Subject line: SCADA Control System & Engineering Best Practices

Dear ACES Member,

As the Official Supporting Association, we would like to present to you **SCADA World Summit 2014, this coming 22-25 September in Singapore.** If you are keen to learn about the latest SCADA project case studies, security management, integration/upgrading, engineering and maintenance best practices from energy, oil & gas, power & utilities companies globally, this is an event not to be missed!

**What will be covered?**

- SCADA security especially cyber security management
- Integrating, Upgrading & Migration Planning for SCADA systems
- SCADA Data Transmission & Communications
- SCADA Alarm Management
- SCADA Troubleshooting & Maintenance

**Directors, Managers & Engineers of SCADA, Instrumentation, Control System, Electrical & Automation from:**

- Sabah Electricity
- Tata Power Delhi Distribution
- Abu Dhabi Distribution Company
- Metropolitan Waterworks Authority
- ESKOM
- Aqaba Water Company
- SBS Transit

& many other SCADA professionals!

Plus! the Early Bird Discounted Rate for the Summit will save up to SGD 2900 if you register **for the 4-Day event before the deadline – 3 June 2014!** Don’t miss it!

**As the ACES Member, you will be entitled to enjoy another 15% discount when you display mac code “aces” in the registration process.**

If you like **more information on the event agenda and full list of SCADA speakers**, there are 2 ways to do so:

- Email at enquiry@equip-global.com

Best regards,

ACES

P.S. Attend this summit in teams! **Register 3 or more delegates from the same organization to enjoy extra discounts!** Don’t miss it!
World’s Leading SCADA Event

Global SCADA, Automation, Instrumentation & Control System Professionals gather at the world’s premier SCADA summit in Singapore!

2014 FACULTY SPEAKERS INCLUDE:

- Mohammad Alharey, Section Head of Strategic Planning/Central Operations, Aqua Water Company
- Abdul Azei Patall, Chief Engineer, SCADA Department, Sabah Electricity Sdn Bhd
- Rudolf Baumann, Chairman of Transmission Security Cooperation, Swissgrid AG
- Gui Ning Chang, Information Technology Director, SINOPEC SHENGLI OILFIELD, PRC
- Sanjay Kumar Banga, Head of Projects Engineering, Contracts and SCADA, Tata Power Delhi Distribution
- Vijay L Sonavane, Member (Technical), Maharashtra Electricity Regulatory Commission
- Moazzen Hossain, Operational Planning & Studies Department Manager, Abu Dhabi Distribution Company
- Kitti Sriprrommune, Chief of Operation Section, Metropolitan Waterworks Authority Thailand

PLUS! 6 separately bookable workshops on 22 & 25 September 2014

- Workshop A: A Practical Approach to Developing a Robust SCADA Cyber Security Management System Framework
- Workshop B: Practical Tips to Protect Your Critical SCADA System and Conduct Vulnerability Assessment
- Workshop C: A Practical Approach to Data Management, Distribution and Analytics in SCADA Systems
- Workshop D: A Practical Approach to Upgrading SCADA Systems
- Workshop E: 13 Ways to Break a Firewall: New Defenses for Online ICS and SCADA Threats
- Workshop F: A Practical Approach to Troubleshooting & Maintenance of SCADA System & Alarm Management System Failure

KEY SUMMIT HIGHLIGHTS

- **Case Studies**
  Hear from Swissgrid AG, Oak Ridge National Laboratory & DNP Technical Committee amongst other leading utilities companies on how to protect your SCADA system against cyber security threats

- **Best Practices**
  Joburg Water, Reliance Energy, Maharashtra Electricity Regulatory Commission and Dubai Electricity & Water Authority will share best practices on SCADA system implementation, migration planning and upgrading, substation and master station automation

- **Interactive Discussions**
  Join exclusive panel & roundtable discussions featuring Utilities, Oil & Gas Companies & Regulators as they share real life perspectives on hot topics such as SCADA security & forensics management, Data Distribution, Management & Analysis as well as SCADA Network Risk Management

- **Detailed Presentations**
  Gain insights from Sabah Electricity, Saudi Aramco, Abu Dhabi Distribution Company & DNP amongst other on how you can overcome key SCADA challenges including alarm monitoring & management, communications, data management & accuracy, reliability improvement & real time network management

- **In-Depth Workshops**
  Attend the 6 Expert-Led Workshops to grasp the nuts and bolts of SCADA System Upgrading, Troubleshooting & Maintenance, Cyber Security Management, Data Distribution & Analysis

