

# 2007 FALL CONFERENCE

Register before September 28<sup>th</sup> for a chance to win a TomTom GO 720 Portable GPS

END-TO-END RELIABILITY:

October 28-31, 2007  
Gaylord Texan Hotel  
Grapevine, TX

# mission critical systems

FAILURE IS NOT AN OPTION

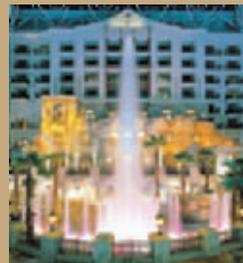
7x24  
**7XChange**  
INTERNATIONAL

The end-to-end reliability forum.

[www.7x24exchange.org](http://www.7x24exchange.org)



NOW OFFERING  
**CEUs**  
TO ATTENDEES!



### What is 7x24 Exchange?

The leading knowledge exchange for those who design, build, use and maintain mission-critical enterprise information infrastructures, *7x24 Exchange* is a not-for-profit organization seeking to improve end-to-end reliability by promoting dialogue among these groups.

Founded on the assumption that often professionals involved with data center uptime issues work in isolation when dealing with technical, budget, political, and career issues. As a result of expensive, time-consuming, and, sometimes, painful trial and error processes, innovative practitioners evolved unique and creative ways of solving problems and building the organizational support needed for their implementation. However, many have been stymied because they did not have access or know how to communicate potential risks to senior management to avoid a downtime disaster occurrence.

members work together to advance the state-of-the-art in infrastructure reliability. By collecting and disseminating data on safeguarding information systems and alerting top management to the importance of proactive measures, members can protect their companies' information lifelines.

### The Goal of 7x24 Exchange Conferences

The field of uninterrupted uptime has no textbooks. Before its founding in 1989 as the Uninterruptible Uptime Users Group, learning how to deal with uptime issues largely resulted from individual trial and error. Continuing this random rate of reliability improvement would increasingly restrict the potential productivity of the large, growing investment in computer and communication hardware and systems. It also would interfere with the increasingly critical dependence on information accessible through computers.

With 7x24 operations now common, how much higher will availability requirements be in five years? How can cost-effective, reliable responses be assured? When is a centralized application site requiring ultra-high availability viable? Addressing, and, hopefully, answering these and related strategic questions, *7x24 Exchange* conferences provide stimulating discussion forums. Collectively, we know much about the future options and alternatives available. With *7x24 Exchange*, that knowledge can be shared.

All program elements aim to increase the reliability and availability of an enterprise's information infrastructure by presenting case studies, new ideas, techniques and tools. Open dialogue between attendees and presenters is encouraged throughout. Further, by involving the many specialists from user and supplier/service organizations with formal and informal sessions, the experience is rewarding and enjoyable for all.

### Who Should Attend and Why?

This conference is designed for anyone involved with 7x24 infrastructures — IT, data center, disaster recovery and network/telecommunication managers; computer technologists; facility or building managers, supervisors and engineers. Vendors, consultants, or anyone concerned with uninterrupted access to critical information also will find the conference of value.

Attendees and their organizations benefit from the conference because proactive plans and cooperation from diverse functions are needed to improve reliability. By promoting a dialogue and clarifying the synergies among functions, past conferences have enabled teams of attendees from a given organization to better communicate the critical importance of a proactive approach to continuous uptime. Team members also were able to cover breakout sessions and network with other professionals in similar companies/industries with like problems.

Conference attendees benefit in three ways: professional development and advancement; increased recognition of their function's importance; and exposure to new ideas, contacts and resources. First-time attendees often discover that many companies face similar, if not identical, technical and organizational problems in their quest for higher availability levels. Those still unaware of this often view their situations as unique. However, they learn there are many common downtime risks and failure modes with solutions clustering around universal ideas and attitudes. *7x24 Exchange* conferences provide insights into what is being planned and done by others to mitigate or eliminate downtime risks. Recommended changes can then be justified, both on their practical merits and in the context of business arguments that have been successful elsewhere.

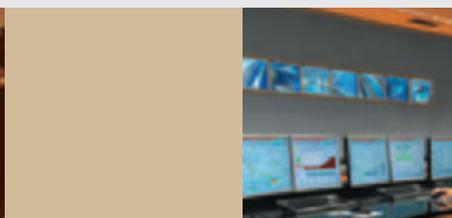
### What is a Tutorial Session?

