

2011 FALL CONFERENCE

www.7x24exchange.org



The end-to-end reliability forum.



End-To-End Reliability | Mission Critical Facilities

LEVERAGING INNOVATION

November 13-16, 2011 | Arizona Biltmore | Phoenix, AZ

Register before October 14th to have a chance to win one of three new **SONY Tablet S**



from end-users to service providers to equipment manufacturers in both formal and informal sessions, the experience is rewarding and enjoyable for all. 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 corporate 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. Attendees are also able to participate in 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. CEU credits are also available.

WHAT IS 7X24 EXCHANGE?

The *7x24 Exchange* is the leading knowledge exchange for those who design, build, operate and maintain mission critical enterprise information infrastructures. We are a not-for-profit organization seeking to promote dialog among industry professionals to address the many challenges facing owners and operators of these facilities. In addition to the ever present challenge of maintaining and improving end-to-end reliability; addressing the challenges of energy efficiency and sustainability and the potential for increased regulatory oversight have become a major focus of our membership.

The organization was founded on the assumption that professionals involved with data center uptime and operational issues often work in isolation when dealing with strategic, technical, budgetary, regulatory, and career issues. This often results in expensive, time consuming, and, sometimes, painful trial and error efforts. *7x24 Exchange* members work together to advance the state-of-the-art by sharing best practices, lessons learned, and evolving strategies to address the challenges of infrastructure reliability and industry leading energy efficiency. Armed with this information members are enabled to proactively communicate, to technical peers, non-technical team members, clients and corporate management, the solutions necessary to drive operational efficiency and protect their companies' information lifelines.

THE GOAL OF 7X24 EXCHANGE CONFERENCES

The field of mission critical operations continues to evolve. Before its founding in 1989 as the Uninterruptible Uptime Users Group, learning how to deal with reliability and operational issues largely resulted from individual trial and error. Continuing this random rate of reliability improvement increasingly restricts the potential productivity of the large and rapidly growing investments in computer and communication infrastructure. Adding to the challenge has been the rapid growth in energy demand and the ever increasing cost of energy. With 7x24 operations now more common, how much higher will availability requirements be in five years? How much will these facilities cost to operate? How will environmental and regulatory concerns impact operations? How can cost effective, reliable responses be assured? 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 the *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, equipment and tools. Open dialogue between attendees and presenters is encouraged throughout. Further, by involving the many specialists

First-time attendees often discover that many companies face similar, if not identical, technical and organizational challenges in their quest for higher availability levels. *7x24 Exchange* conferences provide insights into what is being planned and executed 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 cases that have been successful elsewhere.

WHAT IS A TUTORIAL SESSION?

7x24 Exchange has been offering tutorial sessions for many years. These tutorials are designed to deliver value to a broad range of participants. Whether your need is advanced training on a specific topic of the day or a refresher course on fundamental concepts, there is a tutorial that will meet your need. Almost all of the *7x24 Exchange* general session presentations are geared towards those with an advanced understanding of the concepts that will be presented. The tutorials are intended to complement the Monday through Wednesday general session presentations and help each attendee deepen their level of comprehension.

LEVERAGING INNOVATION

2011 FALL CONFERENCE

**SUNDAY
NOVEMBER 13**

10:30 A.M. – 9:00 P.M.

Registration

10:00 A.M. – 1:00 P.M.

ASHRAE: Greening of Your Data Center: Deploying Wider Temperature Limits, Free Cooling

There are plenty of opportunities to save energy in data centers. Data centers are using an increasing amount of the total energy used by commercial facilities. However, these increases have a downside in that they have caused a significant increase in the power required and the heat dissipated by the computing equipment, such that it is becoming very difficult to power and cool these systems in data centers or telecommunications rooms. This workshop examines the best practices for data center energy efficiency by focusing on thermal guidelines for data processing and using technologies such as free cooling. Participants will gain an understanding of equipment environment specifications while learning methods for measuring performance and developing means to evaluate effectiveness of data center cooling.