“SCADA World Summit 2014, gives me an extraordinary opportunity for excellent networking with high level experts, who will provide the case studies about the actual SCADA Project implementation, along with how to overcome the key challenges of Security Management & Hardware up-gradation in SCADA implementation. I am looking forward to the 2014 SCADA Summit for providing me an opportunity to network with Global experts”

- Vijay L Sonavane, Member (Tech), Maharashtra Electricity Regulatory Commission

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Special Discount for Team Bookings! * See Page 8 for more details

OTHER EXPERT SPEAKERS INCLUDE:

- Dr. Peter Fuhr, Distinguished Scientist, U.S. DEPARTMENT OF ENERGY, OAK RIDGE NATIONAL LABORATORY
- Ajoy Rajani, Senior Executive Vice President Technology Advisory Group, Reliance Energy Ltd India
- Andrew Ginter, VP Industrial Security, Waterfall Security Solutions
- Andrew West, Chairman, DNP Technical Committee
- Awangku Faizulemari, Senior Engineer, Operations Control Center, GAS MALAYSIA
- Mohamed Mohd Abdelghany, Specialist SCADA Master Station, Dubai Electricity and Water Authority
- John Hope-Sotherton, Programme Manager, Group IT, Eskom
- Nguyen Xuan Tuan, Member of Smart Grid Group, Vietnam Electricity Group (EVN)
- Neville Enslin, System Development Manager, Joburg Water

“SCADA World Summit 2014 will provide us an extraordinary opportunity to network with global expert in the field. A must-attend!”
—Moazzem Hossain, Operational Planning & Studies Department Manager, Abu Dhabi Distribution Company

“SCADA World Summit 2014 is filled with practical project case studies and interactive discussions among industry experts. It is a great platform to hear about the latest industry trends that impact what we do on a daily basis.”
—Sanjay Kumar Banga, Head of Projects, Engineering, Contracts, SCADA, Tata Power Delhi Distribution

5 Five Key Benefits of Attending SCADA World Summit 2014

1. Track recent & upcoming SCADA implementation, migration and upgrading projects and hear practical information and experiences of actual case studies from utilities, oil & gas, transportation companies & government authorities globally

2. Wealth of Experience – Hear from 22+ renowned experts who have worked on numerous SCADA projects globally in leading organizations from Asia Pacific, Europe, Oceania, Middle East, Africa & Americas Regions

3. Learn practical tips and know-hows on SCADA security management, cyber security protection, migration planning, alarm management, data transmission analysis, substation & master station management, data-driven decision making, increasing scalability, SCADA system selection & upgrading, troubleshooting & maintenance

4. Gain practical insights through 8 hands-on technical SCADA workshops on key topics you are most concerned with. Equip yourself with the most useful tips and SCADA knowledge that really matter


Split by Job Functions

Energy, Power & Utilities: 40%
- SCADA Directors/Managers/Engineers: 15%
- Control System Directors/Managers: 10%
- IT Directors/Managers: 15%
- Directors/Managers, Electrical Engineering: 10%

Transportation: 10%
- Water & Wastewater Management: 10%

Oil & Gas: 30%

Others: 5%

Split by Industries

Energy, Power & Utilities: 40%
- Oil & Gas: 30%
- Water & Wastewater Management: 10%

30%

Others: 5%
8:15am Registration and Welcome Coffee

8:40am Welcome Address by Chairman

8:50am Aqaba Water Company Case Study
Best practices in Planning and Implementing Water and Wastewater SCADA system advancement
- Integrating future expansion needs into monitoring and system advancement
- Involving controllers to improve the chance of migration project success with key focus areas including: Graphics Design, review and approval
- Improving control functionality
- Alarm Reviews
- Training
- Increasing scalability with the legacy systems through technology innovation
- Understanding how to best use SCADA applications for daily operations
- Expanding SCADA systems for the control of wastewater lift stations, water network and wells
- Logging technology implementation to provide monitor of flow and pressure
Mohammad Alshefay, Section Head of Strategic Planning/Central Operations, Aqaba Water Company