*7x24 Exchange* has been offering tutorials for several years now. The purpose of these tutorials is to provide material refreshers for those attendees familiar with the concepts or to provide a foundation to other attendees who want to become more familiar with the subject matter. All conference attendees are encouraged to attend tutorial sessions. Almost all of the *7x24 Exchange* presentations are geared towards those with an advanced understanding of the concepts that will be presented. The tutorials are intended to complement the Monday to Wednesday presentations and help each attendee deepen their level of comprehension.

*Sessions with content concerning the greening of data centers are indicated with*



*throughout the conference brochure.*



# SUNDAY, OCTOBER 28TH

10:30 A.M. – 10:00 P.M.

## Registration

9:00 A.M. – 5:00 P.M.

### Pre-Conference Workshop – Real Availability

The design, construction, operation, and maintenance of mission-critical facilities is a demanding art. 7x24 Exchange members know from first-hand experience that end-to-end reliability requires attention to all the details while never losing sight of the big picture. Most of the specialized knowledge and training is learned on the job – until now.

Steve Fairfax and MIT Professor Mike Golay have distilled decades of applied reliability theory and practice into a one-day seminar – Real Availability. Developed especially for 7x24 Exchange International, Real Availability will both challenge and change the way you think about reliability and availability.

#### TOPICS INCLUDE:

- Evaluating the reliability of data center power systems
- Why you can't contract for availability
- Understanding and reducing human error in data center operations
- Determining optimal test and maintenance strategies
- Real-world examples and case studies

The course has proven extremely popular in past years. 96% of 7x24 Exchange members who evaluated the 2004 and 2005 Real Availability seminars said they would use Real Availability concepts on the job. 100% said that they would recommend the course to others.

Includes course materials, continental breakfast and lunch. All participants are eligible for CEU credits.

#### Steve A. Fairfax

President  
MTechnology, Inc.

#### Michael Golay, Ph.D.

Professor  
MIT Nuclear Engineering Department

*There is an additional fee for this full-day, pre-conference workshop. Please register for this session and the conference using the Conference Registration Form on page 11. If you are interested in providing a pre-conference workshop for 7x24 Exchange please e-mail a proposal to tara@7x24exchange.org*

12:30 P.M. – 2:30 P.M.

### Tutorial Session A: Commissioning – The Owner's Investment in Reliability

In Mission Critical Facility construction, every entity on the Design and Construction Team has a Quality Assurance Program – the architect, the engineer, the contractors, and the equipment manufacturers. The owner's QA program, though sometimes not advertised as such, is the building commissioning process. This presentation explores the electrical and mechanical commissioning processes and standards, and discusses how the owner can help to ensure their building systems will satisfy their expectations and needs. Discussion will include procurement of commissioning services, the commissioning process, expected fee ranges, expected processes and results. A few examples of system problems and their resolutions will be presented.

#### Daniel Parker, P.E.

President  
Hood-Patterson & Dewar, Inc.

#### Ken Meline

Principal  
Command Commissioning

3:00 P.M. – 5:00 P.M.

### CONCURRENT TUTORIAL SESSIONS

#### Tutorial Session B: Fluid Mechanics 101 – Fundamentals of Cooling Airflow in a Data Center

This tutorial session will introduce basic concepts of air velocity, airflow rate, pressure, and temperature distribution as applied to raised-floor data centers. You will be shown why the flow distribution through the perforated tiles is usually not uniform. It is governed by the air velocity and pressure variation under the raised floor. By calculating this variation, you can predict the airflow coming out of each perforated tile. Such a calculation allows you to study the effect of variables such as: layout of the CRAC units and the perforated tiles, the height of the raised floor, and the presence of obstructions under the raised floor. Once the flow rates through the perf tiles are determined, the next step is to calculate, in the above-floor space, the air velocity and temperature as the air moves through the server racks and back to the CRAC units. Many examples will be presented to develop an understanding of the physical processes and to draw practical conclusions. The tutorial will show how to create a computational model of a data center layout and calculate the corresponding airflow and temperature distribution.

