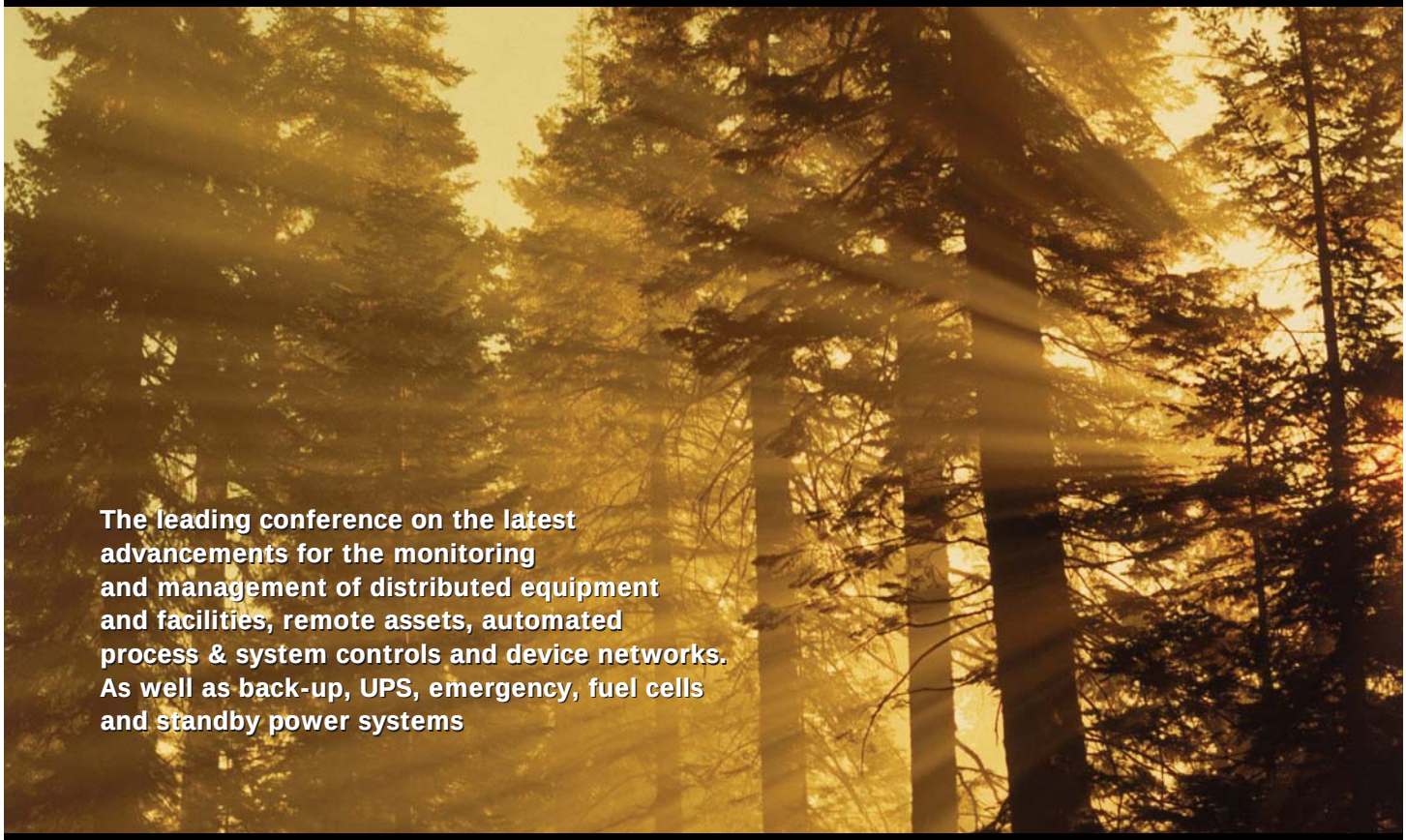
NOVEMBER 6-7, 2007 • SCOTTSDALE/FOUNTAIN HILLS, ARIZ.

REMOTE MONITORING & NETWORKING 2007

SCADA, Data Acquisition, Device Networking, M2M and Security for Remote Sites and Remotely Managed Equipment



The leading conference on the latest advancements for the monitoring and management of distributed equipment and facilities, remote assets, automated process & system controls and device networks. As well as back-up, UPS, emergency, fuel cells and standby power systems

ONSITE POWER 2007

Offgrid, Standby and Back-up Power for Mission Critical Operations

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Register by September 14th and save $200 of our Full Conference Price

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Contents

Overview

The sixth annual **Remote Monitoring and Networking 2007/Onsite Power 2007** conference and expo will be held November 6-7, 2007 at the Radisson Ft. McDowell Resort and Casino in Scottsdale, Az. These technology-driven and solution oriented conferences bring together the innovators and users from multiple industries, including utilities, power, oil & gas, telecom, industrial, water & public utilities, agriculture and facilities management.

Remote Monitoring & Networking 2007 will focus on the leading advancements for the monitoring and management of distributed equipment and facilities, remote assets, automated process & system controls and device networks. Large-scale users and industry experts will speak on SCADA, security, control, automation, M2M, networking, telemetry and condition monitoring.

Onsite Power 2007 will cover the latest advancements in back-up, UPS, emergency and standby power systems, and design strategies for monitoring & controlling distributed, remote and mission-critical equipment and facilities.

This November event will be organized to provide numerous opportunities for networking, discussion sessions, daily luncheons, a cocktail reception, and a large, co-located exhibit (with Zero Downtime 2007) including dedicated hours and exhibit only passes for industry attendees. For information on exhibiting and sponsoring this year' conference email Scott Nash at scottn@infowebcom.com or via phone at 800-803-9488 x.114.

Why Should You Attend?

- Catch up on the latest standards and protocols and discover how they affect your systems.
- Learn how to select the right system for your application.
- Find out the best ways to adapt and upgrade existing systems using the latest technology.
- Discover new system designs, capabilities, development and implementation.
- Learn about new applications and system capabilities

Who Should Attend?

- Managers of Remote Sites and Equipment
- Managers of Distributed Equipment, Facilities and Networks Engineering Managers, System Designers and Application Developers Communications, SCADA and IT System Managers and Developers Process Control Managers and System Designers System Integrators, Value Added Resellers and Dealers Product Managers seeking new applications, technology advancements and partnering opportunities
- OEM Design Engineers seeking to equip their products, devices and systems with the latest technologies for remote monitoring, control and automation.

Involved in These Types of Organizations, Companies and Operations:

- Public and Private Utilities involved in Water/Wastewater, Electric and Power
- Oil & Gas Companies, Pipelines
- Telephone and Telecommunications Companies
- Manufacturing, Process and Distribution Industries
- Natural Resource Management and Environmental Protection
- Security, Public Safety, Emergency Response and Defense/Military
- Public Works and Transportation Systems
- Field and Mobile Service Organizations
- Developers of Wireless Technology Products and Systems
- System Integration and Engineering Firms

Key Subject Areas

- SCADA and Data Acquisition
- Wireless Mesh Networking
- Sensors for Monitoring and Management
- Condition, Environmental and Equipment Monitoring
- Industrial Control and Automation
- Telemetry
- Security Solutions
- Device Equipment Networking and Management
- Gensets
- Standby and Backup Battery Systems
- Microturbine
- Remote Solar/Photovoltaic power
- Fuel Cells
- Renewable Energy Systems
- Standalone Distributed Power
- Small-Scale Cogeneration
- UPS (Uninterruptible Power Systems)
- 24/7 and Remote Monitoring Testing & Maintenance
- Secure Operations

Registration Information

Remote Monitoring and Networking 2007/Onsite Power 2007

Register by September 14th	**$795**
Register after September 14th	**$995**

TEAM DISCOUNT:

If two or more people from your company will be attending Remote Monitoring & Networking /Onsite Power 2007. $100 will be deducted from each attendee's registration fee. (Note: A separate registration form must be submitted for each attendee) Bonus team discounts (3 or more) also available.