9:25am Tata Power Delhi Distribution Case Study
Ensuring Efficient Utilization and Scalability of SCADA/Distribution Management Systems (DMS) for Reliability Improvement
- How much scalability built-in at what investment is required?
- Effectively utilizing the SCADA system usage in utilities
- Overcoming challenges associated with SCADA/DMS system implementation
- Leveraging the functionality of SCADA systems and using it beyond data collection
- Learn about how to develop and implement an effective SCADA standardization program that accelerates scalability
Sanjay Kumar Banga, Head of Projects, Engineering, Contracts and SCADA, Tata Power Delhi Distribution

9:50am Mahanadra Electricity Regulatory Commission Case Study
Efficiency Management Substation Automation and increasing Scalability Effectively
- Practical Methods for Upgrading SCADA Communication Systems and Networks to Ensure Reliability and Speed
- Assessing the requirements to your communication system
- Highlighting innovations in alarm response mechanisms
- Upgrading your control centre room and their functionality
- Overcoming challenges related to substation automation
Vijay L Bonavane, Member (Technical), Maharashtra Electricity Regulatory Commission

10:25am Morning tea and networking break

10:50am Metropolitan Waterworks Authority Case Study:
SCADA System Migration Best Practices in the Water & Power Sector
- Designing a failure proof SCADA control system and Integrating with an existing network
- Data consolidation from multiple sites and from different contractors
- How to internally develop a gap management process for efficient migration?
- Mapping out key project deliverables
- Forecasting future demand on the system according to changing business requirements
Kittipornoom, Chief of Operation Section, Metropolitan Waterworks Authority Thailand

11:25am Sabah Electricity Case Study:
Developing a Failure-Proof SCADA System Operations for an Electricity Provider
- Defining the control parameters before automation design
- A practical approach of planning and mapping out the SCADA system network
- Assessing opportunity cost involved during incidents/accidents arising out of physical/cyber breaches
- Evaluating SCADA performance based on criticality, periodicity and data volume
- Project Management & Operational Aspects of SCADA Implementation
Abdul Aziz Patal, Chief Engineer, SCADA Department, Sabah Electricity Sdn Bhd

12:00pm LUNCH AND NETWORKING BREAK

12:30pm SINOPEC Shengli Oilfield Case Study:
Utilizing SCADA for Sinopec Pipeline System for Remote Data Monitoring & Control
- Integrating a range of dynamic applications including alarm processing, leak detection, hydraulic analysis, pump station monitoring & throughout analysis
- Discovering the latest oilfield leakage detection technologies and applications
- Unveiling challenges and strategies of integrating leak detection into existing SCADA system
- Real time collection and analysis
- Improving security of oil pipeline for SCADA system
De Li N/A, Information Technology Director, SINOPEC SHENGLI OILFIELD, PR China

12:35pm Joburg Water Case Study:
Next Generation Water Supply SCADA System Implementation
- Reviewing the latest applications that can be integrated into SCADA
- Assessing the current water system to identify interconnected system and better control of it
- Determining the right infrastructure for water supply systems
- Using remote terminal unit at each site and programmable logic controller at each base station for a better water supply system
- Working within the required processes to design, improve and implement your system
Neville Enslein, System Development Manager, Joburg Water

2:10pm Swissgrid AG Case Study:
- Understanding the state of the threat and how it may affect your business to understand how you will have to adjust
- Transferable lessons on evaluating vulnerabilities in relation to the components of your systems
- Mitigating risks in SCADA vulnerabilities
- Advanced persistent threats for SCADA infrastructure
- Tackling concerned linked to improper input validation, permissions, privileges and access control
- SCADA and industry control system cyber threat risk assessment & penetration testing
- How to prevent new advanced threats and what to consider when choosing a next-gen firewall
- Tracking the modes and methods of attackers and how to deploy an advanced intrusion prevention system
Rudolf Baumann, Chairman of Transmission Security Cooperation, Senior Adviser Operations, Swissgrid AG

2:45pm Developing appropriate network architectures to secure your SCADA systems – In Depth Analysis
- How real and how serious are cyber physical security threats?
- Possible breaches to be expected within SCADA networks and what you need to do to counter them
- SCADA Communications Security Management – Authentication, Encryption and Integration
- Top vulnerabilities experienced in existing systems and preventive measures to take
- Physical system impact and application impact analyses
- Futuristic test bed experiments in the US and Europe
Dr. Peter Fuhr, Distinguished Scientist, U.S. DEPARTMENT OF ENERGY, OAK RIDGE NATIONAL LABORATORY

