

2017 FALL CONFERENCE

SHAPING

END-TO-END RELIABILITY: MISSION CRITICAL FACILITIES

THE FUTURE

OCTOBER 15-18, 2017

JW MARRIOTT DESERT RIDGE, PHOENIX, AZ

Register by September 22nd for a chance to win an Amazon Echo Show



The end-to-end reliability forum.™

www.7x24exchange.org

What is 7x24 Exchange?

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 dialogue 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 **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 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.

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 **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.



SUNDAY OCTOBER 15TH

11:00 A.M. – 9:00 P.M.

Registration

1:30 P.M. – 2:30 P.M.

Tutorial Session: Protecting Your Cloud with Mist

High-pressure water mist is an advanced fire protection alternative. For future data centers, data is the “new oil” that keeps businesses running. The already enormous amount of data we produce and consume is growing exponentially every year. Businesses, organizations, and individuals have all become dependent on digital data. This has led to an increased demand for large data centers. A large data center contains dozens of server rows with hundreds of miles/kilometers of power and data cables connecting the servers online and to power sources. The energy density per rack has risen, so inevitably the fire risk is more significant.

Jonathan Ingram

Vertical Market Manager – Mission Critical
Kidde Fire Systems/Marioff North America



3:00 P.M. – 5:00 P.M.

Student Session: Data Center 101

In today's Data Center industry there's a high demand for qualified, trained professionals. With the ever changing Internet of Things (IoT), the IT and Facilities functions continue to converge, creating an increasing demand for skilled individuals to operate and maintain data centers. Many companies are currently seeking candidates with multiple skills in electrical, mechanical, computer science, application, cloud and network engineering expertise. Data Center 101 is designed to educate students about the happenings inside a data center and illustrate future opportunities. Students will learn about the various types of data centers, technology trends, networks, data center planning, industry standards, cooling, power, partnerships and a sustainable future. Join us to meet data center professionals, become involved in the mentoring program and advance your career in the data center industry!

Data Center 101 is aligned with 7x24 Exchange's commitment to STEM education.

James Coe

Senior Principal, Director of Critical Facilities
Syska Hennessy Group

Dennis Cronin

CEO
Resilient Solutions

Rich Garrison

Partner
Alfa Tech

Martin Gollwitzer

Regional Practice Leader, Critical Facilities
Gensler

Michael Swetz

Vice President, Enterprise Technology Services
State Street Bank

6:00 P.M. – 9:00 P.M.

Welcome Reception

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Join us for a reception with open bar and buffet dinner accompanied by music. 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.

MONDAY
OCTOBER 16TH

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.

The Xbox Story: Lessons in Leadership Strategy & Team Management

From garage-shop inception to ultimate business success, Robbie shares valuable insights from his journey innovating within Microsoft and leading the creation of one of the most successful business units of our time – the iconic Xbox and Xbox 360 gaming consoles. With expertise on strategy and leadership, Robbie outlines proven practices for any company to foster fruitful innovation. From his concept of “intrapreneurship” – driving innovation within a larger organization – to his 3Ps for success (Purpose, Principles & Priorities), Robbie explores how to utilize one’s existing resources and identify new tools and future trends to transform your organization before someone else ‘Ubers’ you.



Robbie Bach

Innovation Expert, Former Chief Xbox Officer for Microsoft & Author

9:30 A.M.

Refreshment Break

10:00 A.M.

Driving Business Results through Collaboration

Facebook’s disruptive and revolutionary strategy for meeting the demand for data centers challenges vendors to step up and be part of an open approach, one that requires the willingness to evolve toward transparency and teamwork. The presenters will show how their companies transformed a challenge into an opportunity for greater understanding, collaboration, and technological innovation. The presentation will outline how that transformation exemplifies a new way forward for the industry.

James Swensen

*Global Data Center Facilities Operator
Facebook*

Bill Westbrook

*Strategic Account Executive
Schneider Electric*



11:00 A.M.

Cloud and Colocation Trends, Buyer & User Behaviors Impacting the Design, Construction and Operation of Hyperscale and Mid-Market Data Centers

The cloud and colocation markets are seeing unprecedented levels of increasing demand from all sectors of the IT industry ranging from legacy enterprise operators ‘testing the waters’ to start-ups and innovators taking a cloud first, cloud only approach. Yes, each new client brings with them a host of new demands, systems architecture, and a bit of naiveté that adds complexity to the design, construction, and operation of commercial data centers.