#### Suhas V. Patankar, Ph.D.

Professor of Mechanical Engineering,  
University of Minnesota and President, Innovative Research, Inc.



**Tutorial Session C: A Comprehensive Look at Fire Protection Technologies and Codes**

This presentation will educate owners and consultants about the detection, control and extinguishing technologies specific to the mission-critical facility. Included are requirements of the new edition of the National Fire Alarm Code and the American National standards for IT and Telecommunications facilities.

**Brian K. Fabel, P.E.**  
*Director, National Accounts*  
*Orr Protection Systems, Inc.*

**6:00 P.M. – 10:00 P.M.**

**Welcome Reception at the Glass Cactus**

**SPONSORED IN PART BY: CATERPILLAR®**

Join us for a buffet reception with open bar at the Glass Cactus Night Club. This is an excellent opportunity to dialogue with conference presenters, meet new people, network, welcome first time attendees, renew old acquaintances, and meet the board members.

*Hotel policy: Access to the Glass Cactus Night Club is granted only to those guests 21 years and older.*



**MONDAY, OCTOBER 29TH**

**7:00 A.M.**

**Registration & Breakfast**

Check in, pick up your name badge, conference materials and enjoy a hot buffet breakfast.

**8:00 A.M.**

**Welcome and Opening Remarks**

Bob Cassiliano, *7x24 Exchange* chairman will open the conference, provide an overview, review meeting logistics and address general housekeeping items.

**8:30 A.M.**

**Conference Keynote: Failure is Not an Option**

As the leader of the “Tiger Team” of flight directors who brought the Apollo 13 spacecraft safely back to Earth on April 17, 1970, Gene Kranz demonstrated extraordinary courage and heroism. An extraordinarily gifted leader and motivator, Kranz inspired his Tiger Team to hold fast to the highest standards possible. Together, they struggled to devise the plan that would safely bring the ship and its crew of three astronauts home after its oxygen system failed.

“Failure is not an option,” the motto that carried him through the Apollo 13 crisis, is a major theme of his motivational speeches today. Kranz speaks with passion and pride about the NASA employees who formed his mission teams — teams that worked hard and made history in the 1960s and ‘70s. He explains that his flight directors were young engineers and scientists, most of them in their twenties, having come to NASA fresh out of school with little work experience, but with abundant energy, and the will to succeed at one of humankind’s most challenging endeavors: space exploration.

The Apollo 13 crisis pushed Kranz and his team to the brink of fear and doubt, but they refused to give in to these emotions or to succumb to panic. Instead, under his leadership, they worked together to save the imperiled spacecraft, and brought the ship and crew safely home. Kranz speaks with a raw brilliance about the challenges and problems that they successfully faced and overcame, giving his audiences the inspiration that they need to face down challenges and adversity in their own lives and careers.



**Gene Kranz**  
*Former NASA Director of Mission Operations*

**9:30 A.M.**

**Refreshment Break**

**CONFERENCE BREAKS  
 HAVE BEEN SPONSORED IN PART BY: SYSKA HENNESSY GROUP**





## 10:00 A.M.

### Active Power – Peeling the (Green) Onion: What Does Green Really Mean for Data Center Power?

A famous frog once sang, “It’s not easy being green.” Most of us would agree that green facilities, while ideal in theory, prove challenging in fact to understand, design and implement. What is required? What is recommended? What does it really mean to be a “green” data center? With momentum building for tougher environmental legislation, we no longer have the luxury of maintaining the status quo. In this session, Perkins will dissect (sorry, Kermit) various elements of “green-ness,” including power and space requirements, pending legislation, program certifications, Green Grid efforts and more. Perkins will also suggest practical methods to minimize overhead power consumption by improving energy efficiency and exploring viable, reliable quality power alternatives at the facility level.

