	316	Robert Andresen	Monitoring Linux with Native Tools
EEOS	z/OS	326	Russell A. Rogers	Ubiquitous Data Collection in a Large Distributed Environment
EEOS	Non	346	William S. Keezer	IT Web Reporting: All Things to All People
EEOS	Non	412	Daniel A. Menasce	Quality of Service Aspects and Metrics In Grid Computing
EEOS	Non	423	Andrew S. Duffen	Managing All of Your Application's Servers From a Single Web Page
EEOS	Non	424	Giuseppe Cassone	Performance Integration: from Development to Delivery All at Once
EEOS	*nix	427	Douglas A. Tapscott	UNIX Update and Compile Performance Resolution
EEOS	Win	444	Dr. Insung Park	Event Tracing for Windows: Best Practices
EEOS	*nix	454	Jaqui Lynch	Planning for Partitioned AIX Systems
EEOS	Non	512	Ronald R. Kaminski	Automating Workload Characterization by Policy
EEOS	Non	527	Dr. Curtis Hrischuk	Capacity Planning of Voice Response Middleware
EEOS	Non	534	Rich Fronheiser	Too Many Servers, Not Enough Eyes (or – Where Did All These Servers Come From?!?)
EEOS	Win	545	Chris Molloy	Best Practices for Server Virtualization
EEOS	Non	603	Mike Tsykin	Beyond Thresholds: New Directions in QoS Monitoring and Alerting
EEOS	*nix	661	Tony Catone	Configuring and Maintaining Highly Available UNIX Systems
EEOS	*nix	664	Scott B. Small	Supersizing Capacity and Performance
EEOS	Non	667	Shanti Subramanyam	Principles of Good Benchmark Construction
EEOS	*nix	674	James A. Yaple	A Practical Implementation of Guerrilla Monitoring
	Non	341	Corey Ferengul	Assessing the Monitoring Market and Maturity
	Non	357	Thomas Bodenheimer	DB2 Performance Monitoring using Snapshots
		513	Charles W. Hopf	MXG for Dummies
	Non	517	Richard Gimarc	Moving Beyond Test and Guess - Using Modeling with Load Testing to Improve Web Application Readiness
	*nix	521	Baoning Wu	Implementing an Evaluation Architecture for Web Proxies
	Non	532	Linwood Merritt	Seeing the Forest AND the Trees: Capacity Planning for a Large Number of Servers
	Non	533	David F. Pultorak	Service Level Management: More Than Just SLAs
	Non	543	Adam Grummitt	Corporate Performance Management as a Pragmatic Process in an ITIL World.
	Non	552	Rick Lebsack	Facilitated Discussion: The Future of The Performance Field
	Non	556	TBD	CMG Australia Best Paper: TBD
	Non	677	Linwood Merritt	A Finger in the Wind: Forecasting Techniques for Capacity Planning

MANAGEMENT AND CHARGEBACK

FOCUS	PLATFORM	SESSION	AUTHOR	TITLE
EEOS	*nix	317	Susan Schreitmueller	AIX Best Practices
EEOS	Non	511	David Rowley	Utility Pricing - Software Licensing Strategies for an On Demand World
EEOS	Non	526	Michael A. Salsburg	Self-Aware Business Processes
WEB	Non	301	Rick Fuchs	On Demand Business
WEB	Non	311	Dr. Jothy B. Rosenberg	See, Understand and Act in Real Time
WEB	Non	351	Mary Nugent	Embracing Best Practices: the IT-Business Alignment Cycle
WEB	Non	413	Annie W. Shum	Journeying to the Land of On-Demand: Principles to Follow, Pitfalls to Avoid
WEB	Non	602	Larry Reeve	Adapting the TileBar Interface for Visualizing Resource Usage
WEB	Non	606	Dr. Yong-Soo Kim	Performance Metrics in IT Operation Outsourcing
z/OS	z/OS	327	Dr Fabio M. Ottaviani	CMG-Italia Best Paper: 7 Deadly Sins in WLC
z/OS	z/OS	542	Nalini J. Elkins	TCP/IP Chargeback to Enforce Performance Targets
z/OS	z/OS	663	Mp Welch	Software Licensing Cost Reduction Strategies for Large Mainframe Environments
	Non	333	Michael D. Maddox	A Performance Process Maturity Model
	Non	401	Mark S. Lewis	2010 IT: An Information Infrastructure Manifesto
	Non	411	Bruce J. Rogow	The IT Management Landscape…A View from the Odyssey: A New Set of Challenges Returns
	Non	416	Denise P. Kalm	Perception is Reality - The Psychology of Performance Management
	Non	421	David F. Redinbaugh	A Methodology for Tracking Capital Spending for IT
	Non	431	Amy Wohl	TBD
	Non	441	Douglas Neal	Innovating through Technology
	Non	447	Elaine Weston	UK CMG Best Paper: Business Continuity and Disaster Recovery - Managing the Pain
	Non	516	Christopher P. Strasser	Evaluating IT Management Practice
	Non	523	Jerry L. Rosenberg	Service Management - The ITIL Framework
	Non	525	John H. Silver	Why Develop a Storage Strategy?
	Non	536	Rick Lebsack	Panel: Metering and Billing in an On Demand World
		543	Cathy Wright	ITIL: Make it So
		553	Ellen M. Friedman	Panel: ITIL Discussion
	Non	673	John H. Silver	Asset Management as a Prerequisite for Capacity Planning

MODELING, MATH AND STATISTICS

FOCUS	PLATFORM	SESSION	AUTHOR	TITLE
EEOS	*nix	324	James Holtman	Using a Discrete Simulation Tool for Modeling
EEOS	*nix	334	Dr Neil J. Gunther	Linux Load Average Revealed
EEOS		434	Joe Rich	Platinum Sponsor TeamQuest presents: the ABCs of Workloads
WEB	*nix	433	Lloyd G. Williams	Web Application Scalability: A Model-Based Approach
WEB	Non	524	David Mc Guinness	Issues in Developing a Simulation Model of an EJB Application Server
WEB	Non	555	Yiping Ding	Performance Impact of Load Balancers on Server Farms
		443	Scott Johnson	Platinum Sponsor TeamQuest presents: Modeling Multi-Tiered Applications That Access Legacy Systems
	Non	537	Jorge D. Xifra	Performance Analysis: Converting Data Into Information Using One Simple Statistic Function
	Non	547	Tom A. Thompson	Optimize Server Consolidations with End-to-End Modeling
	Non	607	Christopher A. Newland	Projecting Large Scale Deployments with Multiple Year Rollouts
	Win	666	Judson E. Veazey	More CPUs or more DIMMs? Finding the Optimal Balance between System Components

FOCUS AREAS

EEOS = Open and Emerging Enterprise Operating Systems
WEB = WebServices, WebSphere, e-Business
z/OS = z/OS

