END-TO-END RELIABILITY:
MISSION CRITICAL FACILITIES

# PROCESSING
## AT THE EDGE

1989 – 2019 **30**
30TH ANNIVERSARY
7x24
**xChange**®
INTERNATIONAL

The end-to-end reliability forum.™

www.7x24exchange.org

## 2019 SPRING CONFERENCE
### BOCA RATON RESORT & CLUB, BOCA RATON, FL
### JUNE 2-5, 2019

Register by May 10th for a chance to win a **Facebook – 10.1" Portal with Alexa**

# 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.

# PROCESSING AT THE EDGE



*Fall Conference attendees learning*

# SUNDAY, JUNE 2

**11:00 A.M. – 9:00 P.M.**
## Registration

**1:30 P.M. – 2:30 P.M.**
## Modeling Data Centers to Predict Behavior

This tutorial session will introduce the basic concepts of Data Center modeling, which can help to estimate and predict key performance indicators. Mission critical facilities present a high coupling between IT equipment and their physical environment. The energy consumed in a data center is related to the workload processed, affecting the physical environment during operation. If a data center does not process any workload, it will consume a fixed amount of energy in order to maintain the availability of all the required resources waiting for use. As workload increases, the power and airflow required increases, reaching a maximum, where the time required for processing the workload may also increase. The model serves as the basis to develop simulations and predictions to evaluate data centers under different scenarios. Parameters such as workloads and IT equipment specifications are used to estimate quality of service, power, airflow, energy, and key performance indicators through the model. The formulation describes the different parameters and simplifications considered. The attendees will be shown how the results help to assess strategies for end-to-end resource management and key performance indicators improvement. Examples will be presented to develop an understanding of the data center modeling and simulations processes and to draw practical conclusions.

**Moises Levy**
*Director, Grupo Tecnosel*
*PhD(c), Florida Atlantic University*



*In keeping with its commitment to social responsibility, Chairman & CEO, Bob Cassiliano presented Fall Conference Keynote Speaker, Rich Karlgaard with a $5,000 donation on his behalf to the Semper Fi Fund.*

**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, partnership 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 Director 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*
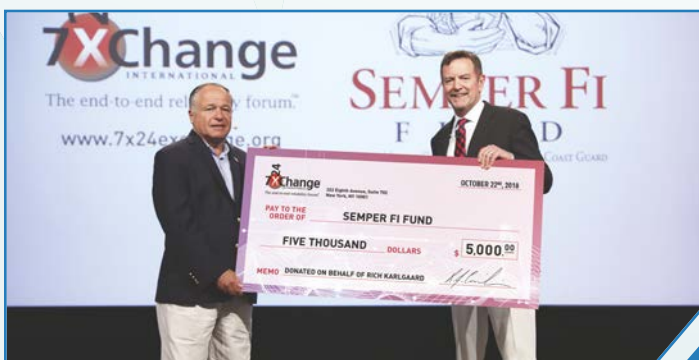
**6:00 P.M. – 9:00 P.M.**
## Welcome Reception

*SPONSORED IN PART BY:*

**CATERPILLAR®**     **PowerSecure**

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, JUNE 3

**7:00 A.M. – 8:00 A.M.**
## Registration & Breakfast
Check in, pick up your name badge, conference materials and enjoy a hot buffet breakfast.

**8:00 A.M. – 8:30 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. – 9:30 A.M.**
## Conference Keynote: Bottom Up Leadership and How It Saved Lives in Benghazi
Kris Paronto—'Tanto' as he is affectionately known in security contracting circles—is a former Army Ranger from the 2nd Battalion 75th Ranger Regiment and a private security contractor who has deployed throughout South America, Central America, the Middle East and North Africa. He also worked with the U.S. Government's Global Response Staff conducting low profile security in high threat environments throughout the world. Paronto was part of the CIA annex security team that responded to the terrorist attack on the U.S. Special Mission in Benghazi, Libya on September 11, 2012, helping to save over 20 lives while fighting off terrorists for over 13 hours. Paronto's story is told in the 2016 major motion picture *13 Hours*. In this program, Paronto uses his experiences in Benghazi that taught him the importance of being able to depend and trust his team, especially in times of major crisis. From combat to business, he shares techniques, stories, and lessons he learned from having a strong team under fire.