Join us in this session to review the latest results and findings from the 2017 industry survey and put the results in perspective with real-world observations and practical experience in addressing the dynamic needs of real-world clients.

Phill Lawson-Shanks

*Chief Architect and VP Innovation
EdgeConnex*

Jack Pouchet

*Vice President Market Development
Vertiv*

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 in 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

*President
7x24 Exchange International*

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1:30 P.M.

Panel: Technology Advancements of Systems Integrations, Intelligent Analytics and Alignment with Mission Critical Market Trends and Needs

Colocation providers are receptive to new technologies and topologies that can improve power usage efficiency (PUE), availability, flexibility and scalability, while also reducing costs and time to market. The panel will provide discussion on the differentiation of enterprise versus colocation design, construction and operations. They will also explore continuing data center trends to simplify the power chain. Enabling power for the future and incorporating the latest technologies to support IoT will also be evaluated.

Moderator:

Dave Sterlace

*Global Head of Data Center Technology
ABB*

Panelists:

Paul Hines

*SVP – Critical Facilities Head – North America
Citigroup*

Tony TeVault

*Vice President
Holder Construction*

James Warren

*Principal and Founder
kW Mission Critical Engineering*

2:30 P.M.

7x24 Exchange Traditional Create Your Own Sundae Break

3:00 P.M. Concurrent Breakout Sessions

Breakout A: Data Center Infrastructure: Global Delivery Best Practices

This presentation addresses the importance of having a global strategy for management and delivery of data center, pop, and edge sites. As the demand for worldwide implementations grows, so does the responsibility. From handling shipping, customs IOR, global currencies, and VMI to ensuring products are delivered overseas on time (and not confiscated) must be considered for an effective plan. This presentation addresses best practices for managing your global data center infrastructure in a global economy.

Michael Liberman

*Mission Critical Infrastructure Applications
Rahi Systems*

Breakout B: Battery Technology & the Future for UPS

Batteries have been the magic power behind supporting critical loads. This session will review the battery technologies available today, in the near future and the distant future relative to UPS applications. What, when, how and why to use each technology supported by performance, physical footprint, initial cost, life cycle cost and disposal data.

Steven Shapiro

*Mission Critical Practice Lead
Morrison Hershfield Mission Critical*

Breakout C: Fortress to Cyber – Integrated Design for Ever-Changing Threats

With each physical and cyber attack against our nation's critical infrastructure and information repositories, it becomes more evident that procurement, design, construction, and operations need to be concurrent to achieve a comprehensive approach to securing mission critical facilities. Gaps between these four core phases increase vulnerabilities beyond a vehicle bomb or insider cyber-attack. This presentation discusses threats (cyber, electronic and physical) that must be identified, validated and fortified against, through incorporating protective designs across all disciplines, in order to keep pace with the ever-changing diversity of threats against mission critical facilities.

Luis Ayala

*Publisher
4th Watch Books*

John Collins

*Senior Account Executive
FoxGuard Solutions, Inc.*

Dana Pomeroy

*Vice President/National Design-Build Director
The Whiting-Turner Contracting Company*

Holly Stone

*President
Stone Security Engineering*

4:00 P.M.

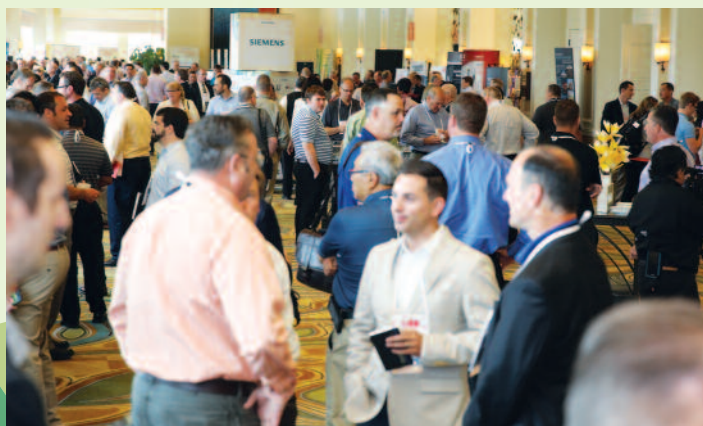
7x24 Exchange Women in Mission Critical Operations (WiMCO) Networking Event

As the leading knowledge exchange in the mission critical space, 7x24 Exchange recognized the importance of increasing the engagement and participation of women in the industry which led to the development of WiMCO. The committee focuses on recruiting women into the organization, supporting WiMCO initiatives at a Chapter level and providing leadership opportunities through the community. Join us for an interactive networking session and engage with your peers in the industry.