PLATFORMS

***nix** = UNIX / LINUX
Non = Non-Specific
Win = Windows NT/XP/etc.
z/OS = z/OS

Subject Area Cross Reference

Network

Focus	Platform	Session	Author	Title
WEB	Non	353	Dr. Werner Vogels	Web Services Are Not Distributed Objects
WEB	Win	453	Dr. Bernard Domanski	Turn Your Old Unused PC At Home Into A Fully Functional Web Server That Runs From Your Kitchen
WEB	*nix	535	Sidney W. Soberman	Web Bandwidth Management using Homemade Tools and Freeware
WEB	Non	535	Nikhil Venugopal	Network Bandwidth Estimations Based on Use-Case Scenarios
	Non	311	Fred Engel	Death, Taxes, and Your Network Infrastructure. How to Make Network Reliability One of Life's Few Guarantees.
	Non	323	Felix Hernandez-Campos	Generating Realistic TCP Workloads
	Non	331	Dr. Kenneth R. Traub	Radio-Frequency Identification at Enterprise Scale
	Non	417	David J. Konz	A White Box Look at the Performance of 802.11 Wireless and its Variants
	Win	675	Dr. Jozo J. Dujmovic	A Network Benchmark for the .NET Framework

Software Performance Engineering

Focus	Platform	Session	Author	Title
EEOS	Non	357	Dr. Serg Mescheryakov	Performance Comparison of Various Hierarchical Structures in Database Systems
EEOS	*nix	436	James Holtman	The Use of ''R'' for System Performance Analysis
EEOS	Win	544	Peter Johnson	How's My Performance? Dial 1-800-I-AM-FAST
EEOS	Non	554	Peter Johnson	Java Garbage Collection Statistical Analysis 101
WEB	z/OS	342	James R. Crew	CICS Application Integration using Web Services
WEB	Non	426	Henry H. Liu	An Analytic Model for Predicting the Performance of SOA-Based Enterprise Software Applications
WEB	*nix	515	David Carter	ARMing Apache
z/OS	z/OS	676	Thomas A. Halinski	Performance Improvements from the "Things I Wish They'd Told Me 8 Years Ago" - Visualized
	Non	312	Dr. Connie U. Smith	Introduction to Software Performance Engineering
	Non	314	Marc J. Fleury	Professional Open Source and the Future of JBoss
	Non	336	Fred M. Richards	Performance Engineering throughout the Software Life Cycle
	Win	356	Claire S. Cates	Where's Waldo: Uncovering Hard-to-Find Application Killers
	Non	422	Dr. Carl J. De Pasquale	Collecting Java Performance Measurements Using Byte Code Engineering
	Win	604	Claire S. Cates	How's Your Memory?

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STORAGE

FOCUS	PLATFORM	SESSION	AUTHOR	TITLE
EEOS	*nix	315	Bruce Naegel	Panel: (SNIA) Tools for Performance Measurements
EEOS	Non	344	Bruce McNutt	SAN Virtualization Layout and Performance
EEOS	Non	344	Joel B. Motzny	Establishing an Open Systems Storage Strategy for your Company
EEOS	Win	354	Mark B. Friedman	A Simplified Approach to Windows Disk Tuning
EEOS	*nix	355	Alan Phelan	Application Performance has Significantly Degraded, It Must be the I/O Subsystem, Please Upgrade It!
EEOS	Win	414	Prem Mehra	SQL Server 2000 and Large Storage Deployment
EEOS	Non	415	Greg P. Schulz	Performance and Capacity Planning Basics for Storage Networks V2.0
EEOS	Non	435	Greg P. Schulz	Storage Technology Primer & Update
EEOS	Non	455	Mel Boksenbaum	Panel: Storage Performance Council Status Update Panel Discussion
EEOS	Non	456	Robert Rogers	Business Process Mapping, Data Classification, and Service Level Objectives
EEOS	Win	546	Michael A. Salsburg	Is a PetaByte More Than We Can Chew?
EEOS	*nix	665	Dr. Xianneng Shen	Study of I/O Performance Characteristics for Volume Managers and File Systems on Intel Servers
z/OS	z/OS	345	Frank M. Bereznay	Reporting on I/O Configurations using RMF Data: Connecting the Logical to the Physical
z/OS	z/OS	445	H. Pat Artis	Understanding the Differences between z900 and z990 Service Time Measurements
z/OS	z/OS	605	Charles T. McGavin Jr	ESCON to FICON Migration Planning
	Non	335	Randy Kerns	iSCSI - Understanding the Issues
	Non	514	Chao Li	A Multi-tiered Model for Performance Analysis of Storage Area Network
	Non	531	Fred G. Moore	Storage Navigator
	Non	541	Fred G. Moore	Panel: Storage - The Next Dimension (Part 1)
	Non	551	Fred G. Moore	Panel: Storage - The Next Dimension (Part 2)

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Focus Area Cross Reference

Open and Emerging Enterprise Operating Systems

Subject	Platform	Session	Author	Title
Mgmt	*nix	317	Susan Schreitmueller	AIX Best Practices
Mgmt	Non	511	David Rowley	Utility Pricing - Software Licensing Strategies for an On Demand World
Mgmt	Non	526	Michael A. Salsburg	Self-Aware Business Processes
Model	*nix	324	James Holtman	Using a Discrete Simulation Tool for Modeling
Model	*nix	334	Dr Neil J. Gunther	Linux Load Average Revealed
Model		434	Joe Rich	Platinum Sponsor TeamQuest presents: the ABCs of Workloads
Perf	*nix	316	Robert Andresen	Monitoring Linux with Native Tools
Perf	z/OS	326	Russell A. Rogers	Ubiquitous Data Collection in a Large Distributed Environment
Perf	Non	346	William S. Keezer	IT Web Reporting: All Things to All People
Perf	Non	412	Daniel A. Menasce	Quality of Service Aspects and Metrics In Grid Computing
Perf	Non	423	Andrew S. Duffen	Managing All of Your Application's Servers From a Single Web Page
Perf	Non	424	Giuseppe Cassone	Performance Integration: from Development to Delivery All at Once
Perf	*nix	427	Douglas A. Tapscott	UNIX Update and Compile Performance Resolution
Perf	Win	444	Dr. Insung Park	Event Tracing for Windows: Best Practices
Perf	*nix	454	Jaqui Lynch	Planning for Partitioned AIX Systems
Perf	Non	512	Ronald R. Kaminski	Automating Workload Characterization by Policy
Perf	Non	527	Dr. Curtis Hrischuk	Capacity Planning of Voice Response Middleware
Perf	Non	534	Rich Fronheiser	Too Many Servers, Not Enough Eyes (or – Where Did All These Servers Come From?!?)
Perf	Win	545	Chris Molloy	Best Practices for Server Virtualization
Perf	Non	603	Mike Tsykin	Beyond Thresholds: New Directions in QoS Monitoring and Alerting
Perf	*nix	661	Tony Catone	Configuring and Maintaining Highly Available UNIX Systems
Perf	*nix	664	Scott B. Small	Supersizing Capacity and Performance
Perf	Non	667	Shanti Subramanyam	Principles of Good Benchmark Construction
Perf	*nix	674	James A. Yaple	A Practical Implementation of Guerrrilla Monitoring
SPE	Non	357	Dr. Serg Mescheryakov	Performance Comparison of Various Hierarchical Structures in Database Systems
SPE	*nix	436	James Holtman	The Use of ''R'' for System Performance Analysis
SPE	Win	544	Peter Johnson	How's My Performance? Dial 1-800-I-AM-FAST
SPE	Non	554	Peter Johnson	Java Garbage Collection Statistical Analysis 101
Stor	*nix	315	Bruce Naegel	Panel: (SNIA) Tools for Performance Measurements
Stor	Non	344	Bruce McNutt	SAN Virtualization Layout and Performance
Stor	Non	344	Joel B. Motzny	Establishing an Open Systems Storage Strategy for your Company
Stor	Win	354	Mark B. Friedman	A Simplified Approach to Windows Disk Tuning
Stor	*nix	355	Alan Phelan	Application Performance has Significantly Degraded, It Must be the I/O Subsystem, Please Upgrade It!
Stor	Win	414	Prem Mehra	SQL Server 2000 and Large Storage Deployment
Stor	Non	415	Greg P. Schulz	Performance and Capacity Planning Basics for Storage Networks V2.0
Stor	Non	435	Greg P. Schulz	Storage Technology Primer & Update
Stor	Non	455	Mel Boksenbaum	Panel: Storage Performance Council Status Update Panel Discussion
Stor	Non	456	Robert Rogers	Business Process Mapping, Data Classification, and Service Level Objectives
Stor	Win	546	Michael A. Salsburg	Is a PetaByte More Than We Can Chew?
Stor	*nix	665	Dr. Xianneng Shen	Study of I/O Performance Characteristics for Volume Managers and File Systems on Intel Servers