**Kris 'Tanto' Paronto**
*Inspiring Hero of the 2012 Benghazi Attack & Subject of the Major Motion Picture,* **13 Hours**

**9:30 A.M. – 10:00 A.M.**
## Refreshment Break

**10:00 A.M. – 11:00 A.M.**
## HyperScale Needs HyperSkill: Mitigating the Labor Shortage
As the data center industry is experiencing unprecedented and explosive growth, the environment that supports this boom needs to expand at the same rate. However, the quantity and quality of skilled labor across the full spectrum of design, construction, & facility management has proven to be a significant hindrance to the market's desired speed and volume of data center deployment. This gap is amplified by the complexity of data centers' labor and staffing requirements, ranging from skilled trade labor to data center operations to engineers and more. This panel will address the challenges of this labor shortage and how the industry is responding to close the gap.

### Moderator:
**Frank Nash**
*Senior Director*
*Schneider Electric*

### Panelists:
**Dennis Cronin**
*CEO*
*Resilient Solutions*

**Chris Jansen**
*Senior Vice President*
*Faith Technologies*

**Bill Mazzetti, PE**
*Senior Vice President & Chief Engineer*
*Rosendin Electric*

**Nancy Novak**
*Senior Vice President of Construction*
*Compass Datacenters*

**11:00 A.M. – 12:00 P.M.**
## Processing at the Edge: The Ghost in the Device
The era of Edge is fast taking shape as devices, networks, core storage and software are configured 'on the ground' to deliver real world benefits of processing close to the source. Yet more than three years of DCD analysis and discussion indicates how the refinement of Edge systems may be just the beginning of a new series of adoption challenges as the technology fights to make a business and investment case, and fights also to achieve a level of understanding sufficient to enable acceptance. Stephen will also reference research conducted by DCD in North America and recently across the major markets of the Asia Pacific to look at how the balance between technology, perception and delivery is being mapped as Edge moves forward.

**Stephen Worn**
*Chief Technology Officer & APAC Director*
*Data Center Dynamics*

**12:00 P.M. – 1:30 P.M.**
## Lunch and Networking

**12:00 P.M. – 1:30 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:
**Dennis Cronin**
*CEO, Resilient Solutions, and*
*Founder, 7x24 Exchange International*

**1:30 P.M. – 2:30 P.M.**
## Latest Data Center Outage Trends, Causes and Costs
Learn Uptime Institute's new findings about data center outages, including trends in causes and types and strategies for reducing the number and impact of outages.

**Chris Ludeman**
*Director of Business Development / Eastern US Region*
*Uptime Institute*

**2:30 P.M. – 3:00 P.M.**
## 7x24 Exchange Traditional Create Your Own Sundae Break

**3:00 P.M. – 4:00 P.M.   Concurrent Breakout Sessions**

## Breakout A: Optimizing Your Infrastructure Architecture for IoT

In the spirit of the chain is only as strong as its weakest link, the vast majority of companies' existing network infrastructures are completely unprepared to support even the most rudimentary IoT applications. Over reliance on the public network, outdated switching hardware and inefficient design present significant architectural challenges delivering the degree of low latency necessary to enable volumes of data to be processed and acted upon. The presenter will examine the structure of existing infrastructure architectures and identify the major inefficiencies and chokepoints that stand in the path of effective IoT implementations. During this discussion, Mr. Fotouh will discuss the emerging hardware bandwidth standards and infrastructure design alternatives that are being adopted to support IoT applications across a variety of industries.

**Sharif Fotouh**
*Managing Director, Compass Edge Solutions*
*Compass Datacenters*

## Breakout B: Digital Infrastructure for the Digital Age

The future of data centers is being influenced by industrial trends, such as hyperscale, wireless, security and digital. Digital distribution systems and equipment enable deep component visibility and easy automation for even lights out data center operations. Digital electrical equipment, such as digital switchgear, is the ultimate example of Edge processing. The system communicates peer to peer and makes decisions without having to communicate back through the centralized control system. Join this session to learn how innovative digital technologies not only improve system communication, but also simplify the electrical system to save data center owners space, costs, time and risk.