**David Perkins**  
*Chief Technical Officer*  
*Active Power*

## 11:00 A.M.

### Innovation: A Case Study in Facility Risk Assessment

Many data center outages can be prevented if the underlying risks are identified and appropriate action taken proactively. Data supports this. Like most other big banks, Wells Fargo had, over the years, engaged just about all the major engineering consultancies to perform risk assessments of their various core data center sites. Concerned by the inconsistencies and gaps between the reports, the Bank asked DataSpace to review the process and make adjustments, in advance of another round of these assessments to be performed at four core data centers in the Bank’s portfolio. Working together, Wells Fargo and DataSpace built a comprehensive risk assessment document tool kit and process methodology that eliminated the gaps and provided needed consistency in these assessments, site to site and year on year. The program continues to utilize engineering specialists from various firms, while providing a consistent look and scope. Learn about the positive feedback and acceptance from regulators and governance officers at the bank. Through a continual process of refinement, DataSpace has made this approach available to other enterprises, with the same excellent results. Come hear how your institution can standardize this process and create these results.

**Fred Dickerman**  
*Principal*  
*DataSpace Advisors, Inc.*

## 12:00 P.M. Lunch and Networking

## 1:15 P.M.

### Cisco – Data Center Transformation

Today’s data centers are transforming dramatically to meet IT demands for greater efficiency. Changing limitations – from power and cooling to asset utilization to provisioning, further pinched by evolving business requirements of Web 2.0 such as greater

collaboration, faster response time, compliance – mean the Data Center can no longer be viewed through the same lenses. In his presentation, Douglas Gourlay, senior director of Cisco Data Center Solutions Group, will focus on how current technologies can transform business operations and efficiency.

**Doug Gourlay**  
*Senior Director, Data Center Solutions Group*  
*Cisco*

## 2:15 P.M.

### Make Your Own Sundae Break

## 2:45 P.M.

### The Critical Role of ITIL Methodology in the 7x24 Environment

Management of a 7x24 Environment presents not only technical challenges, but business operations challenges as well. Use of the ITIL methodology helps to organize and standardize everyday practices, both technical and procedural. Introducing this methodology, however, will require a cultural shift in how you look at, and manage, your environment – forcing you and your staff out of your comfort zone, and posing potential weakness in your operation. Are you ready to face your deficiencies head on or is it worth the risk?

**Donna Manley**  
*IT Senior Director*  
*University of Pennsylvania*

## 3:45 P.M.

### VIRTUAL TOUR

### 365 Main Data Center – Chandler, AZ

This 45 minute video tour takes an extensive look at 365 Main’s modern 315,000 sq. ft. data center based in Chandler, Arizona. The video details how 365 Main increased the power density in the data center to 150 Watts per sq. ft., more than twice the original design. You’ll also learn about the history of the building, challenges faced during build out, and how the data center operates. Topics include: comprehensive overview of electrical and mechanical systems; contingency plans and emergency procedures; quality controls including auditing and monitoring of security, cooling and power systems; and energy efficient best practices.

**Jean Paul Balajadia**  
*Senior Vice President & Founding Partner*  
*365 Main*

## 6:30 P.M. – 10:30 P.M.

### Hospitality Events

You and your guest are invited to visit the hosting companies that support 7x24 Exchange. Food, fun and games in a vibrant high-energy environment will be the emphasis.



## TUESDAY, OCTOBER 30TH

**7:00 A.M.**

**Breakfast**

**8:30 A.M.**

**Opening Remarks**

Bob Cassiliano will review day one highlights, recognize the conference Corporate Leadership Program sponsors and give a 7x24 Exchange update.

**9:00 A.M.**

**Keynote: HP – Increased Efficiency Through Improved Data Center Automation**

This presentation will address the relative merits to increase data center efficiency through supplemental cooling (cooling redistribution), automated cooling management to drive energy conservation and efficiency, and traditional data center designs. The presentation will address why traditional designs are not the correct approach, and why driving increased automation is the real future of data center energy management and cooling efficiency.



**Ken Baker**

*Datacenter Infrastructure Technologist  
HP Dynamic Smart Cooling*

**10:00 A.M.**

**Refreshment Break**

**10:30 A.M.**

**Building the Absolutely, Positively Fault Defiant Data Center**

Not all data centers are created equal: some are responsible for protecting millions of lives or millions of dollars every second. When these facilities fail, people die... or, careers do. It's as simple as that. For these types of facilities, "fault tolerance" isn't enough... they need to be "fault-defiant" from the electrical power infrastructure on up. Especially during blizzards, earthquakes, and Category 5 hurricanes. Because 40% of business downtime is caused by electrical power problems – and 80% of those problems are rooted in internal power infrastructure problems – this panel of experts will explore the newest trends in power system design, diagnostics, and deployment... and the results of their use of advanced technologies to maintain power systems resilience.