Single Day Conference Pass:	**$495**
Government/Military & Utility Pass:	**$495**
Expo Only Pass	**$50**

CONFERENCE WORKSHOP PRICING:

Securing Industrial Networks: Cyber Protection for Automation, Control and SCADA Systems

ISA Members	$395
Non-ISA Members	$445

Register at www.isa.org

SCADA Boot Camp: Beyond the Essentials

Register on or before September 14th	$395
Register after September 14th	$495

Creating an Efficient Data Center	$225
Electronics Cooling: Challenges and Solutions	$495
Removing the Mystery from Data Center Thermal Management	$199
EMC Workshop	Free with Conference Registration

4 WAYS TO REGISTER

By Phone:	800-803-9488
By Fax:	720-528-3771
Web:	www.RemoteMagazine.com
By Mail:	Webcom Communications, Corp., 7355 East Orchard Road, Suite 100, Greenwood Village, CO 80111

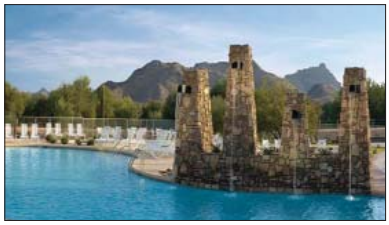
CANCELLATION POLICY:

To receive consideration, all cancellations must be received in writing. Upon receipt, a refund or credit will be issued towards a future event produced by Webcom Communications, less a 25% administrative fee. (Cancellations which do not indicate preference will be issued credit.) No refunds will be issued within two (2) weeks of the event. Credit toward a future even can be issued if requested within 24 hours of the start of the conference and can be used for one year from the date of the event. Webcom Communications will not be held responsible for cancellations or delays in programming due to acts of God, war, government disorder, curtailment of transportation facilities, or other emergency making it inadvisable, illegal or impossible to hold the meeting.

Hotel Information

STAY WHERE THE CONFERENCE IS!

Remote Monitoring & Networking and Onsite Power 2007 will be held at the Radisson Ft. McDowell Resort and Casino. Located on the beautiful lands of the Fort McDowell Yavapai Nation, the Radisson Fort McDowell Resort & Casino is a 4-diamond deluxe property situated on the eastern edge of Scottsdale and Fountain Hills and adjacent to Fort McDowell Casino and We-Ko-Pa Golf Course.



Radisson Fort McDowell Resort & Casino
10438 North Fort McDowell Road ,
Scottsdale/Fountain Hills AZ 85264

A limited number of rooms have been reserved for attendees. Mention Webcom Communications when calling the hotel to receive a discounted room rate of $159.00 per night (single). If reserving a room online, use WEBCOM (all caps) in the promotional code field.

Contact Information

- For program information contact Nick Depperschmidt at 800-803-9488 x.111 or nickd@infowebcom.com
- For exhibit/sponsor information contact Scott Nash at 800-803-9488 x.114 or scottn@infowebcom.com
- For registration information contact Marsha Hanrahan at 800-803-9488 x.103 or marshah@infowebcom.com

Testimonials:

"The sessions were very informative and covered a wide variety of subjects. I found more sessions to attend than I had originally planned."

Michael Pompy,
Sr. Telecommunications Specialist
Williams

"The show was very well managed and organized. It was easy to spend the appropriate amount of time with each vendor due to the number of vendors exhibiting."

Michael D'Angelo,
Business Development Sales Manager
Electrochem Commercial Power

Relaxed atmosphere, good products in presentation hall, nice people. Even the food was good!

Jordan Husney,
Lead Test Engineer
Digi International, Inc.

BLACK SESSIONS - Located in Wassajo 8-9

GOLD SESSIONS - Located in Conference Rooms D-E

RED SESSIONS - Located in Sunrise (*Onsite Power*)

7:00 am - REGISTRATION & CONTINENTAL BREAKFAST

8:00 am - OPENING ADDRESS

Keynote Presentations

8:10 am PLATINUM KEYNOTE - TBA

9:00 am KEYNOTE PANEL SESSION: DESIGNING A REMOTE MONITORING INFRASTRUCTURE - THROUGH THE EYES OF YOUR ENGINEERING FIRM

Even as professionals, sometimes you just have leave it to the experts. This is why often times engineering firms/consulting companies are brought in to develop new, or update existing remote monitoring networks and systems. These artisans have a unique insight on the industry, as they often work on vastly different systems and installations throughout the year.

Because of this we have brought together a panel of speakers, all representing different areas of the Remote Monitoring and Networking market. They will discuss, in an open format, some of the pitfalls they've encountered, what to look for when designing new or upgrading systems, how to get the most from your engineering, consulting, and construction company, as well as some of the emerging technologies they've recently employed on their projects.

Glenn Hebert, Systems Integration Manager - K& F Electric, Inc.

Steve Bridge, CEO - Bridge Business and Engineering Services

Craig Preuss, Engineering Manager for Utility Automation - Black & Veatch Corp.

10:00 am NETWORKING BREAK IN THE EXHIBIT HALL (Exhibit Hall Opens)

10:30 am AUTOMATED METER READING, ALARM AND CONTROL

Advanced Metering Infrastructure holds the promise of a cost-effective way to integrate large quantities of smart meters with a commercial off-the-shelf SCADA package. A Distribution SCADA system can be created that is cost effective and provides for near real-time awareness of the health of a network that distributes water, gas or electricity. Combined with two-way communications, such a SCADA system offers immediate response to outages, reduced operating and maintenance costs, greater network reliability and a reduction in regulatory penalties. Linking the actual real time data from AMR permits the creation for on-demand profiling, reporting and analysis.

But how can water, gas or electrical distribution authorities use off-the-shelf SCADA software to create an application that offers these financial and operational benefits? What does that application look like when it is completed? Are there practical limits to a system like this? Who will use it and what exactly are the financial and operational benefits? How do you start a project like this? Our presentation will endeavor to answer these questions by providing some practical examples of applications that are very achievable and provide almost immediate operational and financial value.

Mike Kenworthy, Director of SCADA Sales - Citect

Kody Salem, Manager of Utilities and Public Infrastructure - Edison Automation

10:30 am WHEN ACCESS TOOLS ARE TURNED AGAINST YOU; NETWORK SECURITY IN THE REMOTE OFFICE

Attacks in data centers and branch offices from hackers and intruders are rapidly becoming more prevalent and sophisticated. Branch offices, in particular, are becoming easy targets because of the lack of security with in-band console techniques, such as Telnet and SSH, for managing remote sites. Even with firewalls and VPNs, branch offices are vulnerable to infiltration. This session will provide an overview on what inexpensive counter measures you can take to secure your data and discourage hackers, while providing secure access to your remote IT equipment. Learn how deploying a layered security model and other best practices will help bulletproof your operations.

Nicolas Nguyen, Director, Remote Office Solutions - Raritan, Inc.

10:30 am GUIDELINES FOR HIGH RELIABILITY REMOTE POWER SYSTEM DESIGN

When designing high reliability power systems for critical loads at remote sites, a variety of considerations must come into play during the design process. The purpose of this class is to familiarize the participants with the key issues affecting reliability, then walk them through the design so they have a better understanding of the overall process. The process starts with the simple, but often overlooked gathering of accurate load information, how to accurately size a solar system and select the proper solar array and battery bank, how to select reliable components, how to minimize field and installation errors, how to efficiently use materials, DC-UPS systems, hazardous locations and vendor selection.