**Dave Sterlace**
*Global Head of Data Center Technology*
*ABB*

## Breakout C: Processing at the Edge: Quantum Computing Impact to...Everything

This presentation will review state-of-the-state of quantum computing, and the perceived impact QC will have on mechanical and electrical systems, how the technology change will impact current design and operations topologies, and ability to adapt existing real estate as those things exist today. The mechanical impact to the ballroom, and the changes to the central mechanical plants, if necessary, to supply systems that have operating elements close to zero degrees. The overall impact to electrical, both to the device, and of the supporting mechanical equipment, will be discussed. How close coupled cooling to the QC chassis impacts things like fluid transfer in the IT space. We will explore how processing changes potentially reduces the quantity and type of individual servers, the fabric of the cloud, and the reduction or modification of real estate, as well as how adaptable existing real estate can receive the technology.

**Christopher McLean**
*Director, Mission Critical Solutions*
*M.C. Dean*


*Attendees learning at the Fall Conference*

**4:00 P.M. – 5:30 P.M.**

## Secrets to Building High Performing Teams in Mission Critical Environments

Join WiMCO and leaders from Facebook's Infrastructure Data Centers team as they share their experiences as sponsors, mentors, and allies, and how these relationships were formed. They will also discuss how these relationships helped them to build high-performing teams based on their people's strengths and hear some perspectives from those on their teams. Panelists will speak about their personal experience navigating career pathways in the data center industry, and highlight how Facebook's open and inclusive culture, focus on mentoring, and professional development programs contributed to their success. Join them and discover what you can take away to create or sustain your own high performing teams, retain great talent in a competitive market, and maximize productivity.

**Organized by the Women in Mission Critical Operations (WiMCO) Committee**

*SPONSORED IN PART BY:* **facebook**

### Moderator:
**Heather Woolery**
*Site Startup Program Manager*
*Facility Operations, Infra Data Centers*
*Facebook*

### Panelists:
**Michelle Carr**
*Pre-Construction Manager*
*Facebook*

**Adrain Garner**
*Facility Operations Chief Building Engineer*
*Facebook*

**Alex Johnson**
*Global Pre-Construction Director*
*Facebook*

**Randi Johnson**
*Global Data Center Facilities Operations Director, Central Region*
*Facebook*

**Jean Normandy**
*Facility Operations Manager*
*Facebook*

**Tom Winter**
*Global Data Center Facilities Operations Director, East Region*
*Facebook*

# TUESDAY, JUNE 4

**7:00 A.M. – 8:30 A.M.**
## Breakfast & Registration

**8:30 A.M. – 9:00 A.M.**
## Opening Remarks
Bob Cassiliano will review day one highlights, recognize the conference Corporate Leadership Program sponsors and give a 7x24 Exchange update.

### Tribute to 7x24 Exchange International President, David Schirmacher

**9:00 A.M. – 10:00 A.M.**
## Keynote: Data Centers – From Tech to Utility
The level of expectation for the availability and functionality of data center-supported applications has become analogous to the same presumption that we have whenever we flip a light switch: It should just work, and you shouldn't have to think about it. In effect, data centers have reached a level of ubiquity that requires them to provide the same level of service as utility companies. The presenter will examine the impact of this transition on the data center marketplace, as data centers are expected to operate not as technology but as a utility. The session will also include a discussion of the changes that data center providers are making to their modes of operation to maintain their competitiveness in the face of increasing levels of customer expectation and demand.

**Chris Crosby**
*CEO*
*Compass Datacenters*

**10:00 A.M. – 10:30 A.M.**
## Refreshment Break

**10:30 A.M. – 11:30 A.M.**
## Facebook's Thriving Data Centers – A Case Study
With over two billion monthly active users, Facebook has experienced tremendous growth across its suite of products (Facebook, Instagram, WhatsApp, and Messenger). This explosive growth demands extensive infrastructure, one that is sophisticated enough to serve its still growing user base. Facebook has answered this call by shifting away from leased space and colocations to designing and building their own data centers—their first was built in Prineville, Oregon, in 2011—and they have not stopped building since. Now, with 15 data centers operating or in construction across the globe, they have continued to evolve their data center design, construction, and approach to start up. In this presentation, leaders from Facebook's Infra Data Centers team will share how Facebook has continued to build, start up, and operate their cutting-edge data centers with unparalleled success.