3:20pm Afternoon tea and networking break

3:45pm Panel Discussion
Addressing the data distribution and analysis challenge in SCADA Systems
- Dealing with great quantities of data in a more predictable and timely manner, over a widening geographical scale
- Providing secure communications for large volumes of data transmission
- Making sense of large volumes of data whilst optimizing data distribution
- Providing an effective mechanism to manage the wealth of new distribution system data from Advanced Metering Infrastructure
- Making complex control decisions that are needed to optimize distribution system performance, efficiency and reliability
Panelists:
Abdul Aziz Patal, Chief Engineer, SCADA Department, Sabah Electricity Sdn Bhd
Moazzem Hosein, Operational Planning & Studies Department Manager, Abu Dhabi Distribution Company
Ajoy Rajan, Senior Executive Vice President Technology Advisory Group, Reliance Energy Ltd India
Sanjay Kumar Banga, Head of Projects, Engineering, Contracts and SCADA, Tata Power Delhi Distribution

4:40pm Conducting Effective Security Assessments for your SCADA System Architecture
- Striking the balance between security levels to provide an optimal level of protection
- Ensuring your security management system is up to scratch
- Preventing data leaks in your SCADA system
- Assessing next generation cybersecurity solutions to counter increasing volume and sophistication of cyber threats
- Ensuring that a user-focused IT security policy is followed and enforced for your SCADA system
Senior Representative – Cyber Security Malaysia

5:15pm Dubai Electricity & Water Authority Case Study
Implementation & Management of Master Station SCADA System at DEWA
- Securing communication between master station and remote terminal units
- Understanding the biggest challenges and how to overcome them
- Validating a SCADA master station effectively
- Master Station Upgrade – Key considerations
Mohamed Mohd Aldeghany, Specialist SCADA Master Station, DEWA

5:50pm Closing Address by Chairman

6:00pm End of Summit Day One
SUMMIT DAY 2
Wednesday, 24 September 2014

8:15am Registration and Welcome Coffee
8:40am Welcome Address by Chairman
8:50am Handling ‘transmission overload’ through proper SCADA system selection and management
- Concurrent development of transmission infrastructure and communication network
- Selection Criteria for SCADA systems handling higher transmission loads
- New developments including spatial area and planning distribution
- Congestion Management for SCADA systems

Mozam Hossain, Operational Planning & Studies Department Manager, Abu Dhabi Distribution Company

9:25am Evaluating Vulnerabilities In Your SCADA System Architecture
- Examining vulnerabilities in real time SCADA-communication system for example the wide area network that connects control centres to substations
- Review of the following including:
  1. Internet / Cyber Security
  2. Hard Wire / Optical Connection
  3. Wireless Security
  4. Network Security
  5. Smart Grid Integration Security
  6. Physical Security
  7. Internal & Business Process Security
  8. Encryption Methods
  9. Firewall Configuration
  10. Mobile Devices
  11. Authentication
- How to protect yourself against security vulnerabilities
- Previously unknown issues and threats – what are they and how can system owners prepare?

Andrew West, Chairman, DNP Technical Committee

10:00am DBP Case Study
Using SCADA for data driven decision making – key considerations
- Tapping the power of big data for SCADA and why business intelligence is good for your business
- Examining the impact of growing data sources from traditional systems and new, unstructured data sources, to prioritise collection, integration and analysis
- Advancing SCADA capabilities to access larger volumes of data entering the grid and translating this into actionable information for grid operation and management
- Adopting appropriate methods to optimise data quality, security and volume and ensure it is accurate and useful for grid operations and planning
- Providing the business with information not just data
- Analysing methods to use data analytics for data-driven decision making
- Leveraging efficient tools for data processing and analysing to transform data into improved situational awareness and enable advanced automated functionalities

Allan Butler, Senior SCADA Engineer, DBP

10:35am Coffee break

11:00am Panel Discussion:
Human Factors Security & Forensics Management for SCADA – Best Practices & Lessons Learned
- Detecting hostile behaviour aimed at your SCADA system early – putting protective countermeasures in place
- Behavioural Modelling
- Threat Profiling
- Setting up a social security framework that regulates systematically how SCADA uses resources
- Implementing User Awareness And Training Your Work Force To Mitigate Accidental Insider Threats

Panelists:
Rudolf Baumann, Chairman of Transmission Security Cooperation, Senior Advisor Operations, Swissgrid AG
Ruhana Mohammed Zain, Specialist, Security Assurance Department, CyberSecurity Malaysia, An Agency Under Ministry of Science, Technology and Innovation Malaysia
Andrew West, Chairman, DNP Technical Committee