It also covers common myths and misconceptions in the marketplace, and closes with the "Ten Commandments" of good solar design, a slightly humorous set of guidelines to follow when they are back at the office. Each participant will receive a compass, which is essential for proper solar panel sitting.

Kevin Conlin, Vice President - Solarcraft, Inc.

11:10 am SYSTEM-WIDE RTUS (AND SCADA RADIOS) REPLACEMENT STRATEGY

Learn how Pacific Gas & Electric implemented its system-wide gas RTU replacement project. This five year program to replace over 300 RTUs throughout PG&E's gas transmission and distribution system covered the project from its initiation to the present. The project is currently in its third year of rollout.

Wayne Fong, Senior Gas Engineer - Pacific Gas and Electric

11:10 am ENSURING SECURE MANAGEMENT OF REMOTE NETWORK INFRASTRUCTURE THROUGH SATELLITE-BASED OUT-OF-BAND MANAGEMENT

Sending a technician into a remote spot such as an oil rig off the coast of Gabon, Africa or a dangerous one, like Liberia, is the last thing most companies want to do. However, most oil and gas service companies are faced with doing this on a regular basis to ensure secure and reliable communications for their customers around the world.

Attendees will benefit from a tutorial about intelligent out-of-band management technology and how it can provide remote monitoring and management of hybrid satellite and terrestrial networks. In addition, attendees will hear about real-word applications and the results being realized from such deployments.

Barry Cox, Chief Technology Officer - Uplogix

11:10 am SUSTAINABLE FUEL CELL SOLUTIONS TO PROVIDE EXTENDED RUN TIMES OF BACKUP POWER

The need for dependable extended run backup power is an on-going challenge in the telecommunications industry. Fuel cell systems offer a compelling value proposition to telecommunications providers and other organizations that require highly reliable critical backup solutions. As the fuel cell industry grows, it will need unique development and manufacturing of clean and reliable PEM fuel cell solutions for telecommunications, commercial and industrial backup power from 1 to 15 kW. These technologies must provide solutions for a wide range of applications from portable to off grid power and directly support efforts towards sustainable energy by developing systems that are high efficiency, clean and capable of processing renewable fuels such as bio-methanol.

Tucker Ruberti, Market Development Manager - IdaTech, LLC

11:45 am LUNCH (Courtyard Plaza I)

12:45 pm EMPOWERING WINDOWS VISTA FOR SCADA AND REMOTE MONITORING

Discover the breakthroughs and opportunities that Microsoft's Windows Vista has created in SCADA/remote management software solutions. Learn how Windows Vista's new graphics capabilities and user interface open up a whole new world for customers, providing a remote 360-degree real-time view of the manufacturing floor/facility. The latest in remote, OPC Web-enabled HMI/SCADA will be showcased, demonstrating interaction with Windows Vista and SharePoint Server. Don't miss this opportunity to see the future of SCADA and remote monitoring!

Mark Hepburn, VP of Worldwide Sales - ICONICS

12:45 pm BUILDING THE IDEAL COMMUNICATION NETWORK – WIRELESS, WIRED, PUBLIC, PROPRIETARY.... SO MANY DECISIONS

Learn how to create the ideal communication network using a "Hybrid" approach to monitoring, controlling, pushing network capability to the extreme. Attendees will discover how to integrate various communication options to create a robust and reliable system to meet their specific requirements.

Dan Paladino, OEM growth and Businesses Development - FreeWave Technologies

12:45 pm POWER SOURCE CONSIDERATIONS FOR REMOTE EFM / SCADA APPLICATIONS

Flow measurement, monitoring and control in the natural gas industry is being performed more frequently via electronic flow measurement (EFM) devices and reported and controlled through Supervisory Control and Data Acquisition (SCADA) systems. This is particularly true as the search for natural gas expands into more remote regions of the country and world. Selecting and maintaining a reliable source of power to EFM and SCADA equipment can be a challenge in remote locations where traditional grid power is not available or not a viable option. This session will discuss several different solutions for supplying power at these locations, and will focus on photovoltaics, ThermoElectric generators (TEG), thermo electric battery chargers (TEC) and will touch on several additional technologies. Subject matter covered will include basic theory, advantages and disadvantages of the different technologies, considerations when choosing a technology, system sizing and comparison between continuous and non continuous power sources

Murray Hillsden, Product Manger of Power Generation Products - PGI International

1:25 pm OPEN ARCHITECTURE OPC BASED SCADA FOR ELECTRIC UTILITIES

Learn how the Fort Collins, Colo. Utilities integrated standard OPC compliant software to create a robust, scalable electric utility SCADA system. The discussion will include project goals, tutorial about the advantages of OPC, GIG fiber loop equipment, and SCADA system architecture and costs. The Human Machine Interface (HMI), communications (GIG fiber and 900 MHZ radio) and specific interface applications to legacy RS232 and Ethernet IEDs for distribution system monitoring and control will be illustrated. Data acquisition using OPTO22 PLCs for realtime loading and fault indication on distribution feeders will be discussed in detail.

Bob Hover - City of Fort Collins Utilities Light & Power

1:25 pm **IMPLEMENTING NETWORKING TECHNOLOGY AS APPLIED TO WASTEWATER AND GROUNDWATER MANAGEMENT**

Discover how a complex telemetry system for water monitoring and production wells was developed into a seamless radio telemetry application in the harsh desert environment of Southern Arizona, where the desert floor temperatures often exceed 120°F. In this presentation you will learn about a real-world application of copper to fiber-optic, to microwave, to licensed radio and finally to unlicensed spread spectrum radios providing a seamless integrated networked architecture.

Two other applications will demonstrate off-site network monitoring and control of water and wastewater facilities. These systems will show the available network topology and network abilities of today's system technology.

Thomas Reski – Founder, President & CEO - Quantum

1:25 pm **ADVANCEMENTS IN GENERATOR PARALLELING TECHNOLOGY AND ITS IMPACT ON SYSTEM RELIABILITY, SERVICEABILITY AND MONITORING**

Parallel power solutions have always offered the standby generation marketplace certain advantages. However, the implementation of these solutions has been limited to mission critical applications and large kilowatt projects. This is largely due to the constraints in implementing traditional paralleling solutions. These constraints include costs, space, issues of single source responsibility and a significant level of complexity. To access the benefits of parallel generation while removing the cost and complexity limitations, generator manufacturers need to integrate generator paralleling into the genset package.

Michael Kirchner, Training Manager - Generac Power Systems

2:00 pm **MULTIVARIATE ANALYSIS OF WIRELESS SENSOR NETWORK DATA FOR MACHINE CONDITION MONITORING**

It is well known that the prevention of catastrophic failures of machines through remote monitoring and early fault detection via condition-based maintenance (CBM) and predictive maintenance (PM) can reduce costs, decrease plant down-times and increase operating revenue.

Two factors that are of importance in the design of CBM/PM include reliably transporting data from a remote location, and accurately/timely detection of machine faults through the implementation of sophisticated data analysis and interpretation algorithms at the remote location.

Learn how a CBM/PM system was employed with a wireless sensor network for the distributed data acquisition, data analysis and interpretation through multivariate, statistical techniques. Other topics will include the advantages of WSN-based distributed data acquisition, WSN deployment and data analysis/interpretation algorithms.

Chellury (Ram) Sastry - Siemens

2:00 pm **MANAGING CONNECTIVITY TO DEVICES BEHIND FALSE IP ADDRESSES**

Embedded devices connected to the Internet directly and easily communicate as clients. However, they usually suffer from two major drawbacks when they need to act as servers. They have a dynamic IP address, and a false IP address because they're behind a Firewall or NAT.

Dynamic IP addresses are usually assigned across a PPP dialup connection. It is complicated for a server device to be based on a dynamic IP address, since the remote client will not know with what IP to approach the server.