Strategies for optimizing the air temperature should begin with control of the supply air temperature as opposed to return air. The new 2011 ASHRAE environmental envelopes will be described. At the micro-level, IT equipment heat dissipation is controlled by board level thermal management devices (fans & heat sinks) such that the inlet air temperatures to the equipment becomes the determining factor for keeping equipment within thermal operating tolerances. In addition, supply air bypass into the return airstream and thermal gradients across the height of the rack structure further distance return air temperature from efficient supply air performance. Relocating control



components from a return air location to the supply will allow discharge air temperatures to be optimized based on both IT equipment cooling requirements and mechanical refrigeration energy consumption. Increased supply air temperatures to the IT equipment may also extend the number of hours of free cooling/economizer availability. These opportunities can encompass simplistic system architectures using remote dry coolers or more complex systems with central chilled water plants.

Attending this workshop will help attendees to make an immediate impact on data center energy consumption.

Roger R. Schmidt, P.E.

IBM Fellow and
Past Chair
ASHRAE TC 9.9

Don Beaty

President
DLB Associates and
Past Chair
ASHRAE TC 9.9

2:30 P.M. – 5:00 P.M.

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.

6:00 P.M. – 9:00 P.M.

Welcome Reception

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Join us for a buffet reception with open bar accompanied by entertainment. 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.

Questions? call 646.486.3818 www.7x24exchange.org

LEVERAGING INNOVATION

2011 FALL CONFERENCE

MONDAY NOVEMBER 14

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: Leadership That Leaves a Legacy...

In a military career that spanned almost four decades, culminating in his assignment as the principal military advisor to two Presidents, and with almost ten years of corporate leadership experience, General Hugh Shelton speaks about leadership principles that will enable individuals in any profession to leave a positive leadership legacy. One of the leading military figures of our time, General Shelton served two terms as Chairman of the Joint Chiefs of Staff under Presidents Bill Clinton and George W. Bush. Shelton was the chief architect of the military response to the September 11th terrorist attacks, and has served in numerous capacities for the army during the Vietnam and Persian Gulf Wars. A Congressional Gold Medal honoree who was also knighted by Queen Elizabeth, General Shelton speaks with superlative expertise and authority on national defense, security issues, and crisis management. A highly respected military speaker, he guides audiences through the world's hot spots, and addresses the challenges facing America and her allies. General Shelton recently released *Without Hesitation: The Odyssey of an American Warrior*, which Amazon calls "a powerful, unvarnished memoir." His book, *Secrets of Success*, a compilation of interviews with men and women focused on values-based leadership, was released in 2009.



General Hugh Shelton

Fourteenth Chairman of the Joint Chiefs of Staff

9:30 A.M.

Refreshment Break

10:00 A.M.

PANEL: The Hunt for Talent

When speaking of successful data center operations, all too often the focus is on the latest technologies and practices. We often forget that to get things done you need people with vision, leadership skills, and the tenacity to execute. This panel of industry leaders will discuss the people qualities they believe are essential to the success of a data center operation.

Moderator:

Dave Ohara

Data Center Meme

Green M3

Panelists:

Mike Manos

Senior Vice President, Technical Operations

AOL

Jack Glass, P.E.

Director – Data Center Planning

Citi Technology Infrastructure

Joe Kava

Senior Director – Data Centers

Google

11:00 A.M.

The Green Grid: Data Center Maturity Model

The Green Grid has developed the Data Center Maturity Model (DCMM) and supporting white paper to outline capability descriptors by area such that users can benchmark their current performance, determine their levels of maturity, and identify the ongoing steps and innovations necessary to achieve greater energy efficiency and sustainability, both today and into the future. The maturity model touches upon every aspect of the data center including power, cooling, compute, storage and network. The levels of the model outline current best practices and a 5-year roadmap for the industry.

Harkeeret Singh

Global Head of Energy & Sustainable Technology

Thomson Reuters and

EMEA Technical Work Group Chair and

Advisory Council Member

The Green Grid

12:00 P.M.

Lunch and Networking

12:00 P.M.