**MODERATOR:**

**Mark A. Ascolese**

*Co-Founder  
Critical Power Coalition*

**PANELISTS:**

**Peter Gross**

*CEO – CTO  
EYP Mission Critical Facilities*

**Adib Nasle**

*President  
EDSA Micro Corporation*

**Jim Firestine**

*AMPS Program Manager  
FAA*

**Brian Canney**

*Director  
IBM Sites and Facilities*

**11:30 A.M.**

**Pass the Mic Session: Failure Analysis**

This special session of Pass the Mic will feature a complete evaluation of a recent outage suffered by a high-profile data center operator. Company executives will detail the sequence of events, root cause analysis and customer communications. 7x24 Exchange encourages attendees to step up to the microphone and ask questions. Attendee participation and open dialogue has made this a valuable session over the years.

**12:30 P.M.**

**Lunch and Networking**

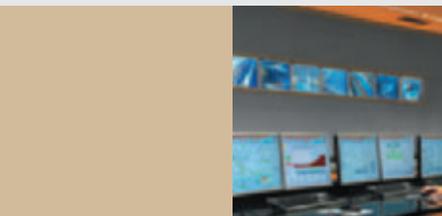
**1:45 P.M.**

**Emerson/Liebert – Tale of Two Data Centers: Creating High Density Computing Environments in Two Space-Limited High Availability New York City Organizations**

At Rockefeller University in New York City, data center space is scarce. So when their current data center needed to move into a new space – totaling 1,000 sq. ft. – project managers were forced to think outside the box to strategically maximize the area. The result is a high-density facility enabled by supplemental cooling that helps maintain 24 x 7 availability of academic, administrative and research computing equipment. Across town, operations never cease for a global financial services giant. When blade servers were deployed at this bank's Manhattan facility, not only did computing capacity and speed rise, so did blade-related heat issues and the risk of downtime. This case study presentation will focus on how innovative supplemental cooling strategies are enabling success for both organizations. Presenters will also touch on supporting power and monitoring solutions that have made these high density – and high availability – computing environments possible.

**Lennart Stahl**

*Senior Product Manager  
Liebert Solutions, Emerson Network Power*



**Stuart Cohnen**  
*Data Center Manager*  
*Rockefeller University*

**Mark Gerard**  
*President*  
*DP Facilities*

## 2:45 P.M.

### Current Trends in Data Center Design and Construction...

Holder Construction has completed the construction of over 80 major Data Center Projects in the last 10 years and has maintained a database of all the Design and Construction issues associated with each of these projects. In this session we will share information from this database regarding what decisions Owners have made regarding critical Design and Construction issues associated with their Data Centers. This session will review the statistics regarding the different decisions made by Owners regarding structural, architectural, mechanical, fire protection, electrical, controls and security systems on their projects. This session will also provide some insight regarding why the decisions were made for the various data center facilities. The projects in this database were for Owners from numerous fields including financial institutions, insurance companies, internet providers, communications companies, and other corporate users.

**Rick Morgan**  
*Senior Vice President*  
*Holder Construction*

**Tony TeVault**  
*Vice President, MEP Services*  
*Holder Construction*

**BJ Butler**  
*VP, Senior Asset Manager*  
*Citigroup*

## 3:45 P.M.

### Refreshment Break

## 4:15 P.M.

### CONCURRENT SESSIONS

#### Breakout A: Continuous Cooling – The Realities Behind the Concept

As the average power density in data centers continues to rise over time; maintaining control of the computer equipment cooling environment in the event of a facility power outage has become more challenging. Continuous cooling is not often set as a design requirement and presents a cost burden for many high density data centers without an industry accepted and documented design rationale for its use. The purpose of this presentation is to: identify at what

load densities facilities cross over and require continuous cooling; look at the realities of how fast cooling systems can be restarted on stand-by power; based on the above, provide a design basis for sizing of continuous cooling systems; present practical design solutions of continuous cooling systems to minimize cost and maintain reliability; identify the cost metrics of thermal storage and serving mechanical systems from UPS power. The investigation into the need for continuous cooling will be supported by a truly transient Computational Fluid Dynamic (CFD) model. This perspective will be a unique view into the transient data center environment not commonly seen in the industry. The results of this transient model will be presented at various load densities to give the audience a sense of scale of the issue and potential problem. The model will document temperature build-up in the data center while IT equipment is operating on UPS power and before the cooling systems are restarted which will lead into when and where continuous cooling is really needed. The remainder of the presentation will document cost effective solutions based on real time experiences.

