

Industrial Internet of Things and Hybrid Control Systems

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ABSTRACT

Hybrid Control Systems combines the best of the PLC and DCS world and are at the epicenter of the industrial internet of things or IIOT. According to Cisco, 500 billion objects and devices will be connected to the internet by 2050. What is it and what does it mean to the water and waste water industry?, how can it be applied to optimize water supply, distribution and treatment, what relationship does the industrial internet of things and hybrid control systems have?. How can hybrid control systems take advantage of higher connectivity to enhance efficiency, conserve energy and reduce operating costs?, how can you gain deeper insights with analytics using the internet of things and hybrid control systems. With IIOT, a water utility can remotely determine the status and working condition of pumps, valves, etc. A gate can be opened or closed or a pump turned on or off remotely to adjust the flow of water through a water transportation system. If a water pump or motor is about to fail, the utility can be prompted, with predictive analytics, to repair or replace it. An IOT-enabled water treatment plant can report if its filters are clean and functioning properly. Smart objects can be displayed on a hybrid control monitor illustrating operating conditions and real time information to make the right decision at the right time.

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