End User Xchange Forum

Designed to encourage in-depth discussion and debate on the latest challenges in data center planning, design and operation, topics will include: trends in infrastructure design resiliency, energy efficient design and operational practices, capacity planning and management, and the day-to-day challenges in managing data center operations. The moderator will guide the discussion with the use of PowerPoint slides and handouts; however, the real star of this session will be you, the end user! Bring your appetites, but more importantly, be ready to engage your peers for an exciting interactive discussion on the latest challenges of our industry. Don't forget those business cards as this will be a great opportunity to meet your peers in the industry!

Moderator:

David Schirmacher

Chief Strategy Officer

Fieldview Solutions and

Vice President

7x24 Exchange

1:30 P.M.

AOL: Managing Disruption – A Data Center Love Story

With an onslaught of new technologies, approaches, regulation and the latest in "IT Fashion Trends" the job of leading innovation in the Data Center is becoming exceedingly complex. This session is focused on assisting the data center professional in navigating through the technical 'dating scene', cutting through the clutter and developing a program that makes sense for you.

Michael Manos

Senior Vice President, Technical Operations

AOL

2:30 P.M.

Create Your Own Sundae Break

3:00 P.M. CONCURRENT BREAKOUT SESSIONS

Breakout A: Understanding Battery Application in Today's Data Center

Battery application is a critical factor of data center design. With all the factors involved there are a myriad of critical questions and decisions. A successful design and implementation requires the cooperation of many individuals including users, designers and sellers. This presentation will provide the important questions to ask when initiating your project, including:

- How do I determine sizing and space requirements?
- Do I need a separate room for my batteries?
- What runtime is needed for the application, including end of life projections?
- What is the difference in 100% end of life and initial battery runtime?
- Is it 80% battery capacity or is it 80% of the runtime?
- What are the maintenance requirements/ procedures including monitoring?
- How do I start up and commission the system?
- How do I analyze the project's total cost of ownership analysis related to battery solutions? Specifically to scalability, life of product and space/containment requirements.
- How do I know my batteries are recyclable?
- Do I meet all the latest national and local code requirements?

Doug Dethmers

National UPS Sales
Deka Unigy

Breakout B: Site Selection, Incentives and Sustainability: A Development Lawyer's Perspective

Selecting a data center location with real sustainability features and low long term TCO potential is becoming more important than ever. Utility regulation, power procurement strategy along with local incentive offerings can profoundly impact your ability to achieve these goals. Qualitative assistance from legal counsel early in your site selection process can help you avoid potential missteps. This session, led by a highly experienced development attorney who deals with these and other issues, will share approaches he is using to manage the issues you confront with site selection, incentives and sustainability.

James W. Grice

Partner & Leader, Project Solutions Group
Spencer Fane Britt & Browne LLP

Breakout C: The Cloud and the Availability Spectrum

The potential of cloud computing to reduce recovery time and achieve better utilization of resources dedicated to disaster recovery has tantalizing appeal for businesses wanting to improve their resilience. The problem is, expectations are often misaligned with the selected technologies or the path of getting from the current infrastructure to one that is truly capable of both fail-over and fail-back in the event of an actual disaster. Progressing companies are often forced to learn painful lessons by piloting new systems: cloud first or disaster recovery first? Is there a path that can embrace both? How do we find out what we don't know to ask? Yan Ness from Online Tech shares the questions, challenges, and solutions generated during Online Tech's own migration from "offsite backup" to true Active-Active availability with a cloud/disaster recovery infrastructure capable of continuity in a meaningful, realistic manner.

Yan Ness

CEO
Online Tech

4:10 P.M.

Vendor Knowledge Exchange

Platinum and Gold partners of the Corporate Leadership Program will present informational sessions on various products and services.

Presentations will be given by:

**ABB, Caterpillar, Cummins
Power Generation, Cyberex,
PDI, S&C Electric, Schneider
Electric, Siemens, Syska
Hennessy Group**



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**TUESDAY
NOVEMBER 15**

7:00 A.M.

Breakfast & Registration

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

MTechnology: Hidden Threats to Data Center Reliability

Steve Fairfax and his team at MTechnology have been performing detailed analysis of data center power and cooling systems since 1996. MTech probabilistic risk assessment tools have been used on data center design, commissioning, operations, and upgrades. MTech's work examining the costs and risks associated with preventative maintenance and testing allows its clients to lower operating costs while significantly increasing data center reliability.