**Paul Leonard**  
*Engineering Design Principal*  
*KlingStubbins*

**Gerard Murray**  
*Engineering Design Principal*  
*KlingStubbins*

#### Breakout B: Practical Methods of Managing Data Center Cooling

The presenter will cover best practices of managing data center cooling and provide practical methods of proactively managing cooling load growth. Topics covered include how to: size data center cooling and distribution; create flexibility; manage growth from 10 to 100% load; measure air flow and detect air flow shortages. This presentation will explore the value and approach to integrated system testing (IST) methodologies as well as key areas for minimizing energy expenses including the importance of humidity control and temperature control (cooling towers, chillers, Chilled Water, return air). Existing data centers will be explored from the standpoint of applying lessons learned. The future will be touched on anticipating how to respond to VM Ware – variable flow proposition. This presentation will be interactive allowing participants to discuss their own specific issues and receive possible solutions.

**Dennis Kniery**  
*Vice President, Corporate Facility Operations – HVAC*  
*Countrywide*



**Breakout C: Integrating Clinical Systems Informatics to Improve Patient Care**

Hospital administrations today are incorporating the latest technology from building systems monitoring to electronic billing to Clinical Systems Informatics Integration (CSII). Advanced technology means getting all of a hospital's clinical and diagnostic equipment to communicate, ultimately driving hospitals to build sophisticated mission critical data centers. Using one of Gilbane Building Company's recently completed projects at Civista Medical Center in La Plata, Maryland, as a case study, this presentation examines the impact that these advanced systems have on buildings and how healthcare clients can prepare to budget and integrate these innovative technologies.

**Melanie Townshend, LEED**

*Project Executive  
Gilbane Building Company*

**Linda Minghella**

*Director of Information Technology  
Civista Medical Center*

**Dennis Cronin**

*Principal, Mission Critical, Center of Excellence  
Gilbane Building Company*

**6:30 P.M. – 10:00 P.M.**

**ROADHOUSE RANCH**

**Rodeo & Biker Barbeque**

Saddle up cowboys and girls as a night of rip roaring entertainment is in store for all those adventurous enough to join *7x24 Exchange International* at "Circle R Ranch" during the 2007 Fall Conference. There is no better place than Texas to get a custom tattoo, ride the mechanical bull, try your hand at Texas hold 'em, black jack, roulette and experience a full blown live rodeo while you chow down on Circle R's authentic "Texas Road Kill Buffet". Upon arrival at the Ranch our attendees will be greeted by a line up of custom choppers and Harleys that would make anyone's head turn. Belly up to the oxygen bar for some free breathin' and watch out for those butt sketch artists, you never know when they're drawin'. All this while the Roadhouse Ranch band sings your favorite country songs.

Never fear we did not forget it is Halloween Eve so the Circle R "Haunted Maze" will be open for anyone who dares...

**SEE Y'ALL ON THE RANCH!**

*Special thanks to the following organizations for making this event possible:*

**ABB, APC-MGE, ASCO Power Technologies, ComRent, Cummins Power Generation, Cyberex, Data Aire, Data Space Advisors, Eaton, Emerson Network Power, Kohler Power Systems, Mitsubishi Electric, MTU Detroit Diesel, PDI, Russelectric, SIEMENS, Starline Track Busway, TAC**

**WEDNESDAY,  
OCTOBER 31ST**

**7:00 A.M.**

**Breakfast**

**8:30 A.M.**

**Opening Remarks**

Bob Cassiliano will review highlights from day two and address housekeeping items of interest.

