Industrial Security for extremely critical embedded Applications

WOLFSSL AND SYSGO'S INTEGRATED SOLUTION

wolfSSL and SYSGO have teamed up to integrate wolfSSL's SSL/TLS crypto library into PikeOS real-time operating system (RTOS), which includes a type 1 hypervisor. With this integration, wolfSSL brings a FIPS crypto library to PikeOS' EAL 3+ certified Separation Kernel in a pre-integrated bundle that ensures robust, proven Security for your project's architecture.

PERFECT FOR YOUR EMBEDDED DEVICE

wolfSSL is a fully-featured, progressive, and easy-to-use SSL/TLS library perfect for resource-constrained systems. With a footprint size of 20-100kB, runtime memory usage of 1-36kB, and support for a large number of platforms, it is the perfect solution for securing your embedded project today.

Benefits: Sold as a bundle with SYSGO products:

1. Via the integration of wolfSSL SSL/TLS libraries
   • Customers can build a secure Root of Trust
   • The software gets more secure via additional signing and verification capabilities
   • Pre-integration into Secure Automotive Connectivity Platform (SACoP) and other Security solutions of SYSGO helps reducing time to market
   • Can also be used as add-on technology for ELinOS
   • The solution has low memory footprint and no impact on the system performance

2. Use of wolfcrypt as crypto library
   • SYSGO can support hardware and software supported cryptography
3. wolfMQTT
   • MQTT (Message Queuing Telemetry Transport) is a network protocol used in machine to machine communication
   • PikeOS POSIX partitions can run as MQTT GATEWAY thus reducing the footprint size (instead of using a full Linux) and having nevertheless the possibility to use TLS (via wolfSSL)
   • Security certification story add-on
   • Added cert artefacts for RTCA DO-178C level A certification in Avionics
   • In Automotive, supports MISRA-C capabilities
   • For government customers, wolfSSL has a strong history in FIPS 140-2, with upcoming Common Criteria support increasing the Security assurance

INDUSTRIAL SECURITY

We support critical embedded applications in Avionics, Automotive, Railway industries and beyond.

wolfSSL and SYSGO integrated technology supports:

• Elements of PikeOS
• Elements of ELinOS
• Secure Automotive Connectivity Platform (SACoP)
• Secure Railway Connectivity Platform (SeRCoP)

MARKET-READY WITH A DIVERSE PORTFOLIO

wolfSSL and SYSGO's partnership brings pre-integrated Secuity technology with the following products:

From wolfSSL	From SYSGO
• wolfSSL	• PikeOS
• wolfMQTT	• ELinOS
• wolfSSH	• CODEO as IDE
• wolfTPM	• SACoP
• wolfBoot	

About wolfSSL - wolfSSL focuses on providing lightweight and embedded Security solutions with an emphasis on speed, size, portability, features, and standards compliance, such as FIPS 140-2 and 140-3, RTCA DO-178C level A certification, and support for MISRA-C capabilities. wolfSSL supports industry standards up to the current TLS 1.3 and DTLS 1.2, is up to 20 times smaller than OpenSSL, offers a simple API, an OpenSSL compatibility layer, is backed by the robust wolfCrypt cryptography library, and much more.

About SYSGO - Founded in 1991, SYSGO became a trusted advisor for Embedded Operating Systems and is the European leader in hypervisor-based OS technology offering worldwide product life cycle support. We are well positioned to meet customer needs in all industries and offer tailor-made solutions with highest expectations in Safety & Security.

www.wolfssl.com   **www.sysgo.com**