In this presentation, Steve Fairfax will highlight several common but rarely recognized threats to data center uptime. These threats have been identified in multiple reliability analyses MTech performed for different clients in different locations.

One threat poses such an extraordinary hazard to critical facility uptime that Steve feels an obligation to inform the *7x24 Exchange* membership. The threat is severe, and is present in nearly all modern data centers. Steve and the MTech team have spent months checking and re-checking the logic, math, and data. It's time to let others check the work and point out any errors. The threat is extraordinary, the analysis compelling.

Steve Fairfax

President
MTechnology

10:00 A.M.

Refreshment Break

10:30 A.M.

Deutsche Bank: ECO Data Center

Due to Deutsche Bank's commitment to being as energy efficient and sustainable as possible, Deutsche Bank is pioneering new designs and methods, and developing concepts that are new to the banking industry, and the wider community. Deutsche Bank wanted to develop a prototype data center space that would achieve the highest energy savings of all their facilities. AKF Group worked side by side with Deutsche Bank evaluating several cooling schemes as well as developing associated CFD models to evaluate the potential of each scheme. Ultimately, AKF recommended a high-density, low Power Usage Effectiveness (PUE) Data Center – a solution that is more commonly used in wide-open spaces and in climates such as the Pacific Northwest or Canada. This presentation will explain the process used and the benefits of designing and building a modern air-side economizer system in an existing building and in an urban environment.

Glen Neville, P.E., LEED AP

Director
Critical Systems/Energy & Utility Management
Deutsche Bank/Jones Lang LaSalle Americas, Inc.

Robert Gibson, P.E.

Partner
AKF Group LLC

11:30 A.M.

EPA: Enabling Energy Savings in Data Centers with ENERGY STAR

The ENERGY STAR program has an array of tools that data center operators can use to improve their energy efficiency and gain national recognition for their efforts. On the product side, energy efficiency specifications are under development to help identify and label efficient servers, UPS systems, storage systems, and other data center products. Whole data centers can also apply for the ENERGY STAR label to receive national recognition of their energy efficient status. Additionally, the ENERGY STAR website contains information to assist operators in identifying facility-level energy savings. This presentation will include an update on ENERGY STAR's programs and status, plus estimated cost savings from adopting ENERGY STAR labeled products in data centers.

RJ Meyers

Data Center Product Lead
US EPA, ENERGY STAR

12:00 P.M.

Lunch and Networking

1:30 P.M.

Facebook: Open Compute Program (OCP)

This session will cover the basics of the OCP data center MEP architecture, initial lessons learned from the first deployments, and some areas interest for future R&D efforts (Generator less data center design and High Voltage DC distribution system design)

Thomas Furlong

Director, Site Operations
Facebook, Inc.

Jay Park, P.E.

Director, Data Center Design and Construction
Facebook, Inc.

2:30 P.M.

Refreshment Break

3:00 P.M.

Uptime Institute: Global Data Center Concerns Affecting the North American Market

Uptime Institute works with data center owners and operators in countries all over Europe, the Middle East, Asia and Latin America. Some of the challenges facing those data center operators are region-specific, but some issues may impact data center professionals in the United States. Pitt Turner, Uptime Institute Executive Director, will present findings on international standards and compliance issues, innovative design solutions, and other data center best practices from a global perspective.

W. Pitt Turner IV, P.E.

Executive Director
Uptime Institute, LLC

4:00 P.M.

CONCURRENT BREAKOUT SESSIONS

Breakout A: Emerging Challenges with Hot/Cold Aisle Fire Protection

Hot/cold aisle energy saving designs for data centers has created a significant amount of confusion regarding fire detection and suppression.



Additionally, manufacturers of hot/cold aisle systems add to this uncertainty by trying to develop what they feel are fire protection solutions that address these problems. Unfortunately, most of these manufacture driven fire protection solutions do not meet current NFPA code requirements, nor do they have UL or FM approvals. Dealing with these unique fire protection challenges is not difficult if one first clearly understands the potential problems prior to designing a solution. You will leave this session knowing what the real issues are and how to specifically overcome them.