11:45am Gas Malaysia Case Study
Enhancing SCADA Connectivity and Communications – Best Practices
- Selecting the best communication system amongst various options
- Maintaining reliable communications for SCADA system in challenging environments
- Ensuring optimal connectivity between the SCADA server, Remote Terminal Units, Electronic Flow Meter and Programmable Logic Controller
- Having several connectivity methods from available options to improve efficiency

Awangku Faiuzilman, Senior Engineer Operations Control Centre, GAS MALAYSIA

12:20pm United Energy and Multinet Gas Case Study
Integrating Disparate SCADA Systems & Implementing Intelligent Substations to Improve Operational Efficiency and Minimize Costs
- Identifying best practices of integrating disparate SCADA Systems
- Assessing the potential for improving operational efficiency
- Achieving cost reduction through the integration of disparate SCADA systems
- Data Centralization – how to best do it?
- Distribution automation best practices and creating intelligent substations

Stephen Major, SCADA/DMS Advisor, United Energy and Multinet Gas

12:55pm Lunch and networking break

1:55pm Reliance Energy Case Study:
Developing an Effective & Real Time SCADA System and Network Monitoring System which is Sustainable for the Business
- Integrating distribution management systems and equipment monitoring systems
- SCADA for remote monitoring and control
- A close look at telemetry architecture including mode of communication
- Ensuring system control centre information in a timely manner for immediate action or future decision
- Providing capability to easily compare system data among geographically dispersed units
- With a restored system synchronization of smart grids
- Improving the reliability, security, efficiency and data security distribution based on modern digital communication and control techniques
- Outage management and network maintenance

Ajay Raijani, Senior Executive Vice President Technology Advisory Group, Reliance Energy Ltd India

2:30pm Alarm Monitoring & Management – What is effective and how to make it effective for the monitoring of your network?
- Advancing alarm management to ensure it is not operated solely based on events that have already transpired but also involves real time decision making
- Substation Alarm Monitoring – Key Considerations to make sure it works
- Overcoming limitations of current SCADA alarm notification and ruling
- Data visualization across devices – enhancing communication elements and immediate assessment


3:05pm Roundtable Discussion
Understanding How The SCADA Network Interacts With The Corporate Network To Implement Measures To Effectively Separate These Networks For Security Improvement & Risk Management
- Gaining an insight into how to make SCADA compliant with business network security requirements
- Understanding how SCADA can coexist in a business network environment
- Understanding the best practices of building virtual security in a business network environment
- Examining the connections between SCADA and business systems and how you can put security in place without affecting your business process
- Understanding the types of firewalls available for segregating the SCADA and corporate network and where these should be placed

Moderated by Conference Chairman

3:45pm Afternoon tea and networking break

4:05pm EVN Case Study
Planning and customising an effective SCADA system architecture at EVN
- Assessing and converting a legacy SCADA system to suit future infrastructure additions
- Addressing challenges when increasing RTU volume
- How to plan and customise for integration of additional generation and transmission loads
- Remote controlling scheme for converted SCADA network
- Handling transmission and distribution effectively with well-planned scada system

Dr Truong Dinh Chau, Head of Department of Automation & Control, Ho Chi Minh City of Technology Vietnam

4:40pm ESKOM Case Study
Lessons Learned when Upgrading SCADA systems
- Modernisation without compromise – ensuring that your new SCADA system architecture accommodates expansion and genuinely improves efficiency
- Improving scalability of existing SCADA whilst minimizing integration issues
- Key lessons learned from system selection processes
- Change drivers: Why, When & How to Upgrade - Ensuring you SCADA fits your operation needs
- System Architectural Principles and Model-Driven Integration
- Overcoming Integration Challenges – Key Strategies

John Hope-Sotherton, Programme Manager, Group IT, Eskom

5:15pm Closing Address by Chairman

6:00pm End of Summit Day One
A Practical Approach to Developing a Robust SCADA Cyber Security Management System Framework

Security threats are increasingly coming under the spotlight as open architecture SCADA systems seem to be very prone to incursions from hackers and terrorists attempting to disrupt our national security. However, open architecture systems still remain the best choice for the integration of SCADA with other systems and devices and the only way to go is to develop more reliable and secure SCADA systems. This interactive workshop will equip you and your team with practical skills and strategies on how to enhance your control system security. You will learn from an expert in wireless technologies and cyber security, as well as sharing experiences of past attacks with the other attendees.

