

HollySys turns to Matrikon for Native OPC UA Connectivity

Case Story

HollySys chose Matrikon FLEX, the ultra-scalable OPC UA SDK, to quickly and easily enable its products with high performance OPC UA connectivity

Background

Founded in 1993, HollySys specializes in process automation, factory automation, rail automation and mechanical and engineering solutions. It serves over 5,000 customers from offices in China, Southeast Asia, India, Middle East and Europe.

Listed on NASDAQ since 2008, HollySys is working to be a global company offering its customers cutting-edge control, safety and information technologies. HollySys industrial control systems are used in a wide range of major engineering projects and technology applications. These include control for million-KW, large-scale ultra-supercritical thermal power plants, ten-million-tonne oil refining equipment, and million-KW nuclear power plant instrumentation and control systems.

HollySys technology is also widely used in transport. Examples of its internationally safety certified railway automation products are its 350km high-speed railway onboard train safety control system and large urban railway transport control system

In total more than 12,000 applications of HollySys technology help keep thermal power, petrochemical, fine chemicals, metallurgy, construction materials, and food and beverage plants worldwide running efficiently and smoothly.

Challenge

HollySys developed its own programmable logic and MC series motion controllers for factory automation which needed to be able to communicate with a broad range of third party systems. This flexibility was needed because these controllers are used in a wide range of control applications including: cutting equipment (e.g. laser cutting); industrial robots (e.g. assembly robots); metallurgical processing equipment (e.g. flying shears); engraving and milling equipment; dispensing equipment; extrusion equipment; wire drawing equipment; CNC machine tools, and various automatic production lines requiring high speed and precision.

HollySys wanted to embed OPC UA connectivity in its controllers to ensure they could easily integrate with third party systems. After four years of effort, HollySys was dissatisfied with the limited progress made with the OPC UA implementation and decided instead to find a new OPC UA software development kit that was sufficiently scalable to work in embedded environments and delivered superior performance. Excellent local technical support was another important criteria.

Matrikon FLEX enables users to easily embed OPC UA functionality needed in smart operations and other critical IIoT solutions.

About Matrikon

Matrikon offers the industry's most extensive portfolio of OPC connectivity products and applications. Its solutions integrate Honeywell's products such as the HC900 Controller, MasterLogic PLC, single loop controllers, control systems, actuators and analyzers with third-party SCADA, historians and human machine interfaces (HMIs) to provide the ideal data connectivity.

Solution

HollySys chose Matrikon® FLEX OPC UA SDK. Designed for developers, system integrators, and device and control manufacturers, Matrikon FLEX enables users to easily embed OPC UA functionality needed in smart operations and other critical IIoT solutions.

Suitable for use in a broad range of embedded devices (from microcontrollers to enterprise-based servers), Matrikon FLEX radically simplifies OPC UA application development by abstracting away the complexity of the OPC UA specification with a simple API.

Further, Matrikon FLEX optimizes processing power for maximum throughput, uptime and connections, all the while minimizing use of memory and process resources.

Realized Benefits

Performance & Scalability

By adopting Matrikon® FLEX, HollySys could:

- use a single OPC UA SDK in all of its product lines, regardless of whether they were MCU based or used high power multicore CPUs
- take advantage of the SDK's high performance and low computing resource use

Allowing Hollysys to achieve its goal of providing smooth, secure data connectivity to third party devices and systems.

Security

With a robust OPC UA implementation, Hollysys products can support OPC UA security (e.g. data encryption and authorization controls) using fully customizable, developer controlled settings.

Rapid Development

With Matrikon FLEX, Hollysys could develop its products and go to market faster because it was freed from the need to develop the OPC UA interface itself and also didn't have to worry about maintaining the OPC UA stack afterward.

Support

Finally, partnering with Matrikon, a Honeywell company, HollySys benefits from substantial local and ongoing support, providing confidence for the future.

For More Information

Learn more about how Honeywell's Matrikon products can improve your data storage and analysis, visit our website or contact your Honeywell Account Manager, Distributor or System Integrator.

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SS-17-12-ENG
June 2017
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