SUBJECT AREAS

Mgmt = Management and Chargeback
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Stor = Storage

WEBSERVICES, WEBSPHERE, E-BUSINESS

SUBJECT	PLATFORM	SESSION	AUTHOR	TITLE
Mgmt	Non	301	Rick Fuchs	On Demand Business
Mgmt	Non	311	Dr. Jothy B. Rosenberg	See, Understand and Act in Real Time
Mgmt	Non	351	Mary Nugent	Embracing Best Practices: the IT-Business Alignment Cycle
Mgmt	Non	413	Annie W. Shum	Journeying to the Land of On-Demand: Principles to Follow, Pitfalls to Avoid
Mgmt	Non	602	Larry Reeve	Adapting the TileBar Interface for Visualizing Resource Usage
Mgmt	Non	606	Dr. Yong-Soo Kim	Performance Metrics in IT Operation Outsourcing
Model	*nix	433	Lloyd G. Williams	Web Application Scalability: A Model-Based Approach
Model	Non	524	David Mc Guinness	Issues in Developing a Simulation Model of an EJB Application Server
Model	Non	555	Yiping Ding	Performance Impact of Load Balancers on Server Farms
Net	Non	353	Dr. Werner Vogels	Web Services Are Not Distributed Objects
Net	Win	453	Dr. Bernard Domanski	Turn Your Old Unused PC At Home Into A Fully Functional Web Server That Runs From Your Kitchen
Net	*nix	535	Sidney W. Soberman	Web Bandwidth Management using Homemade Tools and Freeware
Net	Non	535	Nikhil Venugopal	Network Bandwidth Estimations Based on Use-Case Scenarios
Perf	Non	325	Alexandre Polozoff	Performance Testing Protocol
Perf	Non	337	Dr. Pierre M. Fiorini	The Performance Impact of Security Attacks on Enterprise Computing Systems
Perf	z/OS	352	Glenn R. Anderson	WebSphere for z/OS Ver 5 Performance Tuning
Perf	Non	425	Prof. Robert D. van der Mei	Overload Control for Web Services: Web Admission Control
Perf	Non	446	Yefim Somin	Workload Characterization for Websphere Application Server
Perf	Non	515	Mark W. Johnson	Monitoring and Diagnosing Applications with ARM 4.0
Perf	Win	662	James Cusick	Developing and Applying a Distributed Systems Performance Approach for a Web Platform
SPE	z/OS	342	James R. Crew	CICS Application Integration using Web Services
SPE	Non	426	Henry H. Liu	An Analytic Model for Predicting the Performance of SOA-Based Enterprise Software Applications
SPE	*nix	515	David Carter	ARMing Apache

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Focus Area Cross Reference

z/OS

Subject	Platform	Session	Author	Title
Mgmt	z/OS	327	Dr Fabio M. Ottaviani	CMG-Italia Best Paper: 7 Deadly Sins in WLC
Mgmt	z/OS	542	Nalini J. Elkins	TCP/IP Chargeback to Enforce Performance Targets
Mgmt	z/OS	663	Mp Welch	Software Licensing Cost Reduction Strategies for Large Mainframe Environments
Perf	z/OS	313	Len Jejer	WLM - Our Experiences Implementing Goals By Online Transaction Response Time
Perf	z/OS	322	Dr Rich Olcott	Shared Disk in a Distributed Storage Environment – A Drag on Performance
Perf	z/OS	332	Glenn R. Anderson	A z/OS WLM Update for DB2 Environments
Perf	z/OS	343	Richard S. Ralston	z/Series, Sub Capacity Workload License Charges, Soft-Caps, and WLM
Perf	z/OS	347	Anthony J. Ruberry	z/OS Performance Management in the Real World
Perf	z/OS	432	Ivan L. Gelb	Panel: z/OS and WLM Q & A
Perf	z/OS	437	Robert E. Chaney	DB2 DDF, Life in the Fast Lane
Perf	z/OS	442	Kathy Walsh	WLM Myths, Truths, and Half Truths
Perf	z/OS	452	Kathy Walsh	Introduction and Overview of zAAPs on z/OS
Perf	z/OS	457	Joseph L. Babcock	Care and Feeding of SMF in the Large System Environment
Perf	Non	501	Jim Grant	Business Service Management: Configuration, Change, Assets and IT Management
Perf	z/OS	522	Igor A. Trubin	Mainframe Global and Workload Level Statistical Exception Detection System, Based on MASF
Perf	z/OS	557	Richard Kephart	The Job You Save
SPE	z/OS	676	Thomas A. Halinski	Performance Improvements from the “Things I Wish They’d Told Me 8 Years Ago” - Visualized
Stor	z/OS	345	Frank M. Bereznay	Reporting on I/O Configurations using RMF Data: Connecting the Logical to the Physical
Stor	z/OS	445	H. Pat Artis	Understanding the Differences between z900 and z990 Service Time Measurements
Stor	z/OS	605	Charles T. McGavin Jr	ESCON to FICON Migration Planning

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UNIX/LINUX

SUBJECT	FOCUS	SESSION	AUTHOR	TITLE
Mgmt	EEOS	317	Susan Schreitmueller	AIX Best Practices
Model	EEOS	324	James Holtman	Using a Discrete Simulation Tool for Modeling
Model	EEOS	334	Dr Neil J. Gunther	Linux Load Average Revealed
Model	WEB	433	Lloyd G. Williams	Web Application Scalability: A Model-Based Approach
Net	WEB	535	Sidney W. Soberman	Web Bandwidth Management using Homemade Tools and Freeware
Perf	EEOS	316	Robert Andresen	Monitoring Linux with Native Tools
Perf	EEOS	427	Douglas A. Tapscott	UNIX Update and Compile Performance Resolution
Perf	EEOS	454	Jaqui Lynch	Planning for Partitioned AIX Systems
Perf		521	Baoning Wu	Implementing an Evaluation Architecture for Web Proxies
Perf	EEOS	661	Tony Catone	Configuring and Maintaining Highly Available UNIX Systems
Perf	EEOS	664	Scott B. Small	Supersizing Capacity and Performance
Perf	EEOS	674	James A. Yaple	A Practical Implementation of Guerrrilla Monitoring
SPE	EEOS	436	James Holtman	The Use of ‘‘R’’ for System Performance Analysis
SPE	WEB	515	David Carter	ARMing Apache
Stor	EEOS	315	Bruce Naegel	Panel: (SNIA) Tools for Performance Measurements
Stor	EEOS	355	Alan Phelan	Application Performance has Significantly Degraded, It Must be the I/O Subsystem, Please Upgrade It!
Stor	EEOS	665	Dr. Xianneng Shen	Study of I/O Performance Characteristics for Volume Managers and File Systems on Intel Servers