False IP addresses are usually assigned to devices on a sub-segment behind a NAT and/or Firewall. In this case, the devices act as servers on their local sub-segment, but clients outside the NAT/Firewall do not have access to these devices. In some situations the assigned IP addresses are both dynamic and false, as is the case for example with many GPRS services.

Learn about and discuss these issues in greater detail and discover an architecture that solves most of the associated problems. The presentation shall a use case that can be used to deploy thousands of devices in the field and manage connectivity to these devices when they are configured as servers in a transparent way.

Amir Friedman, Founder, president and CEO - Connect One

2:00 pm **ADVANCES IN LITHIUM-ION BATTERIES FOR UPS AND PORTABLE SOLAR SYSTEM APPLICATIONS**

Recent advances in lithium-ion and lithium-ion polymer cells, battery pack ancillary circuits, and battery control circuit algorithms now make it feasible to use lithium-ion batteries in applications previously restricted to lead-acid. This presentation will provide examples of Lithium-Ion batteries in high power, 20 KW UPS applications and high energy portable solar system applications. It will be shown that by synergistically applying these recent advances, lithium-ion batteries can provide weight savings as much as 8 to 1, size savings as much as 5 to 1, and estimated useful life improvement of as much as 2 to 1 over Lead-acid.

David A. White, Electrical Engineer - Southwest Electronic Energy Group

2:30 pm **DEDICATED EXHIBIT HALL TIME**

3:30 pm **CHALLENGES FACING A REMOTE MONITORING PROGRAM IN THE CITY OF ATLANTA**

As remote monitoring technology has changed, The City of Atlanta Department of Watershed Management has changed with it. This small program within the department that was implemented for cost recovery purposes nearly four decades ago. Initially, the program utilized personnel for data acquisition due to the limited number of sites. As network of sites

increased, it transitioned from personnel to land lines. The ability to justify the "phone line to nowhere" was dwindling, data was stacking up and lightning seemed to have their number (so to speak).

Through its search for alternatives, the city stumbled into the minefield of numerous wireless data transfer methods. The existing network of proprietary monitoring equipment, coupled with the cost of the proprietary modem, would have crippled their budget. Through the search for wireless solutions outside a preferred manufacturer, the city came across a series of AT commands and cheap cellular hardware that could meet their needs. Through wireless communication the city discovered solutions that have suited the needs as a department and a remote monitoring program.

Patrick Woodall, Pollution Control Monitoring Chief - City of Atlanta, Department of Watershed Management

3:30 pm **IMPLEMENTING FIBER OPTICS IN REMOTE MONITORING**

Remote monitoring and sensing of equipment is considered a requirement for deployment of all mission critical and even most data collection stations. More and more these devices are being deployed in harsh environments and environments further away than standard copper networks can reach. The need for fiber optic connectivity and sensing is growing since it offers low power consumption, increased thermal tolerances, and doesn't suffer from EMI/RFI effects like copper.

In this session you'll discover ways to implement fiber connectivity to extended temperature and ruggedized devices. Connectivity is available in data transmission and power over fiber optic cable. Passive fiber optic sensor systems will also be discussed as a way to provide temperature, strain and distance measurements from hundreds of meters to kilometers away.

Ken Applebaum, Director - COTS

3:30 pm **CHG EMISSION REDUCTIONS USING VRB ENERGY STORAGE SYSTEMS**

Learn about the value of applying an energy storage battery at remote area power supply (RAPS) locations that use diesel generation, coupled with wind, to greatly reduce diesel consumption and emissions. In addition, by adding sufficient storage, wind penetration levels of 80 percent can be achieved without stability concerns. The resultant fuel consumption reduction, lowered O&M and CHG emission reductions results in cost of energy (COE) reductions sufficient to yield paybacks of three to four years.

Timothy Hennessy, CEO & Chairman of the Board - VRB Power Systems, Inc.

4:10 pm **PROTECTING OUR WATER SUPPLIES THROUGH REMOTE MONITORING**

The value of real-time environmental monitoring and prediction has become increasingly important given the potential for either the accidental or the intentional introduction of contaminants in our nation's water supply. Timely detection of drinking water contamination or pending equipment failures is critically important in protecting the environment, community health and the economy. In response to a broad array of potential threats, the USEPA, DHS, the National Laboratories, local water districts, educational institutions and private sector enterprises have expressed heightened interest in developing technologies that protect drinking water from these threats. Learn from a case study about a prototype demonstration project which Industry, in collaboration with Environmental Protection Agency (EPA) and two California Water Districts, are engaged in to advance the state and nation's ability to rapidly detect harmful contaminants in public utility systems.

Steve Bridge, CEO - Bridge Business and Engineering Services

4:10 pm **EXPOSING THE M2M CONNECTIVITY 'X FACTOR': REMOTE MANAGEMENT**

Using case studies and examples to demonstrate, learn about the value of network configuration management toolsets for M2M connectivity projects. For example, a petroleum company deploys a router which connects gas station tank monitors to a WAN for remote monitoring. Using a network configuration manager, the device is deployed in multiple locations across the US without onsite technical assistance. The device, when plugged in, calls home for its configuration and is up and running in minutes. This is just one example of the powerful capabilities of NCMs. The session will focus on actionable ways to leverage such tools to maximize resources in any M2M connectivity project.

Deepak Wanner, president & CEO - Precidia Technologies, Inc.

4:10 pm **SUPERCAPS – TIME TO CHALLENGE BATTERY SHORT-TERM BRIDGING POWER**

The battery is an energy storage device that we have been using for over 200 years. Now, another old technology, capacitors that utilize electrostatic energy storage has emerged as the potential alternative to batteries. Especially when integrated with a UPS for short term bridging until the standby generator starts.

Ultra caps are being used by utilities as replacement for battery banks to buffer short term outages on the power grid and to replace batteries when integrated with critical load UPS. The ultra caps provide bursts of energy, withstand hundreds of thousands of charge/discharge cycles without degrading, are modularized (thus scalable) and last 10 to15 years. And, is pollution-free – a "green machine."

Discover how ultra cap technology and the UPS have gained flexibility in handling short term outages by integration with ultra caps. This can replace short term battery strings, and produce savings through a variety of avoided battery costs including no air conditioning, no battery room and no maintenance.

Gene Weaver, Consultant - Mission Critical Power Systems (MCPS)

4:45 pm **COCKTAIL RECEPTION IN EXHIBIT HALL**

7:00A.M. - REGISTRATION & CONTINENTAL BREAKFAST

Keynote Presentations

8:00 am KEYNOTE - TRENDS IN THE GLOBAL ELECTRIC POWER AND ENERGY PIPELINE MARKET FOR SCADA TECHNOLOGY

Learn about the global market and regional variations in SCADA usage patterns in the world's electric utilities and energy pipelines. Topics to be covered in the session include: the five-year market outlook for large new control systems in the worldwide energy industry; large systems project trends in the developing regions of the world; current linkages and plans for additional links between EMS, SCADA and DMS systems to other systems; current and planned use of communications protocols in various world regions; use of external assistance or third party services needed by energy industry end-user utilities and pipelines; approaches used for reducing vulnerability on T&D operations networks at electric utilities and energy pipelines; the pivotal role played by communications infrastructure in the world's energy SCADA systems and fundamental changes in telecommunications infrastructure in the energy industry.

Charles Newton, President - Newton - Evans Research Company, Inc.

9:00 am KEYNOTE PANEL SESSION: SCADA USE IN WATER/WASTEWATER AND UTILITY APPLICATIONS

Technology in the remote monitoring and SCADA market is ever changing. Utilities and wastewater/water system operators must constantly wrestle with upgrading, maintaining or replacing existing systems. This evaluation of products and services gives these professionals a unique insight on the current technology advancements, and their applications. This is your chance to learn about the latest technologies, upgrading legacy systems while keeping budgets in mind, and simply what works and what does not in the real world, as well as ask questions.