**Michelle Carr**
*Pre-Construction Manager*
*Facebook*

**Alex Johnson**
*Global Pre-Construction Director*
*Facebook*

**James Swensen**
*Director, Global Data Center Facility Operations*
*Facebook*

**11:30 A.M. – 12:30 P.M.**
## ES2: Moving Toward Intelligent Self-Sensing, Self-Regulating Data Centers
Designing, operating and maintaining a modern data center, including those used for Edge computing, presents a host of options—but what is really important and how should you choose? Is it sufficient just to produce a design that operates within guidelines? Do you need a scientific assessment? Or, will pure technology win the day? Leading individuals from the National Science Foundation Center for Energy-Smart Electronic Systems Industry University Cooperative Research Center will debate what's important including ASHRAE thermal guidelines, power and cooling infrastructure, energy reuse, right-sizing your IT and intelligent controls, along with the latest research in these areas. Come and join this controversial debate on how to be a best in class data center today, and tomorrow.

### Moderator:
**Bahgat Sammakia**
*VP for Research*
*Binghamton University*

### Panelists:
**Dereje Agonafer**
*Jenkins Garrett Professor, Site Director*
*NSF IUCRC Center in Energy Efficient Systems, and*
*Director, Electronics, MEMS & Nanoelectronics Systems Packaging Center*
*University of Texas, Arlington*

**Kanad Ghose**
*BU Site Director, ES2, and*
*Professor of Computer Science, Binghamton University*

**Alfonso Ortega**
*Associate Director*
*NSF Center for Energy Smart Electronic Systems*

**Roger Schmidt**
*IBM Fellow Emeritus, Traugott Distinguished Professor,*
*Mechanical and Aerospace Engineering Department*
*(Retired IBM Chief Engineer for Data Center Energy Efficiency)*
*Syracuse University*

**Mark Seymour**
*CTO*
*Future Facilities*

**12:30 P.M. – 2:00 P.M.**
## Lunch and Networking

*Jobsite safety panel at the Fall Conference*

## 2:00 P.M. – 3:00 P.M.
### Hyperscale Data Centers in the Age of Edge Computing

The coming wave of Edge computing will stretch the cloud beyond today's paradigms. Rapid changes, new technologies, and speed to market are driving new and unknown demands, challenging the maturing hyperscale marketplace. Hyperscale clients position themselves for changes in technology. Facilities built by and for hyperscale data center clients were already a breed apart from what the enterprise users and colocation providers traditionally provided. Edge computing is impacting demand, site selection, design, vendor selection, procurement, construction, commissioning, network facility management, and cost management. Different perspectives on appropriate IT cooling, power, reliability/availability, carbon footprint, risk avoidance, procurement process, and IT strategy will emerge. This presentation will explore their unique drivers and how the demands from the Edge will impact tomorrow's decisions.

**James Coe**
*Senior Principal, Director Critical Facilities*
*Syska Hennessy Group*

**Josh Fluecke**
*Associate Principal*
*Syska Hennessy Group*

## 3:00 P.M.
### Refreshment Break

## 3:30 P.M. – 4:30 P.M.   Concurrent Breakout Sessions
### Breakout A: From Coal to Lakewater

On the site of the State Line Generating Plant in Hammond, Indiana—where, from 1929 until it was decommissioned in 2012, a coal fired power plant which at times produced 1 GW of power—a new innovative data center is being planned and constructed. The first major data center in this region of Indiana will take advantage of the natural elements of water, wind and sun. Not only will the Digital Crossroads data center provide server space for national companies and major institutions, there are long-term plans to develop a tech startup incubator, renewable energy generation and a greenhouse warmed by waste heat from the servers. The presentation is a case study of the history and implementation of this project.

