

Putting SCADA To Work!

Leveraging SCADA as a Tool for Operations

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Abstract

Modern Supervisory Control and Data Acquisition (SCADA) systems have the ability to provide a virtual cornucopia of tools for the Operations Team in water/wastewater facilities. Gone are the days of single-loop controllers, dial-up phone lines, and paper charts. Yet there still seems to be resistance in our sector to move past the state of “barely works” when it comes to SCADA systems. We need to move past this mentality and look at how we can use SCADA as a tool to run plants more effectively.

This presentation provides an overview of new SCADA features being used by leading SCADA installations around the world. Based on his experiences in the consulting community, international SCADA standards committee work (including ISA, WEF, AWWA and IEC committees), the OWWA Automation committee, and SCADA projects at City of Guelph Water Services, Mr. Nasby will provide a brief snapshot of “what’s new” when it comes to SCADA best practices with a focus on tools for the operations team.

Topics that will be covered include:

- Designing SCADA systems to promote Situational Awareness
- High Performance HMI's – designing SCADA screens that are focused around supporting Situational Awareness, including a guide to the recently released ISA-101 HMI Design standard.
- Alarm Management: More effective design, documentation, and reporting of SCADA alarm systems in accordance with ISA-18, for more effective operator response and reduced operator fatigue.
- Safeguarding the SCADA system to ensure high availability and data integrity.
- Improved techniques for improving SCADA network reliability to remote outstations
- SCADA features you should be asking for: Dashboards, Chemical dosage/usage calculations, Statistics, Online CT Calculators, Wet Weather Adjustments, Automated Start-up/shutdown, Mass Balance Calculations, etc.

About the Speaker



Graham Nasby, P.Eng, PMP, CAP holds the position of Water SCADA & Security Specialist at City of Guelph Water Services, a publicly-owned water utility located in Guelph, Ontario, Canada. Prior to joining Guelph Water, he spent 10 years in the engineering consulting community after completing his B.Sc.(Eng) at the University of Guelph. He is senior member of the International Society of Automation (ISA) and co-chair of the ISA112 SCADA System Standards Committee. He is a member of both OWWA and WEAO, and currently sits on the OWWA Automation Committee. In 2014,

Graham was recognized with a ‘Mid-Career Achievement’ award from his alma mater, the University of Guelph’s School of Engineering. Contact: graham.nasby@guelph.ca