After attending this workshop, attendees will be able to:
- **Build a reliable and secure Cyber Security Management Framework**
- **Learn efficient approaches to test assess and measure risks of SCADA systems**
- **Unveil common threats and resolving the dilemma between plant operations and IT departments**
- **Apply an in-depth technology risk mitigation strategy to secure SCADA systems**

**About your Workshop Leader:**
Dr. Peter Fuhr, Distinguished Scientist, U.S. DEPARTMENT OF ENERGY, OAK RIDGE NATIONAL LABORATORY

Dr. Peter Fuhr has been involved in secure industrial wireless sensing systems for longer than he cares to admit. During his 20 years as a university professor, he has designed sensors into various structures worldwide ranging from buildings, dams, airplanes, hot air balloons, spacecraft, nuclear power plant containment vessels, even humans. Peter has published/presented over 700 technical articles pertaining to wireless, sensors, and secure SCADA systems. His pioneering work in networked sensor systems for structures earned him the Presidential Award for Excellence in Research. Segments of his research activities are featured in the SPIE Milestone Series on Fiber Optics. Dr. Fuhr, Senior Member of the IEEE, chairs numerous standards committees pertaining to wireless, control/SCADA system security, wireless in Electricity Delivery Systems (including the Smart Grid), and networked sensor systems deployed in space and undersea.

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**A Practical Approach to Data Management, Distribution and Analytics in SCADA Systems**

An effective data management and transmission process and system is crucial to the success of your SCADA system. Taking into consideration the huge volumes of data created by advanced technologies, the importance of accurate transmission of data from sub/remote stations to the Central Control system and vice versa, it is important that you take a strategic and practical approach to data management, distribution and analytics.

After attending this workshop, you will be able to effectively:
- **Shift from data collection to data usage**
- **Using real time information effective for SCADA**
- **Implementing a cost-effective framework to use data from SCADA**
- **Improving and upgrading data transmission and communication systems/networks**
- **Lessons learns from past mistakes of data management and transmission**

**About your Workshop Leader:**
Vijay L Sonavane, Member (Technical), Maharashtra Electricity Regulatory Commission

Mr. Vijay L Sonavane is the state regulator for the electricity sector in the state of Maharashtra. He is instrumental resolving the issues related to the integration of renewable energy with the grid. He was also responsible for the framing of regulations for multi-year tariff determination, distribution supply code, standards of performance for licensees, state grid code, open access, demand side management is presently working on smart grid roadmap for Maharashtra. He formulated the Maharashtra Smart Grid Coordination committee for initiating Smart Grid Projects in Maharashtra. Previously he was the Director of Projects of Maharashtra State Electricity Distribution Company, the largest Distribution Utility in India and was in charge numerous system planning, distribution system improvement, SCADA and system operations projects.
POST SUMMIT WORKSHOPS
25 September 2014, Thursday

WORKSHOP D
8.30am – 11.00am
(including morning tea break)

A Practical Approach to Upgrading SCADA systems

To remain competitive, companies must find a practical and cost-effective way to convert outdated system components to a state that allows you to support and enable the new business workflows whilst avoiding interoperability issues. Having a robust process and system to SCADA systems migration planning and upgrading is critical.

After attending this workshop, you will be able to effectively:
- Efficiently plan for SCADA system planning, migration and upgrading
- Understanding and overcoming security limitations associated with migration
- Evaluate Lessons Learned from past SCADA migration and upgrading cases
- Key considerations associated with Risks, Network design, Procedures and Protocols
- Discover latest SCADA control systems and protocols and also fundamentals of SCADA systems: conceptions, architectures, hardware, software and communication systems in the market
- Vendor and Component Selection – Key considerations

About Your Workshop Leader:
Mohammad Alshafey, Section Head of Strategic Planning/ Central Operations, Aquaqa Water Company

Mohammad Alshafey is the Head of Central Operations Section at Aquaqa Water, operating the SCADA system for water, receiving customer complaints, tracking network problems, and monitoring of wells, as well as the head of Strategic Planning, responsible for business planning, water master planning, and water resource management.

He is the project manager of the AW implementation of a joint ENPI NRW project - AQUAKNIGHT, and the principle investigator in the USAID funded Developing Diagnosis Techniques and Strategies to Reduce Non-Revenue Water in the Middle East Region Project. Mohammad is also responsible for hydraulic modelling. He has a BSc in electronic engineering, and tries to bring his background to artificial intelligence to the water sector, integrating intelligent automation with control, and the monitoring of water network efficiency.