Lee Kaiser, P.E., F.P.E.
Engineering Manager
Orr Protection

Breakout B: Securing Power Systems from Cyberattacks

Communications networks are being widely deployed to enable the smart grid; however, they also increase a power system's vulnerability to cyberattacks. NERC has created the CIP standards to address how to protect cyberassets used on the electric utility grid. This presentation describes how utilities supplying mission-critical facilities can harness the innovation of the smart grid while defending against cyberattacks. It touches on some examples of threats against control systems and which compliance efforts for NERC CIP are worthy of consideration for a broader audience. It also provides prudent, practical cybersecurity recommendations for mission-critical facilities to implement in their power systems.

Tyson Salewske
Mission Critical Facilities Marketing Manager
Schweitzer Engineering Laboratory

Breakout C: Phoenix NAP Modularity: From Conception to Execution and Beyond

Interested in applying modular concepts to enhance and expand your business to new markets around the country or around the globe? This presentation outlines both the business and technical aspects surrounding how to effectively and efficiently employ a modular design strategy.

As Phoenix NAP, a premier data center facility and primary network access point (NAP) for the Phoenix, Arizona metro region, continues to expand its infrastructure and business model through modularity, lessons learned from Phase 1 of Phoenix NAP's expansion process will be discussed; and how its modular methodology has enabled it to successfully transition into a leading IT solutions provider and accommodate future expansion plans.

You are invited to join this interesting conversation on the realities and opportunities modular infrastructure concepts present to the ever evolving global business marketplace.

Iam McClarty
President
Phoenix NAP

Sam Macrane
North American Sales Manager
Daikin-McQuay Solutions



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6:30 P.M.
AN EVENING AT



Arizona's finest Mexican rodeo and fiesta destination! Created to keep Mexican heritage alive, its beauty, fun and flair are remembered by all who visit. The ranch, owned and operated for over twelve years by Felix Corona of Guadalajara, Mexico, clearly represents the family's experience with rodeos and horses. During a festive dinner reception, 7x24 Exchange guests will catch a glimpse of the sun setting on the vistas of colorful cacti as you sip your favorite cocktail, taste tequila, visit with a cigar aficionado while enjoying a hand rolled cigar and participate in many activities that will include a variety of casino games, Mexican games and musical entertainment...

After dinner, it's time for the Charreada. This fabulous Rodeo Show highlights the most exciting portions of both Western Rodeo and a Mexican Charreada. The Charreada (Mexican Rodeo) consists of several different feats of Horsemanship including Riding, Roping, Accuracy, Courage and Style. The Western portion showcases the two most exciting events that made Rodeo great...Western Style Wild Bull Riding and Western Style Wild Bronco Riding.

But that's not all folks...for those who have some cowboy in them there will also be an opportunity for 7x24 Exchange guests to participate in a few fun filled rodeo contests on the main stage...so don't be shy and step right up...we know you always wanted to ride that wild bull...



This event has been made possible thanks to the following partners:



WEDNESDAY NOVEMBER 16

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

Intel: The Challenges and Opportunities of Mission Critical Computing

Mission critical computing continues to be an important strategy for IT departments throughout the world. IT managers demand enhanced, energy-efficient performance and the ability to optimize and scale computing environments to maximize server utilization to workload while providing headroom for growth. The challenges facing mission-critical computing environments can feel like a rock and a hard place. The rock: exploding data volumes, expanding requirements to serve your customers online, supporting a continuous stream of social interactions and mobile transactions, and the need to turn data into actionable business knowledge and wisdom. The hard place: flat budgets, inflexible and aging infrastructure, expensive maintenance contracts, and enterprise software innovations that have moved away from low-volume proprietary server hardware solutions. This session will focus on the latest in mission critical computing from challenges faced by IT managers to best practices and successful strategies. IT managers will have an opportunity to raise questions and receive candid insights from an expert on mission critical computing.

Pauline Nist

General Manager, Mission Critical
Intel

9:45 A.M.

Refreshment Break

10:15 A.M.