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Platform Cross Reference

Non-Specific

Subject	Focus	Session	Author	Title
Mgmt	WEB	301	Rick Fuchs	On Demand Business
Mgmt	WEB	311	Dr. Jothy B. Rosenberg	See, Understand and Act in Real Time
Mgmt		333	Michael D. Maddox	A Performance Process Maturity Model
Mgmt	WEB	351	Mary Nugent	Embracing Best Practices: the IT-Business Alignment Cycle
Mgmt		401	Mark S. Lewis	2010 IT: An Information Infrastructure Manifesto
Mgmt		411	Bruce J. Rogow	The IT Management Landscape…A View from the Odyssey: A New Set of Challenges Returns
Mgmt	WEB	413	Annie W. Shum	Journeying to the Land of On-Demand: Principles to Follow, Pitfalls to Avoid
Mgmt		416	Denise P. Kalm	Perception is Reality - The Psychology of Performance Management
Mgmt		421	David F. Redinbaugh	A Methodology for Tracking Capital Spending for IT
Mgmt		431	Amy Wohl	TBD
Mgmt		441	Douglas Neal	Innovating through Technology
Mgmt		447	Elaine Weston	UK CMG Best Paper: Business Continuity and Disaster Recovery - Managing the Pain
Mgmt	EEOS	511	David Rowley	Utility Pricing - Software Licensing Strategies for an On Demand World
Mgmt		516	Christopher P. Strasser	Evaluating IT Management Practice
Mgmt		523	Jerry L. Rosenberg	Service Management - The ITIL Framework
Mgmt		525	John H. Silver	Why Develop a Storage Strategy?
Mgmt	EEOS	526	Michael A. Salsburg	Self-Aware Business Processes
Mgmt		536	Rick Lebsack	Panel: Metering and Billing in an On Demand World
Mgmt	WEB	602	Larry Reeve	Adapting the TileBar Interface for Visualizing Resource Usage
Mgmt	WEB	606	Dr. Yong-Soo Kim	Performance Metrics in IT Operation Outsourcing
Mgmt		673	John H. Silver	Asset Management as a Prerequisite for Capacity Planning
Model	WEB	524	David Mc Guinness	Issues in Developing a Simulation Model of an EJB Application Server
Model		537	Jorge D. Xifra	Performance Analysis: Converting Data Into Information Using One Simple Statistic Function
Model		547	Tom A. Thompson	Optimize Server Consolidations with End-to-End Modeling
Model	WEB	555	Yiping Ding	Performance Impact of Load Balancers on Server Farms
Model		607	Christopher A. Newland	Projecting Large Scale Deployments with Multiple Year Rollouts
Net		311	Fred Engel	Death, Taxes, and Your Network Infrastructure. How to Make Network Reliability One of Life's Few Guarantees.
Net		323	Felix Hernandez-Campos	Generating Realistic TCP Workloads
Net		331	Dr. Kenneth R. Traub	Radio-Frequency Identification at Enterprise Scale
Net	WEB	353	Dr. Werner Vogels	Web Services Are Not Distributed Objects
Net		417	David J. Konz	A White Box Look at the Performance of 802.11 Wireless and its Variants
Net	WEB	535	Nikhil Venugopal	Network Bandwidth Estimations Based on Use-Case Scenarios
Perf	WEB	325	Alexandre Polozoff	Performance Testing Protocol
Perf	WEB	337	Dr. Pierre M. Fiorini	The Performance Impact of Security Attacks on Enterprise Computing Systems
Perf		341	Corey Ferengul	Assessing the Monitoring Market and Maturity
Perf	EEOS	346	William S. Keezer	IT Web Reporting: All Things to All People
Perf		357	Thomas Bodenheimer	DB2 Performance Monitoring using Snapshots
Perf	EEOS	412	Daniel A. Menasce	Quality of Service Aspects and Metrics In Grid Computing

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NON-SPECIFIC

SUBJECT	FOCUS	SESSION	AUTHOR	TITLE
Perf	EEOS	423	Andrew S. Duffen	Managing All of Your Application's Servers From a Single Web Page
Perf	EEOS	424	Giuseppe Cassone	Performance Integration: from Development to Delivery All at Once
Perf	WEB	425	Prof. Robert D. van der Mei	Overload Control for Web Services: Web Admission Control
Perf	WEB	446	Yefim Somin	Workload Characterization for Websphere Application Server
Perf	z/OS	501	Jim Grant	Business Service Management: Configuration, Change, Assets and IT Management
Perf	EEOS	512	Ronald R. Kaminski	Automating Workload Characterization by Policy
Perf	WEB	515	Mark W. Johnson	Monitoring and Diagnosing Applications with ARM 4.0
Perf		517	Richard Gimarc	Moving Beyond Test and Guess - Using Modeling with Load Testing to Improve Web Application Readiness
Perf	EEOS	527	Dr. Curtis Hrischuk	Capacity Planning of Voice Response Middleware
Perf		532	Linwood Merritt	Seeing the Forest AND the Trees: Capacity Planning for a Large Number of Servers
Perf		533	David F. Pultorak	Service Level Management: More Than Just SLAs
Perf	EEOS	534	Rich Fronheiser	Too Many Servers, Not Enough Eyes (or – Where Did All These Servers Come From?!?)
Perf		543	Adam Grummitt	Corporate Performance Management as a Pragmatic Process in an ITIL World.
Perf		552	Rick Lebsack	Facilitated Discussion: The Future of The Performance Field
Perf		556	TBD	CMG Australia Best Paper: TBD
Perf	EEOS	603	Mike Tsykin	Beyond Thresholds: New Directions in QoS Monitoring and Alerting
Perf	EEOS	667	Shanti Subramanyam	Principles of Good Benchmark Construction
Perf		677	Linwood Merritt	A Finger in the Wind: Forecasting Techniques for Capacity Planning
SPE		312	Dr. Connie U. Smith	Introduction to Software Performance Engineering
SPE		314	Marc J. Fleury	Professional Open Source and the Future of JBoss
SPE		336	Fred M. Richards	Performance Engineering throughout the Software Life Cycle
SPE	EEOS	357	Dr. Serg Mescheryakov	Performance Comparison of Various Hierarchical Structures in Database Systems
SPE		422	Dr. Carl J. De Pasquale	Collecting Java Performance Measurements Using Byte Code Engineering
SPE	WEB	426	Henry H. Liu	An Analytic Model for Predicting the Performance of SOA-Based Enterprise Software Applications
SPE	EEOS	554	Peter Johnson	Java Garbage Collection Statistical Analysis 101
Stor		335	Randy Kerns	iSCSI - Understanding the Issues
Stor	EEOS	344	Bruce McNutt	SAN Virtualization Layout and Performance
Stor	EEOS	344	Joel B. Motzny	Establishing an Open Systems Storage Strategy for your Company
Stor	EEOS	415	Greg P. Schulz	Performance and Capacity Planning Basics for Storage Networks V2.0
Stor	EEOS	435	Greg P. Schulz	Storage Technology Primer & Update
Stor	EEOS	455	Mel Boksenbaum	Panel: Storage Performance Council Status Update Panel Discussion
Stor	EEOS	456	Robert Rogers	Business Process Mapping, Data Classification, and Service Level Objectives
Stor		514	Chao Li	A Multi-tiered Model for Performance Analysis of Storage Area Network
Stor		531	Fred G. Moore	Storage Navigator
Stor		541	Fred G. Moore	Panel: Storage - The Next Dimension (Part 1)
Stor		551	Fred G. Moore	Panel: Storage - The Next Dimension (Part 2)