WORKSHOP E
11.15am – 1.45pm
(including lunch break)

13 Ways To Break a Firewall: New Defenses For Online ICS and SCADA Threats.

Cyber security is essential to ICS and SCADA systems (OT) safety and reliability, but constantly increasing demands for IT/OT network integration put both security and safety at risk. Firewalls and encryption are held up as the foundation of security program for IT/OT integration, but there are well-known and extremely effective ways to defeat both firewalls and encryption.

In this workshop, we explore 13 kinds of ways to break through firewalls. Each of these kinds of ways has as many as hundreds or thousands of examples circulating in the wild. For each kind of attack, the effectiveness of seven compensating measures are evaluated and compared, compensating measures including IT cyber best practices such as encryption, software update programs, intrusion prevention systems and new “advanced firewall” measures. The compensating measures include emerging industrial (OT) cyber best practices that provide a different and stronger solution to guarantee ICS and SCADA systems security as well as its safety and reliability.

In the course of the workshop we will explore well-known firewall attacks, demonstrate many of these attacks, and explore a new class of defenses for online threats in the form of a family of stronger-than-firewall technologies based on and complementing hardware-enforced Unidirectional Security Gateways. Fundamentally, firewalls are complex pieces of software—and all software contains errors, and some of those errors are security vulnerabilities. Hardware-based defenses eliminate vulnerabilities due to software problems. Unidirectional Gateways and related technologies are being deployed widely to protect the safety and reliability of industrial control system networks in a wide variety of industries.

Join us to explore how to break through firewalls, to compare the effectiveness of compensating measures, and to understand how and why strong alternatives to firewalls are being deployed routinely as the foundation of advanced IT/OT Integration, ICS and CADA security programs.

About Your Workshop Leader:
Andrew Ginter, VP Industrial Security, Waterfall Security Solutions

Andrew is the Vice President of Industrial Security at Waterfall Security Solutions. Prior to Waterfall, he held CSO and CTO roles at Industrial Defender (now part of Lockheed Martin), responsible for the design of the control system cyber-security product suite. Andrew holds patents in the fields of control system cyber-security and control system application integration. He spent 25 years developing real-time operating systems, networking products, SCADA products, control system middleware products and control system cyber-security products for vendors including Devcoxon, Honeywell Hekket Packard, Afgh Networks, and Industrial Defender. Andrew is currently the co-chair of the ISA SP-99 WG1 working group. He also represents Waterfall Security Solutions to NIST, NERC-CIP, other ISA SP-99 working groups, as well as other cyber-security standards bodies. He holds an M.S. in Computer Science, a B.Sc. in Applied Mathematics, as well as ISP, ITCP, and CISSP accreditations.

WORKSHOP F
2.45pm – 5.15pm
(including afternoon tea break)

A Practical Approach to Troubleshooting & Maintenance of SCADA System & Alarm Management System Failure

Maintaining the various components that comprise a SCADA system is crucial. Misunderstanding how to maintain and troubleshoot your SCADA system is essential to protecting your investment, becoming familiar and comfortable with how your system’s power supplies, battery circuits, analog loops, discrete I/Os, and communications work will not only simplify your life but also save you valuable time and money.

After attending this workshop, you will be able to effectively:
- Gain a solid grasp of SCADA fundamentals
- Learn the Checklist of Effectively Troubleshooting & Maintaining SCADA systems
- Tips of maintaining and troubleshooting the following: Power Supply, Battery Backup Systems, Analog Loops, Discrete Digital Inputs/Outputs, Communications Systems

About Your Workshop Leader:
Muhammad Ali, SCADA & Automation Consultant, Allen Consulting, Former SCADA System Specialist, Saudi Aramco

Muhammad Ali has 30 years of experience in SCADA Master Station and Control Center operations. Most of the experience has been with Saudi ARAMCO, he is now an ambassador in the production of crude oil, natural gas and natural gas liquids. He was responsible for coordinating commissioning activities, testing and commissioning of mission critical data and remote controls from the SCADA master station. The SCADA function monitors and controls the flow of company products by monitoring remote sites (this role includes both major Saudi ARAMCO oil and gas facilities). My expertise are in design, installation and commissioning of major SCADA systems in the Saudi Aramco control center. Ensured smooth operation of control valve from SCADA master station, a top priority. He resolved control issues and communication protocol problems at the SCADA Master Station. Improved alarm management and operational displays to heighten situational awareness in the control center.