**Peter Feldman**
*CEO*
*Digital Crossroads Lake Michigan*

**Conleth O'Flynn, PE**
*Managing Partner*
*AHA Consulting Engineers*

### Breakout B: Infrastructure 2020 and Beyond – The Focus on Workloads

To harness better application response times across data workloads that are stretched to the edge, IT professionals must toggle between seemingly endless infrastructure options that promise varying degrees of optimization, performance, and scalability. Considerations include: public cloud, private cloud, containers, virtualization and just as important, how do you keep track of all this hardware and software? What's current? Who has access? Has the maintenance contract expired? Pulling from trends and first-person research, this presentation will highlight how workloads are driving the decision making of CIOs and what personnel should focus on to remain relevant in the new infrastructure world order.

**Mark Gaydos**
*CMO*
*Nlyte*

### Breakout C: Atlas Shrugged: Addressing the Data Center Capacity Gap

This presentation assesses the social, technological and regulatory environments that are driving the current data center capacity requirements, and suggests where future innovation can be focused to help close the gap between demand and supply.

**Tim Dueck**
*Vice President*
*Gephart Electric*


*Fall Conference attendees learning*

# WEDNESDAY, JUNE 5

**8:30 A.M. – 8:45 A.M.**
## Opening Remarks
Bob Cassiliano will review highlights from day two and address housekeeping items of interest.

**8:45 A.M. – 9:45 A.M.**
## Keynote: New Power Architectures for the Edge
As IT resources move ever closer to the client at the Edge the facilities and operations landscape begins to change rapidly requiring new design considerations, specification, and power architectures. Yes, Tier ratings can help us but many of these new Edge facilities are running lights out, in multi-use buildings where security, power quality, and power continuity are not top priorities. In this session, Jack will help us navigate the new Edge landscape, identify some of the obstacles associated operating in this environment, and provide valuable insights and recommendations for new power architectures, battery chemistries, and managing the lights-out, remote locations.

**Jack Pouchet**
*Vice President Sales*
*Natron Energy*

**Dave Sterlace**
*Global Head of Data Center Technology*
*ABB*

**9:45 A.M. – 10:15 A.M.**
## Refreshment Break

**10:15 A.M. – 11:15 A.M.**
## Managing a Remote Distributed Edge Infrastructure
There are many challenges to integrating a building monitoring system for one building. The design and specification of devices to get the correct information is critical. No matter how much you plan, often issues arise that are not planned. Such as network security issues, firmware incompatibility, protocol issues, installation inconsistencies and part shortages. Now, imagine if there were multiple Edge sites that are unmanned and spread geographically across many different regions. How would this possibly complicate the design and integration of the system? What will you encounter that you don't plan for and how will it be solved? In this presentation we will discuss the differences and similarities of a single site deployment and Edge deployments. What devices are typically monitored and how they integrate. Also, share valuable lessons that were encountered with the remote site deployments.

**Luke Dalske**
*VP of Deployment & Integration*
*BitBox USA*

**John Mangiante**
*Network Development Manager*
*Google Fiber*


*Amaya Souarez delivers a presentation on robotic process automation at the Fall Conference.*


*Fall Conference Keynote Rich Karlgaard*

**11:15 A.M. – 12:15 P.M.**
## Why Validated Skills Matter
For decades there have been numerous vendor-sponsored and vendor-neutral credentials developed for the world of IT Technology. However, the industry has been seriously lacking in developing credentials for those we entrust to deliver 24 x 7 Mission Critical operation of the data center facility. With the availability of the CMCO Exam, that has now changed.

The **U.S. Department of Labor's Employment and Training Administration** provided a grant to enable the creation of a multi-faceted program to prepare tomorrow's workforce for the Mission Critical Operator role. In an industry-wide process, a full job skills analysis was conducted, and findings were validated through a global survey. Experienced Mission Critical Operators from major corporations then created the Mission Critical Operator Blueprint - areas every Mission Critical Operator must have to be effective - including maintenance, process management, reporting, and incidence response. This knowledge Blueprint now serves as the basis upon which the certification program was built.

The session will discuss the benefits of the credential for individuals, End User organizations, Consulting firms and Vendor organizations.