**8:45 A.M.**

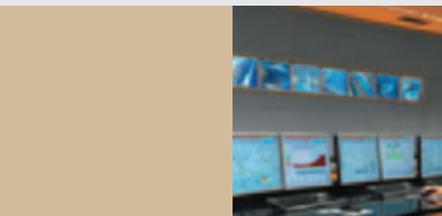
**Keynote: IBM – Can Mission Critical Servers and Storage be Green?**



What makes IT equipment green? All equipment uses energy and must be cooled. There are shades of greenness when it comes to environmentally "friendly" equipment. Some practices are NOT green and need to be avoided if energy or environmental responsibility matters. Being green just does not happen. Green can be designed and planned into mission critical solutions. Green first needs to be designed into components and their packaging, subsystems (processor, memory and I/O) and at the systems level. Next solutions and technology should be used enhance green servers and storage from reliability and energy efficiency perspectives. There are green mission critical systems that can serve as examples for organizations to follow. With green initiatives many examples can be starting points for future energy savings with reliability. Beginning with the end in mind it is possible to have green Mission Critical Servers and Storage.

**David F. Anderson, PE, PMP**

*Systems Team Leader  
IBM Poughkeepsie Briefing Center*



**9:45 A.M.**

**Refreshment Break**

**10:15 A.M.**

**Lawrence Berkeley Lab – US Government Programs to Advance Data Center Energy Efficiency**

The U.S. DOE and EPA are coordinating on complimentary programs focused on data centers and the IT equipment they support. This presentation will describe the goals and objectives of the programs along with on-going and near term activities. The DOE *Save Energy Now* program is incorporating data center systems into the very successful program that is identifying large energy saving potential in US industrial plant systems. This program includes data center assessments involving assessment tools, best practices identification, demonstrations of new technology and more. EPA is coordinating with DOE and the EPA program will utilize assessment data obtained through the DOE *Save Energy Now* program in the *Energy Star Buildings* program. EPA is also proceeding on a two phased investigation to develop Energy Star requirements for servers.

**William Tschudi**  
*Program Manager*  
*Lawrence Berkeley National Laboratory*

**11:15 A.M.**

**Business Continuity Improvements through Real-Time and Very Early Warning Environmental Systems**

This session describes the mounting environmental risks facing the data center and new methods and technologies available to mitigate and manage them. Traditional building-based fire detection, control, evacuation and suppression solutions, and new asset and process-specific methods are described and compared. The session illustrates the advantages of the new methods in providing business continuity with a focus on very early warning smoke detection and sophisticated remote monitoring of the environment. The Air-sampling Smoke Detection systems used to protect the Gaylord Texan are used as a case study for the flexibility and performance of modern approaches to business continuity.

**Scott Wilson**  
*Segment Marketing Director*  
*Xtralis*

**12:15 P.M.**

**Conference Adjourns**



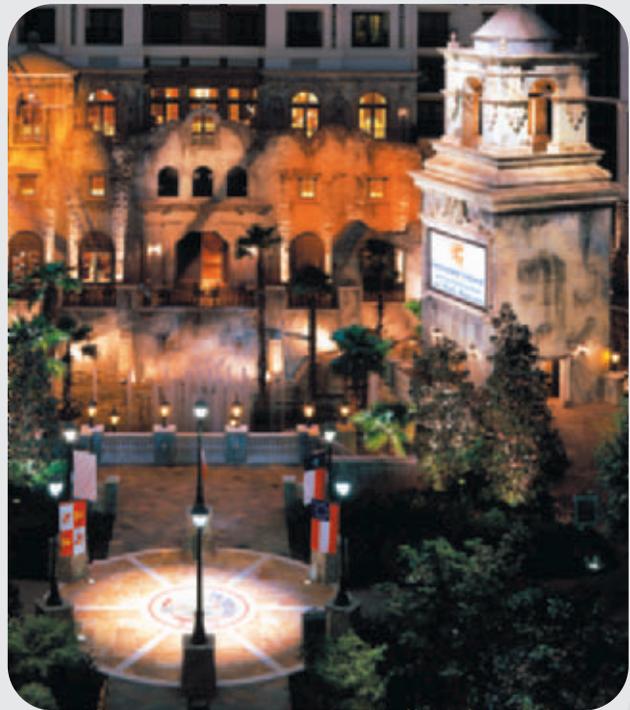
## WHAT MEMBERS ARE SAYING

*“The networking opportunity combined with great keynotes and educational sessions is what makes 7x24 the best.”*