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WINDOWS NT/XP ETC.

SUBJECT	FOCUS	SESSION	AUTHOR	TITLE
Model		666	Judson E. Veazey	More CPUs or more DIMMs? Finding the Optimal Balance between System Components
Net	WEB	453	Dr. Bernard Domanski	Turn Your Old Unused PC At Home Into A Fully Functional Web Server That Runs From Your Kitchen
Net		675	Dr. Jozo J. Dujmovic	A Network Benchmark for the .NET Framework
Perf	EEOS	444	Dr. Insung Park	Event Tracing for Windows: Best Practices
Perf	EEOS	545	Chris Molloy	Best Practices for Server Virtualization
Perf	WEB	662	James Cusick	Developing and Applying a Distributed Systems Performance Approach for a Web Platform
SPE		356	Claire S. Cates	Where's Waldo: Uncovering Hard-to-Find Application Killers
SPE	EEOS	544	Peter Johnson	How's My Performance? Dial 1-800-I-AM-FAST
SPE		604	Claire S. Cates	How's Your Memory?
Stor	EEOS	354	Mark B. Friedman	A Simplified Approach to Windows Disk Tuning
Stor	EEOS	414	Prem Mehra	SQL Server 2000 and Large Storage Deployment
Stor	EEOS	546	Michael A. Salsburg	Is a PetaByte More Than We Can Chew?

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z/OS

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Mgmt	z/OS	327	Dr Fabio M. Ottaviani	CMG-Italia Best Paper: 7 Deadly Sins in WLC
Mgmt	z/OS	542	Nalini J. Elkins	TCP/IP Chargeback to Enforce Performance Targets
Mgmt	z/OS	663	Mp Welch	Software Licensing Cost Reduction Strategies for Large Mainframe Environments
Perf	z/OS	313	Len Jejer	WLM - Our Experiences Implementing Goals By Online Transaction Response Time
Perf	z/OS	322	Dr Rich Olcott	Shared Disk in a Distributed Storage Environment – A Drag on Performance
Perf	EEOS	326	Russell A. Rogers	Ubiquitous Data Collection in a Large Distributed Environment
Perf	z/OS	332	Glenn R. Anderson	A z/OS WLM Update for DB2 Environments
Perf	z/OS	343	Richard S. Ralston	z/Series, Sub Capacity Workload License Charges, Soft-Caps, and WLM
Perf	z/OS	347	Anthony J. Ruberry	z/OS Performance Management in the Real World
Perf	WEB	352	Glenn R. Anderson	WebSphere for z/OS Ver 5 Performance Tuning
Perf	z/OS	432	Ivan L. Gelb	Panel: z/OS and WLM Q & A
Perf	z/OS	437	Robert E. Chaney	DB2 DDF, Life in the Fast Lane
Perf	z/OS	442	Kathy Walsh	WLM Myths, Truths, and Half Truths
Perf	z/OS	452	Kathy Walsh	Introduction and Overview of zAAPs on z/OS
Perf	z/OS	457	Joseph L. Babcock	Care and Feeding of SMF in the Large System Environment
Perf	z/OS	522	Igor A. Trubin	Mainframe Global and Workload Level Statistical Exception Detection System, Based on MASF
Perf	z/OS	557	Richard Kephart	The Job You Save
SPE	WEB	342	James R. Crew	CICS Application Integration using Web Services
SPE	z/OS	676	Thomas A. Halinski	Performance Improvements from the “Things I Wish They’d Told Me 8 Years Ago” - Visualized
Stor	z/OS	345	Frank M. Bereznay	Reporting on I/O Configurations using RMF Data: Connecting the Logical to the Physical
Stor	z/OS	445	H. Pat Artis	Understanding the Differences between z900 and z990 Service Time Measurements
Stor	z/OS	605	Charles T. McGavin Jr	ESCON to FICON Migration Planning

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Exhibitor Descriptions

- **Exhibitor Information**

- **Exhibit Hall Hours ***

Tuesday	11:30 AM	–	4:00 PM
Wednesday	11:30 AM	–	4:00 PM
Thursday	11:30 AM	–	2:00 PM

** Hours are subject to change*

Applied Expert Systems, Inc.

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Applied Expert Systems, Inc. offers business service management solutions for the enterprise with CLEVERBSM, a suite of proactive performance monitoring products that allow you to manage your IT environments in accordance with business objectives, maximizing your most critical resources - your TCP/IP networks and Web sites: CLEVER Web monitors end-to-end Web application performance, including wait time. CLEVER TCP/IP provides z/OS-centric IP monitoring. CLEVER eRoute provides enterprise routing performance analysis. CLEVER cTrace Plus provides IP and VTAM trace analysis and diagnostics.

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Plaistow, NH 03865 Phone: 603-382-4200
www.Aptitune.com Fax: 603-382-4247

Aptitune produces performance analysis tools, including our flagship product, SarCheck. SarCheck analyzes sar reports, data from the /proc filesystem and ps -elf output. Tunable kernel parameters are examined to produce a concise plain English report. SarCheck identifies problems and recommends corrective action. SarCheck can use gnuplot to create JPEG or PNG graphs accompanying its text.

Axios Products, Inc.

1373-10 Veterans Highway Booth: 311
Hauppauge, NY 11788 Phone: 631-979-0100
www.axios.com Fax: 631-979-0537

With today's increasing demand for 24/7 online availability, the challenges of missed windows and limited resources can make day-to-day and long-term goals difficult to achieve. The SmartProduction® batch analysis and tuning software addresses these challenges. SmartProduction automatically locates production inefficiencies, and provides focused analysis and tuning solutions to reduce batch run time and increase system online time.

Visit us to learn more about SmartProduction and our other mainframe performance tools, including the SmartAnalyzer® backup reliability analysis tool.

BMC Software

2101 CityWest Blvd Booth: 101
Houston, Tx 77042 Phone: 713-918-8800
www.bmc.com Fax: 713-918-3460

BMC Software, Inc. [NYSE:BMC], is a leading provider of enterprise management solutions that empower companies to manage their IT infrastructure from a business perspective. Delivering Business Service Management, BMC Software solutions span enterprise systems, applications, databases and service management. Founded in 1980, BMC Software has offices worldwide and fiscal 2004 revenues of more than $1.4 billion. For more information about BMC Software, visit www.bmc.com.