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Limited sponsorship opportunities are still available at the SCADA World Summit 2014!

Are you a key vendor struggling to engage directly with SCADA/Control Systems/Automation/Instrumentation senior level decision makers from the utilities, oil & gas, infrastructure, transportation and manufacturing industry? Are you finding it difficult to differentiate your offering at a time when lots of companies are engaging with the market at the same time? Is your sales team wasting valuable resources chasing potential businesses without getting hold of the right people or finding out what their requirements are?

If the answer to any of the above questions is yes, having a presence at the SCADA World Summit 2014 is the way for you to put this right by engaging with proven buyers and decision makers from the utilities, oil & gas, transportation, manufacturing companies as well as infrastructure & public works authorities at a time when they are actively looking for solutions in this space.

Why get involved early

1. Equip Global conferences enforce strict constraints on the number of vendors we have in the room; ensuring the majority of participants are end-users. Only an early confirmation can guarantee your participation.
2. Start the discussion with us early to find out how you can best partner us to ensure your organisation is reflected in the best way.
3. Register early to enjoy our extensive 4 month marketing campaign that reaches out to leading decision makers from across Asia.
4. Reserve your slot on the agenda as we only have limited speaking and panelist slots for contact centre solutions providers.
5. Book the most optimally located exhibition space in the exhibition hall to ensure you are in a prime position.

Who should sponsor?

If you provide any of the following services, then SCADA World Summit 2014 is the ideal platform for you to present your solutions to key prospects and potential clients globally:

- Engineering, Contracting, Equipment, Technological or Consulting Solutions in:
  - SCADA System Providers
  - Automation Software Vendors
  - Security Management System & Equipment Providers
  - Electrical Equipment
  - System Integrators
  - Measuring Equipment
  - Satellite Communication

How can you get involved?

SCADA World Summit 2014 is our event, and we take personal interest in ensuring a positive outcome for service providers like you.

Please contact me and my team at +65 63760908 or email enquiry@equip-global.com to discuss how we can tailor our sponsorship packages to suit your business objectives.

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PHONE: (65) 63760908 . FAX (65) 63760907 . EMAIL enquiry@equip-global.com . WEB: http://www.equip-global.com/scada-asia-pacific-2014
Please complete in BLOCK CAPITALS as information is used to produce delegate badges. Please photocopy for multiple bookings.
Your priority registration code is printed below. Please quote it when registering -
Event Code: EU10013.001

PRICING & DISCOUNTS

Equip Global recognises the value of learning in teams. Group bookings at the same time from the same company receive these discounts:

3 or more 7%
5 or more 10%
This offer is exclusive of the early bird discount. Call us for a special discount rate for teams of 8 and above. Not applicable to workshop(s) and/or site visit(s) only bookings.

TEAM DISCOUNTS

CONFERENCE DOCUMENTATION

I am registering as a delegate. Please send me an extra set of conference documentation at USD 100 with a discount of USD 399.
I cannot attend the event. Please send me a set of the conference documentation at USD 499.

VENUE & ACCOMMODATION

Furama Riverfront Singapore
405 Havelock Road, Singapore 169633.
Tel: (65) 6733 8888, Fax: (65) 6733 1919
Email: riverfront@furama.com

Hotel accommodation and travel costs are not included in the registration fee. A reduced corporate room rate has been arranged at Furama Riverfront, Singapore for attendees at this conference. To take advantage of this special rate, please process the hotel room reservation form provided upon confirmation of your attendance.

PAYMENT TERMS & CONDITIONS

- All Early Bird, Super Saver Discounts or any discounts offered by Equip Global require payment at time of registration and before the cut-off date in order to receive any discount. All discount offers cannot be combined with any other offer. - 100% payment is required upon receipt of invoice and includes lunches, refreshments and detailed conference materials. - Registration made within 14 working days of the conference/training must be paid by credit card. - No delegate will be allowed into the conference or training unless all payments are received prior to the conference or training - Discounts do not apply to workshop(s) only bookings. - Please note that creditcard payments will incur a paypal charge of 3.4% + $0.30. - Payment not made at the time of registration will be subject to a USD99 processing fee.

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Tel: (65) 63851111 www.ocbc.com
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