ABSTRACT for the 2013 ISA WWAC Symposium

Reinventing the Role of the SCADA Historian:

Distributed Redundancy, Centralized Access

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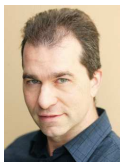
ABSTRACT

As the restless keeper of important SCADA information, the Historian is often overloaded, never appreciated, but sorely missed when unavailable. Indeed, today's culture of increased monitoring, real-time data analysis and frenzied reporting further taxes the traditional Historian Server with access rates hundreds of times that of most business database applications. While improved RAID storage offers some protection from the inevitable drive crash, access speeds suffer greatly and a single server still creates a single point of failure.

The solution lies in leveraging server clustering technology with a decidedly SCADA bent, allowing logged data to be distributed across a geographically dispersed network of dedicated SCADA client and server computers that would otherwise be lightly loaded. Moreover, by distributing each piece of data to two or more computers, different levels of redundancy can be applied to different priority data. The role of the Historian evolves into the centralized interface to the data warehouse, directing report queries and new data to the various distributed data storage locations while backup Historians stand at the ready to assume responsibility. This new architecture offers unlimited storage, greater reliable and faster access than ever before.

This paper explores specific examples of how utilities are applying distributed, multi-plant Historian methodologies to meet demands for improved efficiency and regulatory analysis in an era of reduced operating budgets.

About the Author:



Blair Sooley, P.Eng., MBA is an Account Manager with Trihedral Engineering Inc. He holds an Bachelor in Electrical Engineering from Dalhousie University in Halifax, and an MBA from St. Mary's University. Blair has been working in the controls industry for 18 years and in the water and wastewater sector for 10 years.