CIMS Lab, Inc.

3013 Douglas BLVD Suite 120 Booth: 420
Roseville, CA 95661 Phone: 916-783-8525
www.cimslab.com Fax: 916-783-2090

The CIMS Suite of products provides Capacity Planning, Resource Accounting and Chargeback across the entire Enterprise. CIMS data collectors support all major platforms and systems such as OS/390, UNIX, Windows, Databases, E-Mail Systems, Networks, Internet and more.

CIMS is always working with its customers to develop new features and products to improve Capacity Planning, Resource Accounting and Chargeback.

To learn more about the CIMS System, please stop by the CIMS booth (#420).

CMG2004 SILVER SPONSOR

Computer Associates International, Inc.

1 Computer Associates Plaza Booth: 306
Islandia, NY 11749 Phone: 631-342-6000
www.ca.com

Computer Associates International, Inc. (NYSE:CA), the world's largest management software company, delivers software and services across operations, security, storage, life cycle and service management to optimize the performance, reliability and efficiency of enterprise IT environments. Founded in 1976, CA is headquartered in Islandia, N.Y., and operates in more than 100 countries. For more information, please visit http://ca.com.

Computer Management Sciences, Incorporated

6076-D Franconia Road Booth: 415
Alexanddria, VA 22310 Phone: 703-922-7027
www.cpexpert.com Fax: 703-922-7305

Computer Management Sciences offers CPExpert™ to help analyze performance problems with MVS environments. CPExpert automates computer performance evaluation by detecting system performance problems, identifying the causes of the problems, and suggesting ways to improve system performance. CPExpert analyzes performance problems with DB2, Workload Manager, CICS, and DASD. The latest component of CPExpert analyzes performance problems with WebSphere MQ for z/OS. CPExpert is written in SAS, executes as a batch job, and analyzes standard SMF/RMF data contained in a performance data base.

Demand Technology Software, Inc.

1020 8th Ave. S. Suite #6 Booth: 414
Naples, FL 34102 Phone: 239-261-8945
www.demandtech.com Fax: 239-261-5456

Demand Technology is the proud developer of Performance SeNTry, the premiere Windows Server 2003 performance data collector on the market today. Performance SeNTry is designed with the professional performance analyst and capacity planner in mind. When you combine Performance SeNTry's intelligent data collection capabilities with incredible reports from Lund MetaView and Performance Gallery, Merrill's MXG, SAS, and SAS Institute's IT Resource Manager, you have the ability, for the first time, to take control of your critical Windows servers and applications.

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Fujitsu Australia and New Zealand

1230 Nepean Hwy Booth: 410
Cheltenham, 3192 Phone: +613-9265-0404
Victoria, Australia Fax: +613-9265-0792
www.fujitsu.com/au/

Fujitsu is a world leader in the Information and Communications Technology (ICT) and Microelectronics industries. Our network of over 500 companies spans 100 countries and employs more than 180,000 people. In Australia and New Zealand, we have an enviable track record in transforming the operations of public and private enterprises by delivering the best technology and business solutions. Our products and services range from PCs and high-speed Intel-based servers to data centres, award-winning call centres, telecommunications networks, retail solutions and sophisticated business applications.

HYDRA Systems, Inc.

17585 El Mineral Road Booth: 409
Perris, Ca 92570 Phone: 909-443-4223
www.hydrasystems.com Fax: 909-277-2849

HYDRA SYSTEMS Announces a fully functional 3745/3174 Replacement. HYDRA 3000 the leading replacement for IBM mainframe controllers, support Escon Channel, Gigabit and 10/100 MB Ethernet.Asynchronous and Lan connectivity for (terminal and printer) sessions and mainframe based pc file servers, as well as TCP/IP, RJE, Pnet, BSC, SDLC, SNI, Ethernet, Copper and Escon Channel communications all based in a single chassis. The HYDRA 3000 is exclusively developed,manufactured and marketed by HYDRA SYSTEMS Inc. Contact us at www.hydrasystems.com or call 800 554-9372.

CMG2004 BRONZE SPONSOR

HyPerformix, Inc.

4301 Westbank Drive Bldg. A, Suite 300 Booth: 401
Austin, TX 78746 Phone: 512-328-5544
www.hyperformix.com Fax: 866-495-4293

To align IT resources with the needs of the business, enterprises must ensure the successful performance of critical applications, while also optimizing the utilization and cost of the IT infrastructure. The HyPerformix solution helps reach this alignment; providing decision-support tools to understand application performance and predict the effect of changes BEFORE they are made. The benefits of the HyPerformix solution: reduced risk of deploying enterprise applications, avoidance of unnecessary IT spending, optimization of IT infrastructure, revenue protection, and improved time-to-market.

ISM (the Information Systems Manager)

One Bethlehem Plaza Booth: 206
Bethlehem, PA 18018-5784 Phone: 610-865-0300
www.perfman.com Fax: 610-868-6277

ISM, an international leader in capacity/performance tools & services, provides clear & concise answers to the complex mgmt questions posed by today's multi-platform enterprise environment.

ISM's PerfMan provides an enterprisewide view reducing management & strategic planning complexities, allowing for more insightful decision-making & greater alignment of IT with strategic corporate objectives.

PerfMan support:

- Windows, UNIX/Linux, and z/OS analysis, reporting & modeling
- CICS, DB2, Oracle, Exchange, Tapes Libraries, SQL Server, IIS, & Active Directory

Stop by booth #206 for more info

Merrill Consultants

10717 Cromwell Drive Booth: 417
Dallas, TX 75229 Phone: 214-351-1966
www.mxg.com Fax: 214-350-3694

MXG is a comprehensive SAS-based software package which processes data records used for Measurement of Performance Objectives and Resource Utilization, for System Tuning, for Cost Recovery and Accounting, and for Capacity Measurement and Management with menu-driven graphical reports and analyses.

MXG supports data from all operating systems (AS/400, OS/390, z/OS, z/VM, unix, aix, Windows, etc.), and all of their subsystems.

MXG can be executed under SAS on any platform to process data records created on any other platform.

Metron-Athene, Inc.

23046 Avenida De La Carlota Suite 600-6019 Booth: 207
Laguna Hills, CA 92653 Phone: 949-588-5757
www.metron-athene.com Fax: 949-588-5777

Metron-Athene performance management software solution provides measurement, analysis, planning and reporting capabilities for UNIX, Linux, Windows, z/OS and OS/390.

For UNIX, Linux and Windows, Athene captures and collects performance data from target systems and provides applications that exploit this data for alert management, performance analysis, Oracle and SQL Server performance reporting, trend analysis and analytical modeling.

For OS/390 performance data is captured from target systems (using standard data sources) and client applications exploit this data for performance analysis.

MVS Solutions Inc.

8300 Woodbine Avenue 4th Floor Booth: 310
Markham, ON L3R9Y7 Phone: 905-940-9404
Ontario, Canada Fax: 905-940-5308
www.mvssol.com

If you've been given the task of improving your batch window processing, you must look at ThruPut Manager.

