Video: A New Type of Process Data

The Benefits of Visualizing Remote Assets

Gregory Santos^{1*}

¹Industrial Video & Control, 330 Nevada St., Newton, Maine, 02460, USA (*correspondence: gsantos@longwatch.com, Tel: 617-467-3059)

FORMAT

30 minute presentation

KEYWORDS

Video, Camera, Security, SCADA, HMI, PLC, MODBUS, Surveillance, Bandwidth, Intrusion, Theft, Vandalism, Industrial, Monitor

ABSTRACT

Video can be utilized as a standard type of data that SCADA systems employ to extend their vision and provide more meaningful information about remote processes. Video has the capability to supply more data to operators in a single snapshot than HMI screens can provide with numerous data points. Using the camera as a sensor at remote locations in the field and integrating that data into your existing SCADA/HMI systems provides you with the information you need to make the right decisions smarter, faster, and more consistently. Adding video data to your process control system can improve performance in the following areas:

Regulatory Compliance: Cameras can be used as a new type of sensor for applications such as leak detection providing much more data and efficiency than standard methods. On-site recording provides evidence of regulation compliance. Event based video clips allow for faster assessment and response to events reducing the severity and impact of potential leaks or contamination.

Increased Safety: Video monitoring provides 24 x 7 surveillance of the remote location and its operations enabling faster response and earlier detection of dangerous situations to workers and other stakeholders.

Increased Productivity: Detailed video analysis of a situation at a remote facility provides for the marshalling of proper resources to address an incident reducing wasteful trips to remote sites.

Today's advanced video management systems provide video from cameras along with software that ties video and alarming into existing SCADA/HMI systems. This presentation will make the case for using video to increase the effectiveness of SCADA systems and present some case studies illustrating this.

About the Author:



Gregory Santos is the Principal Engineer for IVC's Longwatch video management software products. Greg has over 12 years experience in the process automation industry. He has held application engineering and project management roles for SCADA/HMI systems in multiple companies. Greg holds a BS in Management Information Systems from the University of Arizona.