



Matrikon Supports Open Cloud Solution in China

Matrikon FLEX OPC UA SDK enabled CASIC to develop a robust OPC UA interface for users of its INDICS cloud manufacturing platform in just two months.

Case Study



Background

China has set its sights on becoming a leader in cloud manufacturing by 2019. As such, it aims to increase the scale of its cloud computing industry by more than 2.5 times between 2015 and 2019, and the government wants to see Chinese companies leading the global market within three years.

INDICS will play a key role in driving this growth in the manufacturing sector.

INDICS, the only Chinese public platform for providing comprehensive cloud manufacturing services, was developed by state-owned China Aerospace Science and Industry Corp (CASIC), which launched its CASICloud website in June 2015. As the world's second biggest industrial Internet platform, it is used by 800,000 enterprises, including 3,000 foreign companies.

With INDICS, businesses can automate, control and monitor operations across sites in real time; collect and analyse data gathered from the industrial Internet of things; and develop bespoke applications and optimize operations.

An enterprise-wide cloud manufacturing platform, INDICS is designed to promote information exchange, resource sharing and collaboration. It brings together the industrial Internet with productivity services, intelligent manufacturing and big data to optimize operations and the whole industrial supply chain.

Challenge

Aiming to be an open business platform, INDICS needs to support connectivity with devices from a broad range of manufacturers, operating across multiple sites and across industries, and in businesses ranging from small Chinese manufacturers to the largest multinationals.

To ensure the greatest flexibility and support, INDICS is committed to supporting open standards, enabling manufacturers to consistently capture data from all their networked devices and sensors and to develop their own applications for monitoring and control.

Having officially launched INDICS in June, CASIC needed to rapidly develop an interface to support the OPC Unified Architecture (OPC UA) standard, a leading data connectivity standard used for control automation.

Solution

To facilitate and accelerate development of the OPC UA interface, CASIC used [Matrikon FLEX OPC UA Software Development Toolkit \(SDK\)](#).

Designed for developers, system integrators, and device and control manufacturers, Matrikon FLEX provides all the functionality needed to quickly enable devices and applications with high performance OPC UA functionality, which is an essential component in the implementation of smarter operations and critical IIoT solutions.

The simplicity and speed of using Matrikon FLEX to implement OPC UA functionality reduced interface development time by more than half. Starting development in September 2017, a single developer at CASIC completed development of the interface in just two months, enabling the scalable OPC UA solution to go live at the end of November 2017.

Built on an OPC UA “Client-in-a-Box” design, the Matrikon FLEX SDK abstracts low level OPC UA implementation details to allow software developers to quickly and easily create scalable, easy-to-use OPC UA enabled applications.

Benefits

By using the Matrikon FLEX OPC UA SDK, CASIC could quickly and easily develop a robust interface that enables the INDICS platform to communicate with OPC UA enabled devices.

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During the development period and beyond, the CASIC team benefited from responsive local product support from Matrikon team. This provided rapid responses to queries and helped with troubleshooting.

Above all, Matrikon FLEX OPC Unified Architecture (UA) technology has enabled INDICS to offer a truly open solution. Using OPC UA, users of the platform can securely connect to a huge range of plug-and-play connected devices, and transfer the data securely to the cloud.

Supporting OPC UA connectivity down to the sensor, controller and device level, the interface makes integrated enterprise monitoring and analytics a reality for the platform’s industrial users, and supports China’s quest to be a leader in cloud manufacturing.

About Matrikon

Matrikon offers the industry’s most extensive portfolio of OPC connectivity products and applications.

Matrikon FLEX OPC UA SDK is the most flexible and powerful way to implement native data connectivity in new and existing products. Based on a secure, open standard, FLEX preserves rich data context and is both hardware and OS agnostic.

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For More Information

Learn more about Matrikon solutions visit www.matrikonopc.com or contact your Matrikon Account Manager, Distributor or System Integrator.

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