Optimizing Cloud Uptime: Data Centers and the Hybrid Cloud

The distributed cloud computing model has many advantages. It enables organizations to have cloud infrastructure at various data centers instead of one cloud at one data center. This presentation will cover the benefits of the distributed hybrid cloud, such as:

- Defining the distributed cloud: what is it, and how does it differ from the traditional cloud model?
- Costs are reduced significantly since one big Internet pipe is not needed.
- Centralized clouds vs. distributed clouds for global expansion: Why data needs to stay in region, performance and latency issues and costs.
- "Mini" clouds vs. "Big fat clouds": which one is right for you?
- Why everyone wins with a distributed cloud model:
 - Hardware suppliers are happy because customers buy smaller pipes at more facilities
 - End users receive better service because data is closer to them, less latency and performance issues, better security
 - Potential cost savings for businesses since they are not buying big pipes, but smaller pipes.

This presentation will also give best-practices on choosing a distributed cloud connectivity partner:

- Strategic locations: are their cloud connection centers where you want to be?
- Security: are their cloud connection centers safe, SAS 70 certified, etc.?
- Connections: are their cloud connection centers carrier neutral, cloud neutral, and give you the choices you need to keep uptime high and service optimal?

Darryl S. Brown

Director of Cloud, SaaS and Media
Telx

George Karidis

Chief Strategy Officer
Soft Layer



11:15 A.M.

Planning the Key to Replacing Critical Cooling in a Live Data Center

Security concerns after 9-11 required a major financial institution to overhaul and expand the capacity of its only mega data center outside NY City. The project required the end of life replacement of a chiller plant, all CW & Condenser piping, cooling towers, water storage tanks and CRAH units in an operating 91,000 sqft raised floor site outside Washington DC. This project was high risk, since the site was fully occupied during the construction. This session will detail the extensive planning for work that was done, how risk issues were mitigated and coordinated with the user and other difficulties involved in executing the work in a live site.

William B. Holmes, P.E.

Vice President of Critical Infrastructure
Byte Grid Holdings, LLC

William W. Sherwin, P.E.

Consulting Engineer

12:15 P.M.

Conference Adjourns



Questions? call 646.486.3818 www.7x24exchange.org

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 next page to:

7x24 Exchange

322 Eighth Avenue, Suite 501, New York, NY 10001

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

www.7x24exchange.org

To guarantee early bird rate, registrations must be received by October 14th.

2. Hotel Reservations

To take advantage of *7x24 Exchange's* special rates at the Arizona Biltmore you can visit the conference website at www.7x24exchange.org to make an online reservation, or call 1-800-950-0086 request group code 7x24 and ask for the *7x24 Exchange* Conference room rate of \$209/night for a single or double plus tax. Upon arrival and departure a \$6 charge will be billed to each guest room for portage/bellman gratuity and a \$3 per day charge will be added for the room attendant. The nightly resort fee has been waived for *7x24 Exchange* attendees. Your room rate includes guest room internet, entry to the spa & fitness center, unlimited local calls, long distance access fees, no charge for credit card, toll free or collect calls, Biltmore Fashion Park shuttle and newspaper each morning.

Please Note: Room reservations are available on a first come, space-available basis. Space permitting, this block will be available until October 21, 2011. 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, finding additional rooms or providing transportation 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 sellout *7x24 Exchange* will recommend nearby accommodations.



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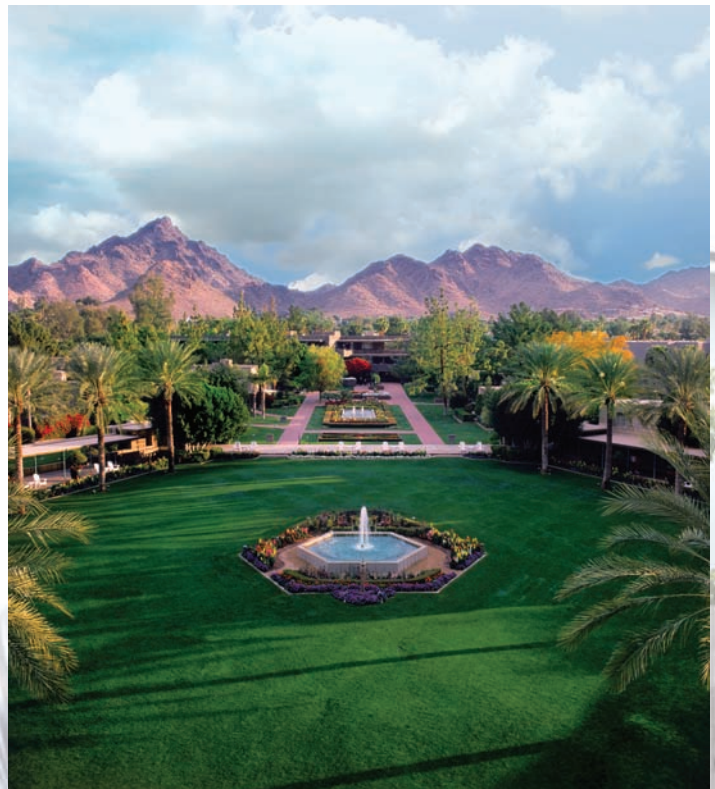
Information Tables