ThruPut Manager's Service Level Manager will automate your batch processing, saving a great deal of elapsed processing time, shortening your batch window time and getting your reports out and your online up faster. If you're a CA-7 user, learn how we can empower CA-7 and help it get your schedule complete, on-time, every time.

Join us at our presentation and visit our booth to learn how ThruPut Manager solves typical problems encountered by data centers everywhere.

OPNET Technologies

7255 Woodmont Ave. Booth: 307
Bethesda, MD 20814 Phone: 240-497-3000
www.opnet.com Fax: 240-497-3001

OPNET is a leading provider of management software for networks and applications, enabling enterprises to:

1. rapidly diagnose end-to-end performance problems, pre- or post-deployment
2. model server, mainframe, and network infrastructure for capacity planning
3. automate network diagnostics, for policy and configuration change validation

OPNET products deliver rapid ROI to thousands of customers, including blue-chip organizations such as: Abbott Labs, Continental Airlines, Mary Kay, Office Depot, Prudential, TXU, and SunTrust Banks.

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PerfCap Corporation

85 Perimeter Road Booth: 405
Nashua, NH 03063 Phone: 603-459-0267
www.perfcap.com

PerfCap offers over 20 years of expertise in developing out-of-the-box, fully automated, web-based, highly scalable and economical software for Performance, Capacity and Asset Management. PAWZ: Performance Software for historical and real-time data collection, analysis, reporting and alerting. eCAP: A Capacity Planning software to answer "What if" questions using analytical queuing network modeling. FindIT: An Asset Management and Change Tracking Software providing inventory of hardware, software and licenses. Platforms: HP-UX, Tru64, Sun-Solaris, IBM-AIX, Linux, OpenVMS, Windows NT/2000/2003.

ProactiveNet, Inc.

2055 Laurelwood Road Suite 130 Booth: 210
Santa Clara, CA 95054 Phone: 408-454-4500
www.proactivenet.com

ProactiveNet's patented software solutions measure, analyze, and visualize performance of SLAs, web and client/server application and related infrastructures in Global 2000 and leading e-Commerce companies.

Responsive Systems

281 Hwy 79 Booth: 100
Morganville, NJ 07751 Phone: 732-972-1261
www.responsivesystems.com

Provides industry leading software to improve DB2, IMS, and DASD system performance. Buffer Pool Tool is the industry standard for pool tuning, and remains the only product that can accurately predict the effect of changes and I/O rates. In addition to un-paralleled accuracy, it also provides a proven methodology for grouping objects into pools based on access type and working set size. DASD Xpert provides the ability to keep any dataset resident in controller cache, thus guarantying I/O response times.

SAS Institute Inc.

100 SAS Campus Drive Booth: 301
Cary, NC 27513 Phone: 919-677-8000
www.sas.com Fax: 919-677-4444

SAS is the leader in providing a new generation of software and services that create true enterprise intelligence. SAS solutions are used at more than 40,000 sites — including 96 of the top 100 of the 2003 FORTUNE Global 500 — to enable better, more accurate and informed decisions. For nearly three decades, SAS has been giving customers The Power to Know®.

Join us Monday, Dec. 6, to learn how SAS® IT Management Solutions help you manage your IT organization and infrastructure, evaluate and control costs, and make informed decisions that directly affect the bottom line.

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TeamQuest Corporation

One TeamQuest Way
Clear Lake, IA 50428
www.teamquest.com

Booth: 201
Phone: 641-357-2700
Fax: 641-357-2778

TeamQuest focuses solely on data center performance management and capacity planning. It's all we do. Our software helps you meet service levels while minimizing costs, consolidate servers, accurately size new systems, and predict capacity requirements for forecasted business growth. TeamQuest offers a complete, integrated solution, from monitoring to modeling. Our software suite helps IT departments mature from basic performance monitoring, to proactive bottleneck detection, to predicting resource requirements for growth or consolidation.

Trident Services, Inc.

1260 41st Avenue, Suite K
Capitola, CA 95010
www.triserv.com

Booth: 108
Phone: 831-465-7661
Fax: 831-476-0966

OS/EM (AWESOME): OPERATING SYSTEM / ENVIRONMENT MANAGER for z/OS & OS/390. Capacity Planning, Operations & Technical Services are all exploiting OS/EM's numerous robust ISPF features. Dynamic Capabilities: Maximize CPU Resources & Batch Resource Routing, Reduce ISV costs, Eliminate Assembler Exits, Tape Share, and HSM Optimizer are just some of OS/EM's proactive features delivering 24/7 availability.

Wily Technology

8000 Marina Blvd Suite 700
Brisbane, CA 94005
www.wilytech.com

Booth: 211
Phone: 415-562-2000
Fax: 415-562-2100

Wily Technology is the market-leading provider of Enterprise Application Management solutions. Wily's products enable companies to successfully manage their critical Web applications and infrastructure by providing real-time visibility into the performance and availability of these systems. Wily customers rapidly detect and diagnose application slowdowns and failures, and virtually eliminate the chaos of blame games. This means better customer service, more stable revenue streams, and higher IT productivity.

Xaffire, Inc.

100 Superior Plaza Way Suite 200
Superior, CO 80027
www.xaffire.com

Booth: 411
Phone: 303-642-4450
Fax: 303-642-4003

xFire 3.0 quickly identifies elusive Web problems by capturing and replaying live sessions that are linked to application and infrastructure status and performance. xFire is the first solution that integrates live Web session capture & playback, external transaction monitoring and network performance management, allowing Web session failures to be exactly reproduced.

With xFire 3.0 you can: reduce the amount of time wasted tracking down problems; clearly understand where a problem lies and who owns it; catch and correct problems before your users complain about them.

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z/Journal

9330 LBJ Frwy #800
Dallas, TX 75243
zjournal.com

Booth: 416
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Zjournal is the only independent magazine dedicated to users of IBM zseries and S/390 systems.

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CMG LAS VEGAS 2004

General Information

Attendees with Special Needs

If you have special needs addressed by the Americans with Disabilities Act, stop by the CMG2004 On-Site Registration Area. We will make every effort to accommodate your needs.

Badge Policy

To gain access to all CMG functions and meals, attendees must wear conference badges and have the appropriate ticket. **There will be no exceptions.** Registered CMG guests must wear their badge and have the appropriate ticket to gain access to breakfast, lunch and PARS events.

Birds-Of-A-Feather (BOF) Sessions

Have a specific interest you want to discuss? CMG2004 offers BOF sessions Thurday evening. following sessions, these informal gatherings allow attendees with similar concerns to exchange ideas in a small group setting. Location and times will be announced in the Final Agenda.

CMG Headquarters Hours

Saturday, December 4, 2004	4:00 PM	–	8:00 PM
Sunday, December 5, 2004	7:00 AM	–	12:00 PM
	1:00 PM	–	8:00 PM
Monday, December 6, 2004	7:00 AM	–	12:00 PM
	1:00 PM	–	8:00 PM
Tuesday, December 7, 2004	7:00 AM	–	12:00 PM
	1:00 PM	–	6:00 PM
Wednesday, December 8, 2004	7:00 AM	–	1:30 PM
Thursday, December 9, 2004	7:00 AM	–	1:30 PM
Friday, December 10, 2004	7:30 AM	–	10:00 AM

Exhibitor Details

The **CMG2004** Exhibitor Hall is located in the Paris Ballroom, Rivoli A-C.

