The Smarter Approach to Smart Manufacturing

VIMANA used Matrikon® FLEX OPC UA SDK to rapidly expand the connectivity of its smart manufacturing software, giving users the power to hear all their OPC UA compliant devices.

Case Study

Background

Headquartered in Berkeley, California, VIMANA is a world leader in smart manufacturing. From the aerospace and automotive sectors to medical devices and industrial machinery, its software provides real-time visibility of manufacturing operations to improve machine and operator productivity.

Serving businesses across North America, Latin America, Asia and Europe, VIMANA connects customers to their machines and provides the tools needed to analyze, visualize, monitor, predict, improve and sustain operational performance.

Its software, onsite or cloud based, gives insights into plant and enterprise-wide performance that can uncover ways to improve manufacturing efficiency, quality, cycle times and responsiveness to customers.

Challenge

VIMANA gives users "the power to hear their machines". It relies on its ability to connect all manufacturers' devices and to facilitate data flow in a consistent way for integration, enrichment and analysis.

To function effectively VIMANA must capture accurate real-time data from a vast range of shop-floor devices and support assets ranging from cutting machine controllers and sensors to data historians. Users require open and secure connectivity between devices and from the edge to cloud solutions.

To successfully support an increasing range of devices and third-party systems, VIMANA needed to enhance its OPC connectivity. To do this, it sought an OPC UA software development kit (SDK) that would meet demanding requirements:

- A solution that was scalable
- One that would enable developers to give customers best of breed OPC UA connectivity, security and interoperability;
- And one that would allow VIMANA users to access data from all their OPC UA enabled systems, increasing the power and potential value of the solution.

In addition, VIMANA sought an OPC UA SDK that was easy-to-use and deploy, and offered tools, libraries, and documentation for developers to rapidly create connectivity solutions for customers with OPC UA compliant devices. The software company wanted to leverage its developers' manufacturing and analytics domain expertise without compromising on providing the optimized and highly reliable OPC UA connectivity needed to give customers high quality data.

VIMANA gives users "the power to hear their machines". It relies on its ability to connect all manufacturers' devices and to facilitate data flow in a consistent way for integration, enrichment and analysis. data historians. Users require open and secure connectivity between devices and from the edge to cloud solutions.

Solution

Based on Matrikon's long standing involvement with the OPC UA standard and strong reputation for building software for OPC compatibility, VIMANA chose Matrikon® FLEX OPC UA SDK.

Designed for developers, system integrators, and device and control manufacturers, the Matrikon® FLEX OPC UA SDK provides "out-of-the-box" OPC UA functionality. It offers a comprehensive set of powerful and easy-to-use software development tools, libraries and documentation.

Using Matrikon FLEX, vendors can quickly and easily implement OPC UA connectivity in products ranging from small, embedded devices with no operating system to large enterprise servers.

Matrikon FLEX delivers all the benefits the OPC UA standard has to offer: from robust data context functionality and data security, to the scalability needed to facilitate communications at every level throughout the enterprise.

Benefits

Matrikon FLEX fully satisfied VIMANA's requirements, enabling its developers to quickly and easily develop a wide range of OPC UA enabled software solutions

As a result, VIMANA solutions deliver OPC UA data connectivity that are compliant with the strict OPC UA standard and provide excellent performance, while minimizing computing resource consumption.

VIMANA spokesman said: "The Matrikon FLEX OPC UA SDK has provided agile and easy development of connectivity applications, as well as extremely responsive product support and documentation to enable our developers to work productively. It's a partnership that enabled us to confidently deliver customers the connectivity they need."

About Matrikon

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

Matrikon FLEX OPC UA SDK is the easiest, most flexible tool for implementing native OPC UA data connectivity in new and existing products.

For More Information

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

Matrikon®