This Remote Monitoring and Networking 2007 exclusive will provide you the opportunity to discuss your needs in a relaxed panel session environment. Topics covered will include emerging technology, SCADA applications, project difficulties and their solutions, management, maintenance, communications, security, upgrade timetables, mesh networking, CDMA, etc.!

Edward Loop, SCADA Engineer - Kalamazoo Water Works

Bob Hover - Fort Collins, Colo. Utilities Light and Power

Patrick Woodall, Pollution Control Monitoring Chief - City of Atlanta, Department of Watershed Management

10:00 am NETWORKING BREAK

10:30 am DESIGNING SCADA COMMUNICATION WITH THE HELP OF STANDARDS

Where does a SCADA designer go to find guidance for SCADA designs? In SCADA systems, technology is rapidly transforming SCADA system designs and communications. What was designed in the past just doesn't include what we need to do now. This presentation takes an overview look at the upcoming revision to IEEE C37.1, what has changed in the standard and what is left to the engineer to figure out. It takes a look at integration, networking, and security in SCADA communications where technology is making drastic changes and what the industry technologists writing standards are offering for guidance.

Craig Preuss, Engineering Manager for Utility Automation - Black & Veatch Corp.

10:30 am DISTRIBUTED, INTELLIGENT EDGE NETWORKS FOR REMOTE MONITORING

Learn about a new technology direction in the area of basic network design, distributed, intelligent edge networks, that will play an increasingly strong role in the future of remote monitoring and networking. The benefits of this technology direction are many.

This intelligent network infrastructure would:

- Provide an open network architecture for sensors and actuators, as well as access by authorized personnel.
- Be scalable to allow for easy incorporation of future network and system enhancements.
- Employ wireless and mesh-enabled communications architectures for resilience.
- Provide distributed, field-level computational capacity support autonomous and semi-autonomous operations.

Patrick Esposito, president & Chief Operating Officer - Augusta Systems, Inc.

10:30 am ENSURING OPTIMUM BACKUP POWER FOR BUSINESS CONTINUITY

Businesses with multiple locations that operate in today's commercial marketplace do so with the understanding that they must compete in a global economy that offers no forgiveness if you can't service your customers. It's simple in today's economy, if you can't service your customer, someone else will. That's why it's so important to keep the power up and running when nature strikes to ensure a constant and uninterrupted business plan so that you can continue to provide excellent customer service and support to your dedicated clients. Discover how to address the issue of our nation's fragile power grid and offer options on how to keep the power on when the grid fails.

Eric Johnston, CEO - Triton Power

11:10 am SURVIVING THE AMPS SUNSET

On February 18, 2008, wireless carriers may elect to remove analog based cellular service in certain portions of their coverage area. When (not if) this happens, customers who depend on AMPS technology may no longer have coverage.

Learn about the challenges associated with managing a transition from AMPS based remote monitoring units to digital cellular units for a major natural gas distribution customer. Since this client had over 3,000 units and daily information from these units was critical to their day to day operation, the project had an elevated level of importance. We will explain the AMPS Sunset problem, the development challenges in finding an alternative, the commercial challenges of convincing the customer to migrate, and the field installation requirements.

Lee Blankenstein, PE, VP Sales and Marketing - American Innovations, Ltd.

11:10 am **SCADALESS SCADA USING WIRELESS MESH RADIO TELEMETRY**

Discover "end point" of technology in three areas: a Wireless MESH radio combined with a PLC on a Chip, and an ancillary processor and memory with IO connectivity all on the same board. This allows the proportional power a SCADA system would allocate to that number of IO, to be distributed to the point of the IO. The MESH radio approach facilitates IOs being "mapped" to each other so that inputs can direct outputs on different boards with the MESH radios performing the "transport" function. Theoretically, there is no need for the SCADA system in such cases, although blending new installations with legacy SCADA is the more practical approach.

Over time, PLC's will be replaced with processors and memory which can be programmed directly using more powerful programming languages than "ladder logic" allows. While such a board as may be necessary for the transition period, it is a simple matter to just drop the PLC on the chip from the board later, and use the remaining components to perform the same functions. Therefore sucn a board can provide an immediate, and cost effective solution now, while being designed to provide a migration path for the future.

Louis F. De Silvio, President - Industrial Telemetry, Inc.

11:10 am **UTILIZING NEW TECHNOLOGY TO SOLVE A PROBLEM IN THE TELECOMMUNICATIONS MARKET**

A request for proposal was initiated by a large telecommunications company that asked suppliers to provide a power system for sites throughout the UK. What motivated this request was the fact that the current diesel genset units were causing a serious environmental problem relating to spillage of fuel at the sites. Another aspect that was the noise level had to be below 60 db(A) at twenty feet.

The key to solving this problem would be to design a well enclosed remote power system that would eliminate the diesel engine as a power source, as well as extending the service interval for as long as possible. This system had to have reliability equal to or better than the existing gensets that were being used. Learn how Marathon Engine Systems met these requirements, and the system that evolved from it.

Mike Cocking, General Manager - Marathon Engine Systems

11:45 am **LUNCH**

1:00 pm **WIRELESS INSTRUMENTATION FOR EQUIPMENT CONDITION MONITORING**

Unexpected downtime results in loss of production, and costs the process industry millions of dollars each year. Similarly large sums of money are spent replacing perfectly good equipment in the quest to avoid failures. In most cases the characteristics of impending failure are well known and normally give ample warning, but the key is to get accurate, up-to-date and reliable data in a cost-effective manner.

New technologies in wireless instrumentation are allowing for this to happen. The true benefit of implementing wireless instrumentation for equipment condition based monitoring lies in the cost savings, ease of use and breadth of measured parameters associated with this technology. This presentation surveys several applications of wireless instrumentation in successful equipment condition monitoring programs and will focus on these experiences.

Gene Yon, President - Adaptive Instruments/Accutech

1:00 pm **INSTALLING WIRELESS NETWORK-BASED SECURITY DEVICES USING INCREASINGLY-CROWDED UN-LICENSED RADIO SPECTRUM**

The use of wireless network technologies is expanding rapidly, so much so that it is becoming critical for integrators to fully research the subject prior to deploying products in this very crowded unlicensed bandwidth space. How do you avoid interference? What analytical hardware/software tools and installation tricks should you consider when addressing these situations to ensure that your wireless application will work when you flip the switch? Learn about the pros and cons of deploying licensed versus unlicensed RF products and sure-fire ways to ensure a satisfactory and fully functioning installation.

Ray Shilling, Vice President of Sales & Marketing - AvaLAN Wireless Systems

1:00 pm **ONSITE POWER BREAKOUT - TBA**

1:40 pm **EVALUATION OF WIRELESS IP COMMUNICATIONS FOR SCADA**

Wireless communications technologies are essential for bringing cost-effective data acquisition and control for small point-count applications. The introduction of low-cost, reliable serial wireless communications made many automation applications economically and technically practical. The recent expansion of wireless IP communications technologies promises more function with similar cost, better reliability, and more technology and vendor choices. This paper evaluates and compares the performance, costs and benefits of wireless IP communications using CDMA, Satellite, Wi-Fi and non-licensed radio technologies for small point-count applications.

Gary Roskos, Director of Engineering Services - Open Systems International, Inc.

1:40 pm **THE NEXT-GENERATION OF MACHINE CONNECTIVITY AND MANAGEMENT**

The ultimate goal of machine connectivity is the realization of fully-automated, programmable remote device management. Problems or actions that would normally be fixed by a technician or normally require human intervention can be handled automatically by networked equipment in real time. Hand in hand with device autonomy will be the ability to utilize existing web tools to automate reporting and centralize device management, leading to more efficient processes. Discover the future of machine connectivity, what technology can be utilized and tips on how to take advantage of the revolution. Also learn and discuss its benefits via case study examples.

