CASE STUDY

Softing Industrial Automation Works with Gemalto Sentinel to Monetize the IoT

Industrial communication technology is a highly competitive market with many global players. Among these, Softing is a world-wide leading product and technology supplier. As part of its Internet of Things (IoT) activities, Softing recognized the need to implement a proven protection and licensing technology to strengthen security, guard intellectual property, and more fully monetize its end-user software products.

Background

OPC Unified Architecture (UA) has been identified as a key technology for the Internet of Things, including “Industrie 4.0” (a German government-driven initiative for implementing an industrial IoT), providing the means to address the associated opportunities and challenges. OPC UA is an interoperability standard developed by the OPC Foundation that allows for platform-independent data and information exchange. Softing employs standards such as OPC UA in its end-user software products. These software products include OPC Server and OPC Middleware which are used to optimize communication between Programmable Logic Controllers (PLC) and OPC Client applications (IT systems such as SCADA, ERP, MES, etc.).

Challenges

The dataFEED OPC Suite software products are offered worldwide. In order to both secure and increase the success of this product, Softing knew it needed to secure the trade secrets contained in their software code and prevent unauthorized use of its software. The company also needed a way that potential users could try-before-they-buy. “There was no demo version available,” said Mr. Andreas Röck, Softing Product Management for OPC products. Softing was also unable to turn on or turn off software features as needed to address customer and market needs.

Challenge

➤ No means to stop unauthorized use of OPC products
➤ No ability to protect trade secrets
➤ No ability to offer software demos
➤ No ability to enable or disable features

Solution

➤ Sentinel LDK
➤ Sentinel HL Max and Sentinel SL

Results

➤ IP Protection to secure trade secrets
➤ Copy protection for maximized ROI
➤ Feature-based licensing for better response to market needs
➤ Hardware - or - software-based protection keys enforce licensing
➤ Quick implementation
➤ Easy to handle, distribution-ready licensing solution

The company recognized the need to implement a robust and proven protection and licensing technology to strengthen security, guard intellectual property, enable demo versions and feature-based licensing so that it could more fully monetize its end-user software products.
Solution

After careful consideration, Softing chose Sentinel License Development Kit (LDK) with Sentinel HL Max hardware keys (dongles) for copy protection, intellectual property protection, license enablement, compliance, and management. "Software licensing is a must since our OPC products are distributed and used worldwide. Restrictive license policy and handling is important to secure revenue. Thus OPC end user products are licensed and protected with Sentinel HL," said Mr. Andreas Röck. In addition to Sentinel HL, Softing also offers Sentinel SL, to its customers that prefer software-based licensing.

The dataFEED OPC Suite offers a full package of components for OPC communication into a single product. With integrated PLC protocols, it enables access to more than 50 different PLC types, including those of leading companies like Siemens, B&R, Rockwell, Schneider Electric or Mitsubishi.

The integrated Tunnel functionality saves users the time-consuming setup and maintenance of DCOM security settings. This substantially speeds up the configuration of OPC communication across networks. The special architecture of the dataFEED OPC Tunnel places minimum requirements on the configuration of the PCs used within the network. Corporate computer and network security policies (e.g. firewall settings) can thus be complied with.

The state-of-the-art graphical user interface with intelligent, practice-oriented defaults, setup wizards, drag-and-drop support, and intuitive user guidance significantly reduces the time required for the configuration of OPC communication.

The Gemalto Sentinel HL Max key plugs into the dataFEED OPC Suite to protect Softing’s intellectual property investment, enable licensed features and functionality, and prevent unauthorized use of the dataFEED OPC Suite software on additional PCs.

According to Mr. Herr Rummel, HoD SW for Softing, "The Sentinel API was used to read license info on the Sentinel HL Max keys. There is always one Sentinel HL Max key assigned to each OPC Server product and each key contains multiple feature licenses."

The entire implementation took Softing only a few weeks – from implementation, to testing, to go live – and that included the extra time needed to learn how to use new functions like extended dynamic Sentinel HL memory.

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Results

Sentinel LDK enables Softing to secure the trade secrets residing in its code to defend the company’s competitive advantage. Sentinel HL Max makes it easy for Softing to monitor and enforce license compliance and secure revenue. In the future, Softing plans to use the driverless HL Max key to release and host more products on one key.

Distribution-ready licensing is achieved through Sentinel HL-based licensing—for both Softing subsidiaries and Softing channel partners. "Because we sell our OPC software through many different distribution channels it was important that we choose an easy-to-handle, distribution-ready licensing solution. With Sentinel, we get that. The distributor receives a CD plus a key," stated Andreas Röck. "Sentinel provides a lot of flexibility in terms of how we package and enable features in our software," said Mr. Andreas Röck. "It’s given us the ability to customize our products for individual customers and different markets through simple feature configuration."

When asked why Softing chose Gemalto Sentinel, Mr. Herr Rummel replied, "We chose Gemalto because they are the market leader and have a good licensing solution. We have worked with Gemalto in the past and over the years there has been close collaboration at both an operational and a technical level – even when it comes to details. Gemalto Sales Engineering helped in using new functions like dynamic memory allocation. Gemalto is at our side in both words and deeds."

About Softing Industrial Automation GmbH
http://industrial.softing.com