**Dennis Cronin**
*CEO*
*Resilient Solutions*

**12:15 P.M.**
## Conference Adjourns


*Juli Ierulli presents during the 7x24 Exchange WiMCO session*

**www.7x24exchange.org**

## 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 **May 10th**.

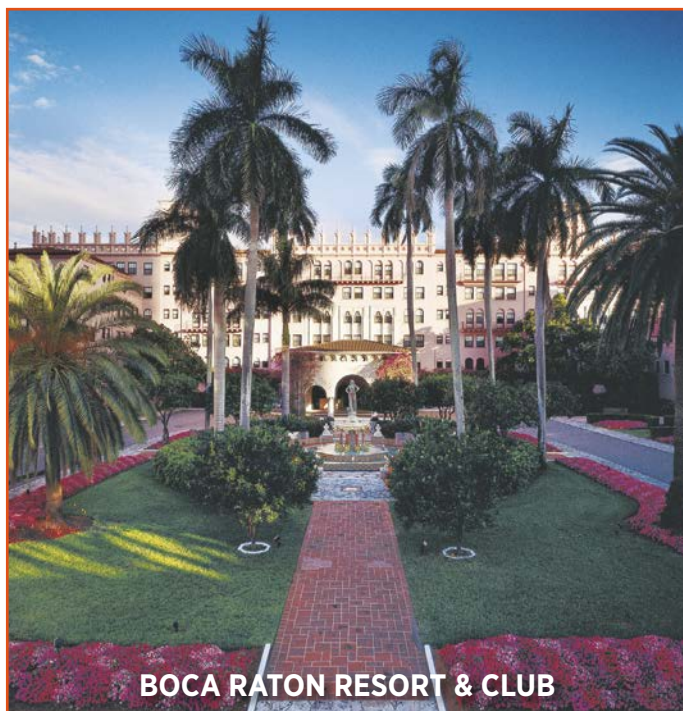## 2. Hotel Reservations

**BOCA RATON RESORT & CLUB**
A WALDORF ASTORIA RESORT

501 East Camino Real
Boca Raton, FL 33432

To take advantage of 7x24 Exchange's special rates at the **Boca Raton Resort and Club** you can make an **online reservation by visiting** *www.7x24exchange.org* or calling Boca Raton Resort & Club directly at 1-888-557-6375 and ask for the 7x24 Exchange Conference room rate of $240/night for a single or double, plus applicable state taxes. Please refer to **Group Code A72419** when calling.

The daily resort fee is $25 plus tax per night and includes: Guest internet access in guest rooms and public space; Mizner's Dream Quest discovery tour, access to two full service fitness Centers, unlimited driving range use and golf club storage; local, 800 toll-free, domestic and long distance calls and Bellman gratuities for arrival and departure. There is an additional $3.00 per day room attendant fee.

**Please Note:** Room reservations are available on a first come, space-available basis. **Space permitting, this block will be available until May 10, 2019**. 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.



**BOCA RATON RESORT & CLUB**

## Guest/Spouse Shopping Shuttle

### MONDAY, JUNE 3

**10:00 A.M. – 4:00 P.M.**

Enjoy a day of leisure at some of Boca Raton's finest indoor and outdoor shopping malls.

The guest shuttle departs the resort from the Mizner Center driveway on the hour and returns on the half hour.

Pick up at: **Mizner Center** and **Porte Cochere**

**MIZNER PARK**

**ROYAL PALM PLACE**

**TOWN CENTER**

## 2019 SPRING CONFERENCE
### END-TO-END RELIABILITY: MISSION CRITICAL FACILITIES

# PROCESSING AT THE EDGE

## REGISTRATION FORM

Name
_____

(Informal Name/Nickname for badge)
_____

Position/Title
_____

Company
_____

Address
_____

City _____ State _____ Zip _____

Phone _____ Fax _____

E-mail
_____

Name of guest

A guest is a spouse/significant other 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. Only one guest is permitted for each paid registration. Guests are invited to attend the Welcome Reception, Monday Morning Keynote, Spouse/Guest Shuttle, Tuesday Sponsored Event and Wednesday Morning Breakfast.