Shaye Shayegani, Senior Field Application Engineer - Lantronix

1:40 pm **PREFERRED IMPLEMENTATIONS FOR THE WATER INDUSTRY - REMOTE STATIONS**

For three types of remote water stations – small lifting or pumping stations, pumping or booster stations, and large booster stations or complex pumping stations – Schneider Electric will examine preferred implementation solutions. These preferred implementations provide a comprehensive solution allowing complete integration, from supervision to instrumentation. For each preferred implementation solution, Schneider Electric will address the advantages, the layout, typical applications, and characteristics. The presentation will end with a look at success stories from around the globe.

Donna Smalls, HMI and SCADA product manager - Schneider Electric North America

2:10 pm **SUBSCRIPTION-BASED REMOTE MONITORING VIA THE INTERNET**

Discover the features, benefits and open architecture of a subscription based remote monitoring service, implemented by an OEM. The system allows machines, processes and equipment to be remotely monitored to improve operational efficiency and lower service costs, as well as provide enhanced customer support and drive increased revenues from the customer base. By using Wireless and internet technologies, remote nodes communicate securely to a central monitoring system, which then delivers web-based reports and alerts to service techs and customers via browser, email, fax or cellular phone. Utilizing a secure central data collection/processing center on a subscription basis, the oem was spared the capital expense of developing the necessary infrastructure. A key focus of the presentation is an analysis of the ways the OEM can save money and increase profits by using this type of system.

Richard Lamb, President - Midwest Technology Ventures

2:10 pm **MANAGEMENT NETWORK LOWERS COSTS FOR SERVICE PROVIDER**

The key to developing any large-scale network is to keep operating expense under control. Magnet Networks provides residential, commercial and other customers with fiber-to-the-home and ADSL2+ based broadband services. To help reduce the number of service calls to its more than 50 remote data centers, the company deployed a remote networking system that enables network managers to monitor and control all elements of the equipment in these facilities from centralized locations. This presentation will cover the case study of Magnet, describing its implementation of a “lights out” management system.

Tom Coburn, Product Line Manager, Out-of-Band Networks - MRV Communications

2:10 pm **REMOTE & MOBILE VIBRATION MONITORING FOR THE OIL AND GAS INDUSTRY, A CASE STUDY**

Many companies are moving toward wireless sensor technology. Due to the level of complexity surrounding vibration and vibration analysis, there continues to be a preference toward a manual process for taking vibration readings on motors and pumps within the oil and gas industry.

Learn about a real world example of wireless vibration monitoring solution, jointly developed by Wilcoxon Research and Octave Technology. This product was implemented at a refinery and provided a immediate positive results and allowed the company to better utilize their maintenance resources and further analyze the state of their equipment in real time.

Chris Parker, Director of Business Development - Octave Technology

2:50 pm **CHALLENGES AND STRATEGIES IN MANAGING CITY OF ATLANTA FLOW DATA AND MONITORING**

Prior to an EPA/EPD mandated FACD, the City of Atlanta maintained around 21 permanent flow meters and eight rain gauges as part of their Inter-Jurisdictional (IJ) Flow Monitoring Program. After the development and implementation of a system-wide flow and rainfall monitoring plan, this system grew to 117 permanent flow meters, over 500 temporary flow meters, 103 flow monitoring sites and 13 rain gauges.

Due to the magnitude and objectives involved, there was a lack of uniformity in reporting flow monitoring data. To help remedy this problem the city took inventory of the various type and formats of data, and began working with the municipalities on a number of fronts and upgrade their IT system so data space is no longer a concern. Learn how the City of Atlanta dealt with these issues and upgraded/maintained its Inter-Jurisdictional (IJ) Flow Monitoring Program.

Patrick Woodall, Pollution Control Monitoring Chief - City of Atlanta, Department of Watershed Management

2:50 pm **DEMYSTIFYING WIRELESS ETHERNET**

Discover how to demystify wireless Ethernet. How do I integrate Ethernet into my serial network? Can I get IP addressability to the wellhead? What advantages can I expect? These are just some of the questions that will be answered by Jim Gardner of FreeWave Technologies. This presentation will be valuable to a number of people across many professions from IT supervisors to instrumentation manufactures.

Jim Gardner, Sales Manager of Oil and Gas - FreeWave Technologies

2:50 pm **LEGACY SYSTEM INTEGRATION: CHALLENGE FOR REMOTE ALARM MONITORING SYSTEMS**

Older systems based on discrete contact closures, and using either dial-up or slow speed digital communications back to a monitoring center are still in use in many areas of our industrial world. The problem is that they are still in good working order and very often too expensive to replace, but they are limited in both capability and performance.

This session will take an in-depth look at older alarm monitoring systems and detail, by today's standards, the limitations of these older systems. Then the discussion will focus on the browser based systems of today and all the benefits we are able to obtain.

Learn about the challenges involved in making the migration to newer systems, listing some of the many pitfalls and obstacles involved in implementing a modern alarm monitoring system, whilst still keeping the older system functioning.

Lionel Silverman, P.E, VP Business Development - Facility Robotics, Inc.

For more information on our Conference Program Please Contact: Nick Depperschmidt at Nickd@infowebcom.com or 800-803-9488 x.111

Networking Opportunities

Each year, hundreds of today's Remote Monitoring, Networking and Onsite Power solution providers, OEMs and end-users that utilize Remote technology, converge to discuss the latest advancements in the field. Below is a partial list of companies that will attend this year's conference or have attended past Remote Monitoring and Networking / Onsite Power Conferences.

ABB
Accutech
AC Data Systems
Addco, Inc.
AES-Intellinet
Advantech Automation
Aeris.net
Agilent
Alliant Energy
Alpha Technologies
Alisal Water Corporation
American Power Conversion
Antenna Specialists
Argonne National Laboratory
AT&T Wirless
Avocent
Axeda Systems, Inc
Bluetree Wireless Data, Inc.
Boeing
BP Pipelines N.A.
BP Solar
Campbell Scientific, Inc.
Central Coast Water Authority
CH2M Hill
Chevron International Utilities
Cisco Systems
Citel
Cobasys
Collier County Public Utilities
ComBrio
Control Microsystems
Control Systems International
CSB Battery Technologies, Inc.
Data Comm for Business
Dataradio
Department of Defense
Department of Water Resources
Digi International
DPS Telecom
DTE Energy Technologies
East Bay Municipal Utility
Echelon Corporation
Endress & Hauser, Inc.
Flex-Kleen
FreeWave Technologies
GE Fanuc Automation
Geist Manufacturing
GEMS Remote Monitoring
HyRadix, Inc.
IdaTech
Intel Corporation
InterDigital Communications Corp.
Itron, Inc.
Kohler
Kyocera Solar
Kyocera Wireless Corp.
Lantronix
Lavaca Navidad River Authority
Lower Colorado River Authority
Luna i-Monitoring
Madison Gas & Electric
Marathon Oil Corporation
Matrix Solar Technologies
McMinnville Water & Light
Merced Irrigation District
Microwave Data Systems, Inc.
Motorola, Inc.
MRV Communications
National Grid USA
National Renewable Energy Lab
National Weather Service
Nearson, Inc.
Nebraska Public Power District
Nemo Technologies
NEORSD
NetBrowser Communications
Nexergy, Inc.
Nokia
North Carolina Electric Coops
Northern Border Pipeline
NovaRoam Mobile Router
NPhase, LLC
NTT Facilities, Inc.
Numerex
Nuvera Fuel Cells
Octave Technology
Omnex Control Systems, Inc.
Omron Tech Ventures Group
Onset Computer Corp.
Optical Cable Corp.
OPTO 22/NOKIA
Orto de Mexico
Oxy, Inc.
PacifiCorp
Palmdale Water District
Parallax Energy Systems, Ltd.
Parsons
PCS
PCS UtiliData
Phoenix Contact
Plug Power, Inc.
PolyPhaser Corporation
Power-One
Powerserve Technologies, Inc.
Plant Equipment, Inc.
Progress Energy
PS Energy Group, Inc.
PSI
Quantum Automation
Quest Controls
Raytheon
RAD Data Communications, Inc.
RainWise, Inc.
Remote Equipment Systems, Inc.
Renewable Energy Resources
RF Neulink
Sachs Automation
Sage Designs, Inc.
San Antonio Water System
Sandia National Laboratories
SatCon Power Systems
Satel
Sempra Energy Utilities
Sensor Technologies & Systems
Serveron Corporation
Sharp Technologies, Inc.
Siemens
Silicon Oil & Gas Ltd.
SIXNET
SmartSpark Energy Systems
Smarteq Wireless AB
Sonoma County Water Agency
Sony
Sony Ericcson
Southern California Edison
Southwest PV Systems
Space Data Corp.
SPC TelEquip
Spectrum Instruments, Inc.
Stonewater Control Systems, Inc
SunWize Technologies
Survalent Technology Corp.
Tadiran Batteries
Teletronics International, Inc
TESSCO Technologies
Texaco Ovonic Battery Systems
US Bureau of Reclamation
US Department of Defense
U.S. Office of Pipeline Safety
Utility Automation & Engineering
Valere Power
vMonitor, Inc.
Water & Sewerage Authority
Westin Engineering
Wireless Telematics
Ziphany LLC

