

ISA112 SCADA Systems Management Lifecycle & The Municipal Water/Wastewater Sector – Opportunities for Positive Change

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Abstract:

In Summer 2020, the ISA112 SCADA Systems Standards committee release the first draft of its new ISA112 SCADA Systems Management Lifecycle. The Lifecycle is comprised of 8 core phases, each broken down into work processes, which provides an organized method and framework for the long term management of SCADA systems. This includes maintaining system standards, a standardized way to conduct automation projects and guidelines for the long term maintenance and operation of SCADA systems.

In this session, Mr. Nasby who is co-chair of the ISA112 SCADA systems standards committee, along with several other ISA112 committee members will talk about the benefits of the ISA112 lifecycle, and the motivations behind its development. The session

The ISA112 SCADA Systems lifecycle is already being used at several water/wastewater utilities in Ontario Canada, where it has helped with the standardization of work processes used for managing SCADA system. The ISA112 lifecycle has also simplified their procedures and workflows for managing SCADA projects. The ISA112 committee currently has over 200 members from around the world, and has been active since 2016. The committee is working towards releasing the first part of the written ISA112 standards documents in 2023. This interview and open participant discussion provide an overview of the newly released ISA lifecycle diagram that is now available at www.isa.org/isa112 and sneak preview of the written ISA112 standards that are soon to follow.

About the Speaker



Graham Nasby, P.Eng., PMP, CAP, FS.Eng. holds the position of Water SCADA & Security Specialist at City of Guelph Water Services, a publicly-owned/operated water utility located in Guelph, Ontario, Canada. Prior to joining Guelph Water in 2015, 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. His is also a named SCADA expert on the IEC-TC65 committee, a voting member of CSA committee P125 on Functional Safety, and a voting member of the ISA's Alarm

Management and HMI Design committees. Mr. Nasby is a member of both AWWA and WEF, and currently sits on the Ontario Water Works Association's Automation Committee. In 2014, he was recognized with the "Mid-Career Achievement Award" from his alma mater, the University Of Guelph's School of Engineering. Contact: graham.nasby@guelph.ca

Questions for the Session

1. Why is ISA developing the ISA112 SCADA Systems standard?
2. Are the SCADA needs of the municipal water sector unique to municipal water?
3. Who is on the ISA112 committee?
4. What has the ISA112 committee produced to date?
5. Is the material in ISA112 all new? Or is it leveraging any existing standards?
6. Why is SCADA so complicated?
7. Is ISA112 going to help standardize the terminology used by SCADA systems?
8. What should water utilities be doing to manage their SCADA systems?
9. What opportunities are there for IIoT (Industrial Internet of Things) in SCADA systems?
10. Will IIoT replace SCADA?
11. Can you walk us through the ISA112 SCADA system management lifecycle?
12. Is there a standardized architecture that should be used for SCADA systems?
13. How does cybersecurity impact SCADA systems?
14. Can the concepts in ISA112 be applied to an existing (or legacy) SCADA system?
15. How is the ISA112 SCADA systems standard going to be published? What is available now?
16. How does the ISA112 SCADA systems standard compare to the AWWA M2 publication?
17. How does the ISA112 SCADA systems standard compare to other published automation/instrumentation guides?
18. Where can I get a copy of the ISA112 SCADA systems management lifecycle? (Ans: www.isa.org/isa112)
19. Who are the co-chairs of the ISA112 SCADA system's standard committee?
20. Are there any articles or presentations available about the ISA112 standard?
21. How is the ISA WWID supporting the development of the ISA112 SCADA systems standard?
22. Is the ISA112 SCADA systems standard more useful for water or wastewater applications?
23. How will the ISA112 SCADA standard benefit system integrators?
24. How will the ISA112 SCADA systems benefit in-house SCADA staff teams?
25. How will ISA112 make it easier for Water Utilities to manage SCADA systems?
26. How will Consultants and Engineering Firms benefit from using the ISA112 standard?
27. How can I learn more about the ISA112 SCADA standard?
28. How can I get involved with the ISA112 SCADA Systems standards committee?