## CONFERENCE FEES:

| | Early Bird Discount through May 10th | After May 10th |
|---|---|---|
| **VENDOR** | | |
| Member: | $1,900 | $2,200 |
| Non-member: | $2,200 | $2,500 |

An individual that sells or distributes products and/or services.

| | | |
|---|---|---|
| **CONSULTANT** | | |
| Member: | $1,700 | $2,000 |
| Non-member: | $2,000 | $2,300 |

An individual that provides professional advice or consulting services for a fee.

| | | |
|---|---|---|
| **END USER** | | |
| Member: | $1,400 | $1,600 |
| Non-member: | $1,600 | $1,900 |

An individual that operates or maintains mission critical technology and enterprise information infrastructures for internal use.

\* An individual that can be considered as an End User or a Vendor will be classified as a **Vendor**.

\* An individual that can be considered as an End User or a Consultant will be classified as a **Consultant**.

We reserve the right to modify the registration fee without notice if incorrect fee is selected.

## PAYMENT METHOD:

❑ Check enclosed

Charge (check one)

❑ American Express   ❑ Visa   ❑ MasterCard   ❑ Discover

Card Number: _____ Exp. Date: _____

Name (as it appears on the card)
_____

Signature
_____

Promotion Code: ☐☐☐☐☐

## DO YOU PLAN TO ATTEND?

### SUNDAY 1:30 P.M. – 2:30 P.M.
Modeling Data Centers to Predict Behavior ❑ Yes ❑ No

### SUNDAY 3:00 P.M. – 5:00 P.M.
Student Session: Data Center 101 ❑ Yes ❑ No

### SUNDAY 6:00 P.M. – 9:00 P.M.
Sunday Evening's Welcome Reception ❑ Yes ❑ No
If yes, do you plan to bring a guest? ❑ Yes ❑ No

### MONDAY 10:00 A.M. – 4:00 P.M.
Guest/Spouse Shopping Shuttle ❑ Yes ❑ No

### MONDAY 3:00 P.M. – 4:00 P.M.
### CONCURRENT BREAKOUT SESSIONS
A: Optimizing Your Infrastructure Architecture for IoT ❑ Yes ❑ No
B: Digital Infrastructure for the Digital Age ❑ Yes ❑ No
C: Processing at the Edge: Quantum Computing Impact to…Everything ❑ Yes ❑ No

### TUESDAY 3:30 P.M. – 4:30 P.M.
### CONCURRENT BREAKOUT SESSIONS
A: From Coal to Lakewater ❑ Yes ❑ No
B: Infrastructure 2020 and Beyond – The Focus on Workloads ❑ Yes ❑ No
C: Atlas Shrugged: Addressing the Data Center Capacity Gap ❑ Yes ❑ No

### TUESDAY 6:00 P.M. – 9:00 P.M.
Sponsored Event: An Evening Under the Big Top ❑ Yes ❑ No
If yes, do you plan to bring a guest? ❑ Yes ❑ No

❑ I would like to continue receiving promotional e-mails from 7x24 Exchange about membership, upcoming events and services.

### WHAT'S INCLUDED?
Unique to 7x24 Exchange, the conference registration fee covers conference sessions and activities, mobile app, Welcome Reception, Sponsored Event, breakfasts on Monday, Tuesday & Wednesday, lunches on Monday & Tuesday and refreshment breaks all 3 days.

*Participants are responsible for all other expenses, including guest meals, transportation and hotel accommodations.*

### DRESS CODE
A business casual dress code allows attendees to conduct business in a relaxed environment.

### CONFERENCE MOBILE APP
7x24 Exchange has transitioned to a paperless conference for sustainability purposes. The conference mobile app will provide attendees with access to everything the conference has to offer right from your mobile device, tablet or laptop.

### CANCELLATION POLICY
Cancellations received by May 10th will be refunded, less a $200 handling fee. There will be no refunds after May 10th. However, substitutions of company participants may be made at any time.

By registering I agree that images and videos recorded during the breaks, sessions and evening events can be used without compensation in perpetuity by 7x24 Exchange International in any media on any platform.

All applications for registration are subject to review by 7x24 Exchange for accuracy and completeness prior to being accepted. We may contact you for further information.

**Please return this form to: 7x24 Exchange International**
**322 Eighth Avenue, Suite 702, New York, NY 10001**
Phone 646-486-3818 | Fax 212-645-1147
Email conferences@7x24exchange.org
Register online at www.7x24exchange.org

**2019 SPRING CONFERENCE**

END-TO-END RELIABILITY:
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