SECURING INDUSTRIAL NETWORKS: CYBER PROTECTION FOR AUTOMATION, CONTROL AND SCADA SYSTEMS (CEU CREDITS - 0.7)

Monday, November 5th, 8:00am - 4:00pm

Are your computerized factory automation, process control and SCADA networks vulnerable to hackers, spies or saboteurs? This seminar will teach you the basics of cybersecurity, and how to apply it to your industrial networks.

After Attending this Workshop You Will be Able to:

- Understand why improving industrial security will be necessary to protect people, property, and profits
- Learn how today's computerized networks, with COTS software, open systems, and Web accessibility, are mor vulnerable than previous generations of systems.
- Conduct an analysis of the vulnerability of your networks
- Understand how to anticipate attacks and deploy defenses
- Talk knowledgeably with management, IT people, and vendors about improving your industrial network security.

This Workshop Will Cover:

- *What is Security*: Definition, the three aspects of security, security vs. safety.
- *Cyber Threats in the New Millennium*: Who might attack and why, insiders vs. outsiders, computer crime statistics.
- *Terminology and Tools*: Threats, vulnerabilities, counter measures and risk assessments.
- *Computer and Network Vulnerabilities*: Pre-1990 systems, COTS hardware and software, open systems, real time OS and environment, web accessibility, wireless.
- *The Forces Against You*: Attacker tools and techniques
- *Defense Tools and Strategies*: Foundations of computer security, policies and procedures, encryption, firewalls, intrusion prevention and detection, network separation
- *Analysis and Protection Examples*: Factory Automation network, chemical plant process control, SCADA network.
- *Where to Go from Here*: Standards, role of government, cyber security education, vendor security requirements.

INSTRUCTOR:

Wayne Manges, Oak Ridge National Lab (ORNL)

Wayne Manges co-chairs the ISA SP100 standard for industrial wireless automation and directs a center known as the Extreme Measurement Communications Center (EMC2) dedicated to facilitating deployment of assured communications channels (especially wireless) in harsh environments. He also directs the DOE's Industrial Wireless Program at ORNL with a focus on the needs of the industries identified by the DOE's Industrial Technology Program.

REGISTRATION:

$395 – For ISA Members
$445 – Non-ISA Member Price

Register at www.ISA.org (under Education and Training)

SCADA BOOT CAMP: BEYOND THE ESSENTIALS

Monday, November 5th, 8:00am - 4:00pm

This workshop is intended for SCADA system managers and maintenance personnel who wish to gain a better understanding of the engineering practices for the design of a modern SCADA system.

Is Your SCADA System Experiencing a Mid-Life Crisis?

SCADA systems are designed for a seven to 10 year life span. During this time frame you can expect to conduct at least one major hardware and software refresh. If your service territory or facilities have been expanded significantly, one refresh may not be enough.

Participants will learn about the importance of assessing your SCADA system at the middle of its life rather than waiting until it's obsolete. Discover exactly what you will get from a mid-life assessment, the benefits and what to do after the assessment.

Historical Data Management & Reporting: Fundamentals

Learn about the ground work for leveraging the critical data captured from a SCADA system and how to use it for reporting purposes.

SCADA Wide Area Network Design

Engage in an technical discussion about traditional SCADA Wide Area Networks, Ethernet SCADA Wide Area Networks and Wireless Design Wireless Ethernet (WiLAN) Standards.

How Secure is your SCADA Infrastructure?

Many utility managers believe their SCADA systems and networks are protected from tampering by state-of-the-art firewalls, routers, VPN's, access control, etc.. But are they really safe?

Security assessments repeatedly expose vulnerabilities. Using commonly-available hacking tools SCADA Systems can be easily accessed and controlled - often within hours and without being noticed.

Learn to dispel the myths associated with SCADA and Cyber security, Topics include sources of threats, known vulnerabilities to SCADA sytstems, industry efforts to provide better security and considerations for SCADA/cyber security.

Enabling Intelligent Asset Management and Improved Regulatory Compliance with an Integrated Data Warehouse (Case Study)

This case study discusses how an organization is leveraging SCADA information as well as other resources to add value to the management of the organization.

INSTRUCTORS:

Bill Serjeantson, P.E., VP of Engineering - Westin Engineering
Dean Schoeder, Project Director - Westin Engineering

REGISTRATION:

$395 – Register on or before September 14th
$495 – Register after September 14th

Co-Located Conference Workshops

Conference Workshops brought to you by Zero Downtime 2007
(co-located with Remote Monitoring and Networking / Onsite Power 2007)

CREATING AN EFFICIENT DATA CENTER

Monday, November 5th - 9:00 am - 4:00pm
In this pre-conference workshop, DegreeC and their circle of experts will tell participants how to create and maintain an efficient data center. Participants will learn best practices for reducing data center cooling and energy costs. Topics covered at this workshop will include reducing overcooling, directing airflow, lowering the total cost of humidity while staying within ASHRAE guidelines, and the benefits of server virtualization. The workshop will tie all of the recommendations together at the end by concluding with a discussion on increasing cooperation between Facilities and IT managers. Participants will also hear an analysis of the EPA study on data center efficiency that is expected to be released in June. Wally Phelps, DegreeC's Data Center Product Manager participated in the EPA's workshop in February and has submitted market data to assist the EPA with their study. Lastly, participants will hear from a data center manager who has been successful in implementing the key ingredients for an efficient data center.


INSTRUCTORS:
Wally Phelps, Data Center Project Manager - DegreeC
Coy Stine, Simulation Engineer - DegreeC

REGISTRATION:
$225 – Register at www.RemoteMagazine.com

ELECTRONICS COOLING: CHALLENGES AND SOLUTIONS

Monday, November 5th - 9:00am - 1:00 pm
Design engineers are dealing with more heat problems than ever before. This session is designed to increase an engineer's awareness of thermal science and design issues. Electronics Cooling: Challenges and Solutions will provide engineers with the knowledge to recognize, understand, and characterize heat problems, and provide them with valuable information on how to best to manage them within the cost and time limits they are always facing. Attendees will also learn about different cooling solutions available today as well as, those in development.

