A Movement Toward Wireless Standards Solutions in Factory Discrete and Hybrid Applications

ISA EXPO 2008
Welcome

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Cliff is responsible for strategy development for new technologies and applications at Rockwell Automation. With over 25 years in the automation business, and as a 20 year member of ISA, Cliff has been involved in every aspect of automation – from product and system definition to solution delivery to sales and marketing and now strategy.
Agenda

- Factory Automation in Discrete/Hybrid Manufacturing
- ISA100 Factory Automation Study Group
- Vision
- Scope
- Goals
- Timeline
Our Sandbox?

- ISA 100.11a largely for process applications

- This only gets us part of the way there
Factory Automation Includes MACHINES

- Different needs, different challenges
- Higher speeds
- Tighter spaces
- Larger quantities
At the ISA100 meeting in Houston (October 2007), support formed to understand where wireless networks may be applied.

An interest group was formed to reach out to all interested parties.

- It sought the interest level in the industry around the possible development of a standard for a wireless factory/discrete automation system.
- It would serve hybrid and discrete industries (e.g., Consumer Goods, Electronics, Automotive, Aerospace and other industries).
- In contrast to environments driving the ISA100.11a (release 1) and other emerging interest groups, this group will consider:
  - assembly, batch, blending, packing, robotics, shop floor data collection and other applications.
  - These are likely to drive different demands for mobility, scalability, point density and lower latency.
March 2008: ISA100 elevated the status of the Interest Group to a Study Group based on the following:

- There is a critical mass of participation and active solicitation of new members (e.g., ARC Forum/ISA100.11a meeting)
- Participants have expressed the desire to begin work on Requirements Gathering and Use Case development
- Participants have expressed the need for greater structure and a definition of work product(s) to focus discussions and further discovery and to form liaisons with different activities internal and external to ISA
  - all elements a Study Group can offer
The ISA100 Factory Automation Study Group has defined the following:

- Vision
- Scope
- Work Products
- Timeline
Vision

• What is the most value this Study Group can provide to ISA100 and ISA?
  – The ISA100 Factory Automation Working Group will develop and maintain:
    – Requirements
    – Recommended practices
  – Demonstrate leadership of ISA100 professionals in the application of industrial wireless technology in Factory Automation applications.
  – Collaborate with other standards-making and specifying organizations to benefit the end user community and ensure standards are developed that address our needs in the area of factory automation
Scope

• Provide descriptive requirements and recommendations regarding practices for deployment of wireless technology for Factory Automation applications. This scope includes, but is not limited to:
  – From monitoring to safety
  – Wireless, with reference to wired infrastructure as necessary
  – Technology descriptions and comparisons
  – Factory Automation topologies
  – Existing, emerging, and conceptual solutions
  – ISA100 interface to IEC and other bodies with interest in Factory Automation
Work Products

• Documents with Working Titles:
  – “Requirements for Wireless in Factory Automation”
Timeline

- Bi-Weekly teleconferences
- Face-to-Face meetings
- Summit Presentations
- Draft documents for Working Group review by end of 2008
- Final documents for distribution to the public by mid-2009
Interested? Join Us!

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