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.

Hospitality Suites

Hospitality suites/demo rooms are permitted on Monday, November 14th between the hours of 6:30PM and 10:30PM. All hospitality suite hosts must be a Silver Partner of the *7x24 Exchange* Corporate Leadership Program (CLP). In order to be recognized by *7x24 Exchange* vendors must complete a suite registration form.

As always, hosting a hospitality suite 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 a suite on Monday, November 14th please contact Brandon Dolci at 646-486-3818 x108 before October 14th.



2011 FALL CONFERENCE REGISTRATION FORM: PLEASE PRINT OR TYPE CLEARLY

Name:

(Informal Name/nickname for badge)

Position/Title

Company

Address

City

State

Zip

Phone

Fax

E-mail

CONFERENCE FEES:

	Early Bird Discount through October 14th	After October 14th
END USERS		
Member:	\$1,200	\$1,400
Non-member:	\$1,400	\$1,700
CONSULTANTS/VENDORS		
Member:	\$1,500	\$1,800
Non-member:	\$1,800	\$2,100

PAYMENT METHOD:

Check enclosed

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RETURN THIS FORM TO: *7x24 Exchange*
322 Eighth Avenue, Suite 501, New York, NY 10001
Phone 646-486-3818 • Fax: 212-645-1147
Registration is also available online at
www.7x24exchange.org

DO YOU PLAN TO ATTEND?

SUNDAY 10:00 A.M. - 1:00 P.M.

Greening Your Data Center Yes No

SUNDAY 2:30 P.M. - 5:00 P.M.

Fluid Mechanics Yes No

SUNDAY 6:00 P.M. - 9:00 P.M.

Sunday Evening's Buffet Reception Yes No

If yes, do you plan to bring a guest? Yes No

Name of guest:

A guest is a spouse/significant other, friend or an adult child (18 and over) who is not in an industry related occupation. Co-workers or associates in the industry may not use the guest registration category and are required to submit a separate registration form. Guests are invited to attend the Welcome Reception, Monday Morning Keynote, Hospitality Suites, the Vendor Sponsored Event and Wednesday Morning Breakfast.

MONDAY 3:00 P.M. - 4:00 P.M.

Breakout A: Battery Application Yes No

Breakout B: Legal Issues Yes No

Breakout C: Cloud and Availability Spectrum Yes No

TUESDAY 4:00 P.M. - 5:00 P.M.

Breakout A: Hot/Cold Aisle Fire Protection Yes No

Breakout B: Securing Power Systems Yes No

Breakout C: Modular Expansion Yes No

Vendor Sponsored Evening Yes No

Do you plan to bring a guest? Yes No

Name of guest:

Other comments, suggestions:

Do you wish to receive membership information? Yes No

Check here if this is your first time attending a *7x24 Exchange* Conference

If yes, how did you hear about *7x24 Exchange*?

The conference registration fee covers conference sessions and activities, handout materials, Sunday's reception, lunches and breakfasts on Monday, Tuesday and Wednesday. Participants are responsible for all other expenses, including guest meals, transportation and hotel accommodations. The dress code is business casual. Cancellations received by October 14th will be refunded, less a \$150 handling fee. There will be no refunds after October 14th. However, substitutions of company participants may be made at any time.



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