*“Presenters provide a wealth of knowledge with many takeaways”*

*“Each conference gets bigger & better”*

*“I enjoy the mix of attendees at 7x24 conferences.”*



## TWO QUICK STEPS TO REGISTRATION:

### 1. CONFERENCE REGISTRATION

Complete a Conference Registration Form for each participant, on-line or mail or fax a copy of the Conference Registration Form on page 11 to:

**7x24 Exchange**  
322 Eighth Avenue, Suite 501  
New York, NY 10001

**Phone:** 646-486-3818  
**Fax:** 212-645-1147

[www.7x24exchange.org](http://www.7x24exchange.org)

To guarantee early bird rate, registrations must be received by September 28, 2007.

### 2. HOTEL RESERVATIONS

Take advantage of *7x24 Exchange's* special rates at the Gaylord Texan Resort:

**ONLINE:** Visit [www.gaylordtexan.com](http://www.gaylordtexan.com). On the right side of the home page in the *Related Pages* section click on *Room Only Reservations*. Select the preferred dates and enter **C-EX07** into the special offer/group code box. This will take you to the 7x24 reservations page to confirm your reservation.

**PHONE:** Call for reservations 866-782-7897 and ask for the *7x24 Exchange* Conference room rate of \$205/night.

Room rates are not inclusive of tax and a \$10 resort fee. The resort fee covers high-speed internet access in each guestroom, transportation to Grapevine-area attractions, bottled water (2 per room, per day), daily newspaper, access to the resort's state-of-the-art Fitness Center, local phone calls up to 20 minutes (10¢/minute thereafter), toll-free and credit card calls up to 20 minutes (10¢/minute thereafter).

Please Note: Room reservations are available on a first-come, space-available basis. Space permitting, this block will be available until September 28, 2007. Register for the conference and make your hotel reservations early, as this block will likely sell out. Previous *7x24 Exchange* conference room blocks have sold out. *7x24 Exchange* is not responsible for matching rates or finding additional rooms once this block is sold out. *7x24 Exchange* makes every effort to reserve the appropriate number of room nights for attendees. In the event of a sell out *7x24 Exchange* will recommend nearby accommodations.



### VENDOR/CONSULTANT POLICIES & PROCEDURES

#### Information Tables and Pop-Up Displays

All vendors and consultants are encouraged to participate in *7x24 Exchange*.

However, the group is primarily driven by user interest. Tables are provided at the conference for the distribution of product literature, educational material and other useful information at no cost. Display signs are not permitted on literature tables. Overt selling at *7x24 Exchange* meetings and the use of *7x24 Exchange* membership lists for direct selling are prohibited.

Conference sponsors at the Key level or higher will be permitted to occupy one full six foot table for literature and/or a pop up display at no cost. Non sponsoring companies can set up pop up displays for a fee.

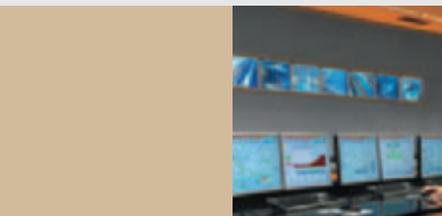
If you wish to coordinate a display please contact Brandon Dolci at 646-486-3818. All displays **MUST** be registered with *7x24 Exchange* by October 19th and accompanied by one full conference registration by a representative of the company.

#### Hospitality Events

Hospitality events/demo rooms are permitted on Monday, October 29, 2007 between the hours of 6:30PM and 10:30PM. All hospitality event hosts must be a Key member of the *7x24 Exchange* Corporate Leadership Program (CLP). In order to be recognized by *7x24 Exchange* vendors must complete an event registration form.

As always, hosting a hospitality event gives vendors, direct access to the conference attendees and provides the opportunity to promote products and services in an enjoyable relaxed environment.

If you are interested in hosting an event on Monday, October 29, 2007, please contact Brandon Dolci at 646-486-3818 x 108 before October 8th.





# CORPORATE LEADERSHIP PROGRAM PARTNERS

(at press time)

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