Moderator:

Juli Ierulli

*Marketing Communications Manager,
Large Power Systems – Industry Solutions, Caterpillar and
Marketing Director, Vendor Representative
7x24 Exchange International*



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Get ready for game time at the 7x24 Exchange Mission Critical Sports Bar & Grill. This premier, one of a kind exposition will allow attendees the opportunity to network and view the latest and greatest equipment, products and services available to assist you in your day-to-day data center operational needs.

MONDAY

6:30 P.M. – 9:30 P.M.
Marquis Plus+ Partner Showcase



Special thanks to our Marquis Plus+ Partners as this event would not be possible without their support.

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Questions? **Call 646-486-3818**

TUESDAY
OCTOBER 17TH

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: Security and Insecurity – What's Next?

As we boldly move into the future, it seems that everything is connected to the Internet. From the connected home to the Internet of Things, and from cruise control to autonomous cars – it's an exciting time. But all these possibilities bring new and interesting ways for criminals and other miscreants to cause mischief. In his usual wry way, Kevin takes us into the world of ransomware, Bitcoin, killer robots and 24x7 voluntary surveillance. Of course, he also offers practical advice to help you be an interested observer, rather than an unwilling participant! In this talk, Kevin helps to deflate some of the press' hyperbole, and gives real-world information and knowledge that can help individuals and businesses to safely participate in the connectivity revolution.



Kevin Kealy
Chief Information Security Officer
Ingram Micro

10:00 A.M.

Refreshment Break

10:30 A.M.

Understanding Hyperscale Campus Compartmentalization

The sheer volume of the applications supported by Cloud and SaaS providers continues to grow in volume and importance. The presenter will discuss how these entities face increasing pressure to deliver uptime, the attributes necessary to address these requirements while simultaneously increasing scale, and why not every data center provider can support these requirements.

Chris Crosby

CEO
Compass Datacenters

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11:30 A.M.

Lessons Learned in Achieving Data Center Efficiency Goals – 3 Case Studies

Today, data centers account for roughly 2 percent of the total U.S. electricity use, and national computational demand is expected to grow at a fast pace. Data center energy consumption can be reduced by 20 to 40 percent through proven, commercially available energy efficient technologies. Experts from Intuit, PayPal and Lawrence Berkeley National Laboratories who participate in the U.S. Department of Energy's Better Buildings Initiative will share their success stories in "Shaping the Future" of their data centers by using energy efficiency to lower energy bills, improve resiliency, and cut pollution.

Dale Sartor

*Staff Scientist/Engineer
Lawrence Berkeley National Laboratory*

David Breland

*Manager, Enterprise Data Center Facilities
Intuit, Inc.*

Rich Reyher

*Director, PayPal Core Platform & Infrastructure: Global Data Center
PayPal, Inc.*

12:30 P.M.

Lunch and Networking

2:00 P.M.

Data Center Real Estate Trends

Commercial real estate cycles, and trends directly affect data center supply, which in turn, affects delivery dates, pricing, and also is a reflection of other more subtle trends in the market. The presenters will discuss the global implications of interoperability of real estate, data center delivery and product type during this session.

Kristina Metzger

*Global Advisor
CBRE*

Jeff West

*Director, Data Center Research & Analysis
CBRE*

3:00 P.M.

Refreshment Break



3:30 P.M. Concurrent Breakout Sessions

Breakout A: Thermal Optimization Through IoT – What Gets Better and Why

IoT is getting a lot of buzz, but can it help you improve the performance of your data center? This presentation describes how an IoT approach was used to manage the existing, multi-vendor cooling infrastructure in three North American colocation data centers, and describes what happened. What was the expected ROI, and what was delivered? How difficult was the implementation? What results were achieved? How did it impact facility staff? What impact did it have on the overall business and sustainability goals? Answers to these questions and more will be covered in this case study presentation.

Ryan Hunter

*Director of Facilities Support
vXchnge*

Jeff Rauenhorst

*VP, Analytics
Vigilent*

Breakout B: Data Center Enterprise Transformation 2018 with Cyber Security

The data center comprehensive enterprise solution continues to transform in 2018. This includes considerations for cyber security. Learn the "elements" and fundamental concepts associated with the continued transformation. Understand what board of directors, senior management, stock holders, trustees, and tax payers are looking for in their data center solution. A vendor neutral overview of total cost of ownership vs. risk!