INSTRUCTOR:
Kaveh Azar Ph.D., President & CEO - Advanced Thermal Solutions

REGISTRATION:
$495 – Register at www.RemoteMagazine.com

REMOVING THE MYSTERY FROM DATA CENTER THERMAL MANAGEMENT

Monday, November 5, 2007 – 1:30pm – 5:30pm
In recent years, power and cooling needs as well as energy costs of data centers have risen exponentially and have become the most important issue for many data center managers. The cost of cooling data centers alone can constitute up to fifty percent of total energy costs. Improving cooling efficiency by adopting best practices not only significantly reduces cooling costs but also makes more power available for IT equipment. Strategic placement of air conditioning units, proper distribution of high-density heat loads, and good management of supply and return air in the data center help reduce energy costs.

This workshop will provide attendees best practice principles of data center cooling along with several examples demonstrating how CFD technology can help in optimizing the cooling performance and improving energy efficiency of data centers. The role of the server cabinet in reducing acquisition costs, construction costs and energy costs while simultaneously supporting densities over 500 watts per square foot will be explained and a case study will be presented

INSTRUCTORS:
Ian Seaton, Technology Marketing Manager - CPI
Kishor Khankari, Ph.D., CoolSim Project Manager - ANSYS
R.M. Lodder, Principle - Uptime Technology

REGISTRATION:
$199 – Register at www.RemoteMagazine.com

LAIRD TECHNOLOGIES EMC WORKSHOP

Tuesday, November 6th - 1:00pm - 5:00pm
EMC is a key ingredient of achieving zero downtime. EMC issues can cause untold complications in electrical and electronic equipment. Susceptibility issues start at the component level and continue throughout the system design and development. Finally, the ultimate Downtime issue is not being able to place the product onto the market because it does not meet its mandatory EMC requirements.

This workshop will discuss the legislation, basics of EMC, practical examples and design considerations to achieve the necessary EMC for your product to operate as intended and be able to go to market.

INSTRUCTOR:
Gary Fenical, EMC Technical Support Engineer/NARTE Certified EMC Engineer - Laird Technologies

REGISTRATION:
FREE – With Day 1 Conference Registration

Meet Some of the Speakers

Deepak Wanner
President & CEO - Precidia Technologies, Inc.

One of Silicon Valley North's 'serial' entrepreneurs, Deepak Wanner is the founder and president of Precidia Technologies. Leveraging expertise in IP based payment technologies, Deepak's vision has helped drive the market for M2M connectivity towards remote device management and deployment. Deepak is a proponent of actively managed network migration and integration solutions for legacy devices in industries ranging from building automation to energy and utilities. A 2005 Remote Monitoring Conference speaker, Deepak has presented at many industry conferences, including the National Association of Broadcasters, Energy Security and Entelec. Most recently, Deepak addressed the 2007 M2M United conference. Deepak holds a P.Eng degree, and an MBA in Accounting.

Kody Salem, Utilities and Public Infrastructure Division Manager – Edison Automation

Mr. Salem has more than 13 years experience in facilities process operations/engineering, design, construction and startup, technical support, and maintenance of a wide range of plant equipment/systems, including: SCADA and DCS, electrical distribution and generation, negative pressure ventilation, cooling tower systems, pressurized air systems and piping/fluid transfer systems. He has a strong background in operations and has worked closely with plant operators. Kody is responsible for planning and implementing the strategy of Nashville Metro as well as Virginia Beach and is now the Manager of Edison Automation's Utilities and Public Infrastructure Division.

Craig Preuss, Engineering Manager Utility Automation - Black & Veatch Corp.

Craig Preuss is the Engineering Manager for Utility Automation at Black & Veatch Corp. He performs many different tasks as he works in substation integration and automation. He is a professional engineer in the states of Illinois and Washington, and earned his bachelor's degree in electrical engineering from Valparaiso University. He earned his master's degree in power system analysis from the Illinois Institute of Technology. He has authored several papers, presentations, and articles on topics dealing with substation integration and automation. He is a member of the IEEE and is the working group chair for IEEE C37.1, was involved in the writing of IEEE 1615, IEEE 1686, and is also involved in other IEEE working groups. He is also a member of the ISA.

Patrick Woodall, Pollution Control Monitoring Chief - City of Atlanta, Department of Watershed Management

Patrick Woodall is the manager in charge of the flow/rain monitoring program for the division of Industrial Inspection & Stream Monitoring with the Bureau of Watershed Protection, Department Of Watershed Management in the City of Atlanta. Patrick's responsibilities include other programs in addition to the remote monitoring programs such as the storm water utility. Patrick has been employed by the City of Atlanta for 14 years.

Wayne Fong
Senior Gas Engineer - Pacific Gas & Electric

Wayne Fong is currently a Senior Gas Engineer with Pacific Gas and Gas T&D Engineering in Northern California. He obtained both his B.S. and M.S. degree in mechanical engineering from the University of California at Berkeley. Wayne has over twenty years of experience in diverse gas engineering and computer disciplines, including Instrumentation and Control, Supervisory Control and Data Acquisition Systems (SCADA), network administration and remote access. He has also worked with various embedded and network operating systems including the different versions of Windows implementations. Currently Wayne is the project engineer for PG&E's system wide RTU replacement project.

Michael Kirchner
Training Manager - Generac Power Systems.

After graduating from the University of Wisconsin with an electrical engineering degree, Michael worked as a field engineer in the oil fields of Saudi Arabia. Michael began his career in the electric power industry as a systems engineer and project manager for Woodward Governor Company. At Woodward, Michael designed hydro-turbine and plant control systems for the electric power industry. After leaving Woodward, Michael finalized his masters in business administration degree from the University of Wisconsin before joining Marathon Electric. At Marathon Electric, Michael performed marketing and application engineering duties. In 1999, Michael joined Generac Power Systems where his current role is training manager responsible for providing technical training, developing professional CEU seminars and presenting technical papers.

Donna Smalls
HMI/SCADA Product Manager - Schneider Electric

Donna Smalls, HMI and SCADA product manager, is a member of the Automation and Safety Product Marketing Team at Schneider Electric North America. Prior to joining Schneider Electric in 2006, she spent over 12 years in the industry working for companies like Alcatel, Plexsys Wireless Systems, Watkins-Johnson Company and D&C Technical Services. She holds a master's degree in electrical engineering from Georgia Institute of Technology and a bachelor's degree in electrical engineering from Clemson University.

Timothy Hennessy, CEO & Chairman of the Board - VRB Power Systems Inc

Mr. Hennessy holds a Master of Science & Engineering, a B.Sc. Electrical Engineering and has completed B. Com. subjects majoring in economics and quantitative management. He is a chartered engineer in London and registered professional engineer in South Africa. He has held positions including Vice President of Engineering and Operations at LECTRIX LLC, Vice President of PacifiCorp Energy Services and was a founder and Principal of Power Quality Technology. Mr. Hennessy has extensive experience assessing and developing new technologies, utility project management and product delivery. Mr. Hennessy has also published and presented over 20 international technical and economic papers as well as editing of the Power Quality Blue Book (South Africa), a text for engineers in industry.

Gold Sponsor

Citect is a global leader in HMI/SCADA and MES solutions that increase OEE and productivity. With over 30 years' experience providing automation solutions for small plants to Fortune 500 companies, Citect's 75,000+ installation base spans industries including food & beverage, facilities monitoring, gas & oil pipelines, water and wastewater treatment plants and power distribution. Citect solutions are enhanced by strong partner programs as well as professional services, customer support and training. Citect has offices worldwide with installations in over 75 countries. www.citect.com

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