Exhibit Hall Hours

Tuesday, December 7, 2004	11:30 AM	–	4:00 PM
Wednesday, December 8, 2004	11:30 AM	–	4:00 PM
Thursday, December 9, 2004	11:30 AM	–	2:00 PM

For more information on **CMG2004** Exhibitors, refer to the Exhibitor Section.

User Group Meetings

Some **CMG2004** exhibitors use Monday, December 6, to hold User Group Meetings.

Exhibitor Presentations

Many of the **CMG2004** exhibiting companies will hold exhibitor presentations during conference week. Scheduled from 5:15 PM – 6:15 PM and 6:30 PM – 7:30 PM, Tuesday – Wednesday, these presentations allow attendees a more comprehensive look at the exhibitor's products and services.

Conference Registration Information

Registration Hours

Saturday, December 4, 2004	4:00 PM	–	8:00 PM
Sunday, December 5, 2004	7:00 AM	–	12:00 PM
	1:00 PM	–	8:00 PM
Monday, December 6, 2004	7:00 AM	–	12:00 PM
	1:00 PM	–	8:00 PM
Tuesday, December 7, 2004	7:00 AM	–	12:00 PM
	1:00 PM	–	6:00 PM
Wednesday, December 8, 2004	7:00 AM	–	1:30 PM
Thursday, December 9, 2004	7:00 AM	–	1:30 PM
Friday, December 10, 2004	7:30 AM	–	10:00 AM

DECEMBER • 5-10

Meal Schedules

Breakfast will be served Tuesday – Friday, location to be announced on site.

Lunch will be served Tuesday – Friday in the location to be announced on site. Please note that lunch will be served promptly at 11:30 AM.

Veggie/Kosher Meals – If you prefer vegetarian or kosher meals and did not indicate your preference on your registration form, please notify a CMG staff member at the On-Site Registration Area.

Individual meal tickets are also available at the CMG On-Site Registration Area. Breakfast tickets are $20, lunch tickets are $25 and PARS tickets are $50 per night.

Mullen Foundation

Extra CMG collectible items are available Wednesday and Thursday. Times will be posted. All check or cash donations will go directly to the J. William Mullen Foundation. The Mullen Foundation cannot accept credit card contributions.

Newsletter

Pick up your daily newsletter at breakfast, Registration, or the Exhibitor Area for last minute updates to conference activities. A daily schedule of BOF's is found in each issue.

PARS

CMG hosts the unique **P**erformance **A**nalysts' **R**elaxation **S**ession **(PARS)**, Monday – Thursday, from 7:30 PM – 11:00 PM Take a breather, network with other attendees or just relax after a long day. Enjoy hors d'oeuvres during the first 90 minutes each evening, complimentary soft drinks, quiet areas, and entertainment. **Please note: You must be 21 years of age to attend PARS.**

Publications for Purchase Onsite

CMG has several member publications, in both printed and electronic formats. All attendees will receive the CMG2004 CD-ROM. Additional copies of the CMG2004 Proceedings (in either the 2-volume set or on CD-ROM) are available for purchase. For all other member publications, please consult the publication order form found in the CMG2004 On-Site Registration Area. (Orders of older publications will be mailed in January.)

Recruitment Policy

As the intent of the meeting is to share information, not to recruit new staff, there is a **no recruiting policy** at the conference. Deliberate recruiting such as job postings, general announcements, or recruiting conversations with specific individuals, is specifically prohibited at any meeting or activity sponsored by CMG.

Shipping Information

CMG will provide shipping services to send your material back home. Your registration packet includes a self-addressed label for this purpose.

Smoking

CMG's no smoking policy includes all CMG sessions, exhibit halls, meals, and PARS functions. There will be designated areas for smokers. We appreciate your compliance with this policy.

Speaker Services

CMG provides business services for speakers and attendees. For an order form and price information on available services, please go to the speaker services desk at the On-site Registration Area.

Sunday Workshops, December 5, 2004

Breakfast	7:30 AM –	8:30 AM
Morning Workshops	8:30 AM –	12:00 PM
Lunch	12:00 PM –	1:00 PM
Afternoon Workshops	1:00 PM –	4:30 PM

You must be registered to attend Sunday Workshops. Each workshop will only be held once and will not be repeated. Attendees registered for the Sunday Workshops will receive meal tickets with their workshop materials for Sunday's Breakfast and Lunch.

What Are The CMG2004 Collectibles?

Your on-site registration packet contains your tickets for the conference collectibles, which include a Final Agenda (on-site program), Proceedings and other CMG gifts.

Conference Guest Registration

Las Vegas is a fun place for everyone! In order to attend various CMG2004 functions, guests must be registered by a CMG2004 conference attendee. Registration forms are available in the CMG On-Site Registration Area. For only $300.00, your registered guest receives a conference badge and can attend:

- PARS on Monday, Tuesday, Wednesday, and Thursday evenings. A guest must have a badge and PARS ticket to attend PARS functions.
- Full Breakfast Tuesday – Friday in the designated meal area.
- Entrance into CMG's Exhibit Hall on Thursday.
- Registered guests may attend **only** the session at which their sponsoring attendee makes a presentation. A guest registration **does not** include attending formal conference sessions.
- Individual tickets for the luncheons or PARS can be purchased at the CMG On-Site Registration Area.

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Z JOURNAL

Computer Performance Evaluation for MVS Mainframe Systems

by Barry Merrill

With the cooperation of the Computer Measurement Group, Dr. Barry Merrill will offer his normally-three-day-class, “Computer Performance Evaluation for MVS Mainframe Systems”, tuition-free, taught in two very-long-days, **Saturday and Sunday, from 8:30 am to 7:30 pm, December 4 and 5**, preceding the CMG2004 Conference in The Paris Las Vegas conference hotel.

This class is open to technicians who use or plan to use MXG or ITSV/ITRM software. The class description, registration forms, and links to the hotel reservation form and CMG information are in the CLASSES frame at **www.mxg.com**. You can leave home on Friday, take advantage of over-Saturday-night and attend both the MXG class and the CMG Conference, all in the same hotel, and at the CMG Conference hotel room rate!

ICCP Certification Exams at CMG

CMG continually attempts to add value to each annual conference. This year, as a recognized affiliate of the Institute for Certification of Computing Professionals (ICCP), CMG is offering discounts for a Certified Computing Professional (CCP) review program to help attendees prepare for the ICCP tests as a separate offering on Sunday. (note: this is **not** part of the Sunday Workshop Program)

After a review period during the morning session of the program, attendees will have the opportunity in the afternoon to take up to three ICCP exams onsite. The examinations are: the IT Core exam, the IT Management exam, and the Business Information Systems exam. Additionally, attendance at CMG2004 counts toward the continuing education hours required for maintaining an ICCP professional certification in good standing.

The ICCP examinations are computer-based, so attendees should bring laptop computers to the class.

Since the ICCP review and testing are separate from Sunday Workshops there is a special registration option on the form on page **43**. We encourage you to take advantage of this certification opportunity.

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www.cmg.org/conference1