Mark Evanko

*Principal – Engineer
BRUNS-PAK*

Breakout C: Water – The Future of Data Center Cooling

As the thirst for critical environments continues to grow, market forces are demanding IT facilities be more energy efficient. This pressure is prompting changes in cooling technologies. Many heat rejection solutions are now utilizing water evaporation to enhance peak performance, reduce energy consumption, and lower operating costs. We'll review the pros and cons of adiabatic enhanced air-cooled chillers, water-cooled chillers, direct and indirect adiabatic cooling. While water is and undoubtedly will be part of the efficient cooling solution, it is not without cost and operational risk. Join us as we dive in and discuss water's role in the data center.

Aaron Duda, PE, LEED AP BD+C

*Principal
kW Mission Critical Engineering*



SPONSORED EVENT
FIESTA BY
Join 7x24 Exchange for the final networking opportunity of the 2017 fall conference by moonlight, at a traditional Mexican Street Fiesta! Food truck vendors, authentic décor, entertainment and games will set the tone for a fun and unique evening onsite at the resort!
MOONLIGHT!
Tuesday, October 17
6:30PM - 9:30PM

SPECIAL THANKS TO OUR PARTNERS THAT MADE THIS EVENT POSSIBLE



Questions? **Call 646-486-3818**

WEDNESDAY OCTOBER 18TH

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: New Metrics to Consider for Facility Managers

Facilities have been hooked on PUE, DCIE and Tier levels with little to no consideration for what the IT equipment can provide in the way of redundancy and resiliency. This presentation provides a means to help evaluate and identify both ways to save on power and cooling and ways to identify and assist IT in resiliency decisions.



Carrie Goetz
Global Director of Technology
Paige DataCom Solutions

9:45 A.M.

Refreshment Break

10:15 A.M.

Is your Data Center Infrastructure Cyberhardened and Secure?

How secure is your data center's power and thermal infrastructure? From unit and supervisory controls to BMS and network connections, the security of power and thermal infrastructure equipment is often



overlooked and can be the greatest physical and cyber security threat your data center faces. The answer is new software and controls technology, security standards and simple processes that will greatly increase the security of your infrastructure from small IT closets up to large data center operations as shown through a case study of a government working through a cyberhardening process.

Jason Gloeckner

Director of Thermal Controls
Vertiv

Joe Saunders

CEO & Founder
RunSafe Security

11:15 A.M.

Modular Backup Power System for Colocation Data Centers

C7 Data Center in Salt Lake City started with a vision and small operations, but was competitive through innovation and strategy. New technology is often avoided due to risk, but this presentation shows how risks can be diminished and rewards can be achieved. Learn about C7 Data Center's experience in adopting new emergency power technology which allows the highest reliability, lowest capital investment and agility for a colocation data center.

Steve Boyce

Director of Facilities Engineering
C7 Data Centers

Curt Gibson

Power Solutions Manager
Generac Power Systems

12:15 P.M.

Conference Adjourns





1. Conference Registration

Complete a Conference Registration Form for each participant online or mail or fax a copy of the Conference Registration Form on the next page to:

7x24 Exchange International

322 Eighth Ave., Suite 702, 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 **September 22nd**.

2. Hotel Reservations



5350 East Marriott Dr.
Phoenix, AZ 85054

To take advantage of 7x24 Exchange's special rates at the **JW Marriott Desert Ridge Resort & Spa** you can visit the conference website at www.7x24exchange.org to make an online reservation, or call **JW Marriott Desert Ridge Resort & Spa Hotel** directly at **1-800-835-6206** and ask for the **7x24 Exchange Conference room rate of \$279/night for a single or double plus tax**.

Please refer to **7x24 Exchange 2017 Fall Conference** when calling.

Please Note: Room reservations are available on a first come, space-available basis. Space permitting, this block will be available until September 18th. Register for the conference and make your hotel reservations early, as the 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 to hotels that have not been contracted by 7x24 Exchange once the 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.

Hospitality Events

Due to the success of the Marquis Plus+ Partner Showcase, hospitality events will not be permitted at this conference. All are invited to join us on Monday, October 16th for another spectacular event.

Vendor/Consultant Policies & Procedures

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.



Guest/Spouse Shopping Shuttle

MONDAY, OCTOBER 16TH

10:00 A.M. – 4:00 P.M.

Enjoy a day of leisure at some of Scottsdale's finest shopping malls.

Register online at www.7x24exchange.org

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