PROTECTING THE VALUE OF YOUR IOT BUSINESS

Your Passport to Intellectual Property, Integrity, and Revenue Generation

WIBU SYSTEMS

Solutions
CodeMeter

Value

- Protecting digital assets
- Safeguarding IoT devices
- Monetizing Industry 4.0
- Envisioning new business models

Summary

- With client-centric solutions and protection of the invaluable know-how of intelligent device manufacturers, CodeMeter opens up new digital markets.

As OT and IT continue to evolve and become more intertwined, the embedded market is experiencing a resurgence of interest. The Internet of Things (IoT) is transforming production facilities into smart factories, utilities into smart grids, and traditional construction work into smart building development. As the concept of Industry 4.0 is becoming reality and cyber-physical systems are getting connected in distributed, flexible industrial networks, plant engineers are also realizing that machine features can be activated or upgraded through software at the point of need to allow a far more fluent relationship between maker and buyer. Established sales processes can be taken to a new level and modular, scalable business models introduced that are truly responsive to the needs of the market.

This transformation results in new products and services for consumers and new revenue streams for the companies providing the infrastructure and services. However, it also brings about new threats as infrastructure providers and service providers contend with the challenge of protecting their more complex systems against cyberattacks, securing the privacy of their clients' information, protecting the integrity of the system, and safeguarding their own intellectual property (IP).

Leveraging their deep embedded market and security expertise, Wind River® and Wibu-Systems® have partnered to offer manufacturers of embedded systems all-encompassing security capabilities to safeguard their connected devices. This partnership has produced the integration of Wibu-Systems' technology with VxWorks®.

WORLD'S LEADING RTOS TOGETHER WITH AWARD-WINNING HARDWARE-BASED SECURITY

Powering billions of intelligent devices, VxWorks is the world's most widely deployed real-time operating system (RTOS). It delivers unrivaled deterministic performance and sets the standard for a scalable, future-proof, safe, and secure operating environment for connected IoT devices. VxWorks enables a full set of software-based security features that can be further enhanced with Wibu-Systems' CodeMeter® hardware-based security to enable a comprehensive solution for security-sensitive applications.

Wibu-Systems is an innovative cybersecurity leader in the global software licensing market. Its award-winning CodeMeter solution protects and monetizes the digital know-how of software publishers and intelligent device manufacturers. Once devices, data, and IP in IoT and stand-alone systems are protected, CodeMeter's unique and internationally patented technology integrates seamlessly with a versatile and cloud-based license and entitlement management platform that further monetizes digital know-how.

KEY ADVANTAGES OF THE SOLUTION

The benefits of the joint Wibu-Systems–Wind River solution include:

- **IP protection:** Safeguarded by Wibu-Systems' market-leading security technology, the IP in binaries built for VxWorks 6.8 and higher can be encrypted before being downloaded to the target system, protecting the IP from reverse engineering.

- **Integrity protection:** The integrated solution combines secure boot, digital signatures, and asymmetric encryption to prevent modification and tampering with the code before it is executed on the target system.

- **Comprehensive hardware- and software-based security:** CodeMeter extends the software-based security features enabled by the integrated solution with the CmDongle hardware-based licensing system. This supports the secure storage of encryption keys on several hardware form factors, including USB dongles (with standard or compact body, metal or plastic casing, with or without flash memory), secure memory cards (SD cards, microSD cards, CF cards, and CFast cards), PCBs for internal mounting, and ASICs. Alternatively, licenses can be stored in software-based CmActLicenses bound to the digital fingerprint of a specific device.

- **License and entitlement management (LEM):** CodeMeter also supports complete license lifecycle and entitlement management with extended license options, such as unit counters, time-related settings, pay per use, subscriptions, and feature-on-demand models. Licenses can then be created, managed, delivered, and monitored with CodeMeter License Central, a cloud-based framework that streamlines back-office processes and seamlessly integrates with leading enterprise resource planning, customer relationship management, and e-commerce solutions.
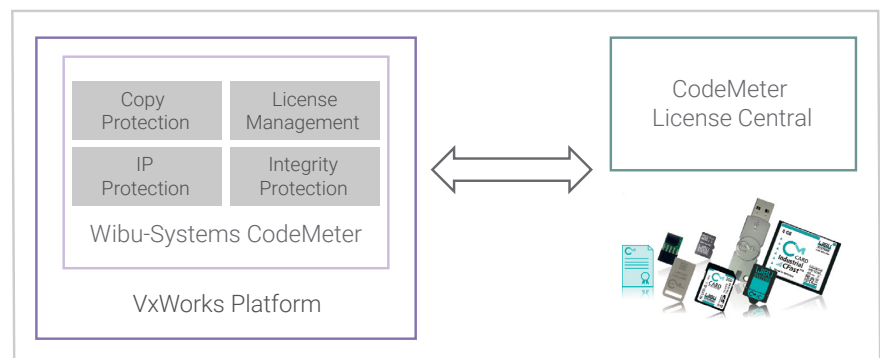

Figure 1. VxWorks with Wibu-Systems CodeMeter

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