

Wellington County Water/Wastewater Workshop

Thursday, October 26, 2017

County of Wellington Museum (Aboyne Hall) – 0536 Wellington Road 18, Ontario, Canada

Guelph Water's SCADA System

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SCADA, DCS, PLC, PAC, RTU, HMI, OIT, ISA-101, ISA18, IEC-62682, ISA-99, IEC-62443, Human Factors, Historian, Situational Awareness, Alarm Management, Cyber Security, Redundancy, High Availability

Format: 30 minute presentation

Abstract

This presentation provides overview of how Guelph Water Services uses its SCADA (supervisory control and data acquisition) system to support operations, security of water supply, and regulatory compliance.

Topics that will be covered include:

- Purpose of the SCADA system
- Benefits of automatic control and monitoring
- Situational Awareness
- Structure of the SCADA System
- Guelph's Fully Redundant SCADA Network: Fiber-optic Ethernet with wireless backup
- SCADA View Nodes
- Data Logging for regulatory compliance, including redundant data logging
- Process Control Screens
- System Dashboard Screen
- Power Status Monitoring: Hydro Outages, Transfer Switches, UPS's, and Generators
- Security System Monitoring
- SCADA Alarm System & Call-out Alarms
- SCADA Reporting Tools: e.RIS and SCADAwatch
- Other Data Sources: DMA Flowmeters, Weather Stations, External Data Sources

About the Speaker



Graham Nasby, P.Eng, PMP, CAP holds the position of Water SCADA & Security Specialist at City of Guelph Water Services. Prior to joining the city in 2015, he worked in the consulting sector for 10 years. Graham is an active member of the OWWA and WEAO, and currently co-chairs the ISA112 SCADA Systems standards committee of the International Society of Automation. Contact: graham.nasby@guelph.ca