

CyberSec™

Securing Unicast and Multicast Communications in Industrial Control Systems

Mocana® CyberSec™ is a zero-coding, high-assurance, efficient, flexible solution for securing multicast communication between controllers and devices in industrial control systems such as SCADA (supervisory control and data acquisition) systems, DCS (distributed control systems), PLCs (programmable logic controllers), and production equipment such as robotics, manufacturing control, material processing, and factory automation.

CyberSec extends IPsec and IKE to the multicast scenario and implements the GDOI (Group Domain of Interpretation) standard to establish security associations among several group members. GDOI alleviates the need to negotiate secrets between every client pair in the group. CyberSec is a plug-and-play solution for unicast and multicast traffic: very frequent, small, UDP/TCP messages between controllers and devices.

CyberSec includes the following components (see Figure 1 below):

- › CyberSec Server (Key Distribution Center) that runs on a Microsoft® Windows® Server and distributes the group secret keys to each CyberSec Client (member) enabling group members to communicate directly to each other.
- › CyberSec Client (agent) binary with an installer for Linux and Microsoft Windows platforms. The agent runs as a service and writes information to event logs/file.

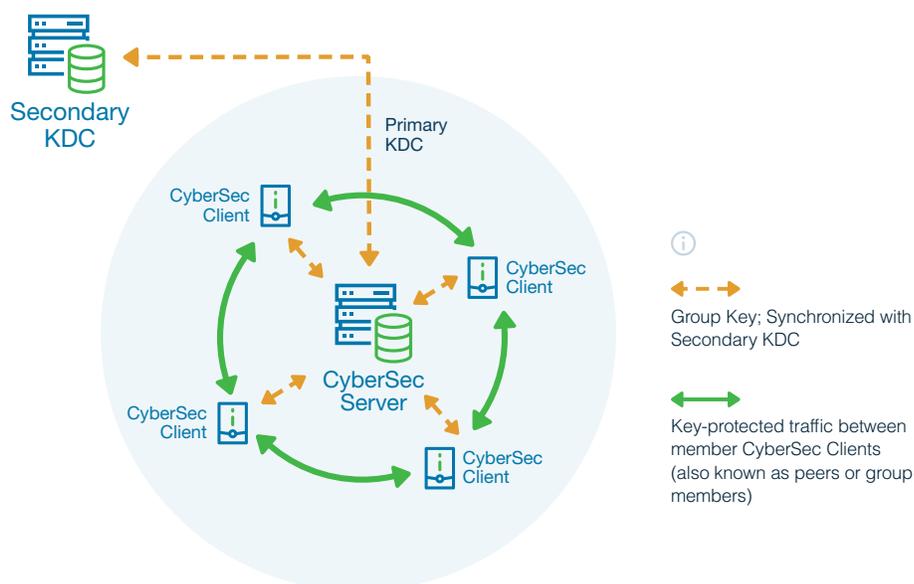


Figure 1. Mocana CyberSec Components

Features and Benefits

- › Integrated FIPS 140-2 Level 1 cryptography engine
- › Integrated with Mocana TrustCenter™ for secure and remote key and certificate management
- › High availability (HA) configuration for the KDC
- › Key Distribution Center (KDC) on Microsoft Windows platforms
- › CyberSec Clients for Windows, Linux, and VxWorks® platforms
- › GDOI standards-based member and group key management over IKE
- › IPsec-based traffic encryption
- › Dual mode for backwards compatibility with legacy brownfield devices

Mocana's IoT Development Platform

The Mocana IoT Development Platform (see Figure 2 below), provides key and data protection for any connected device. As a device designer, you can choose only the components you need for your particular project or standardize company-wide on Mocana's platform, future-proofing your investment with this broad, cross platform, flexible and extensible security architecture.

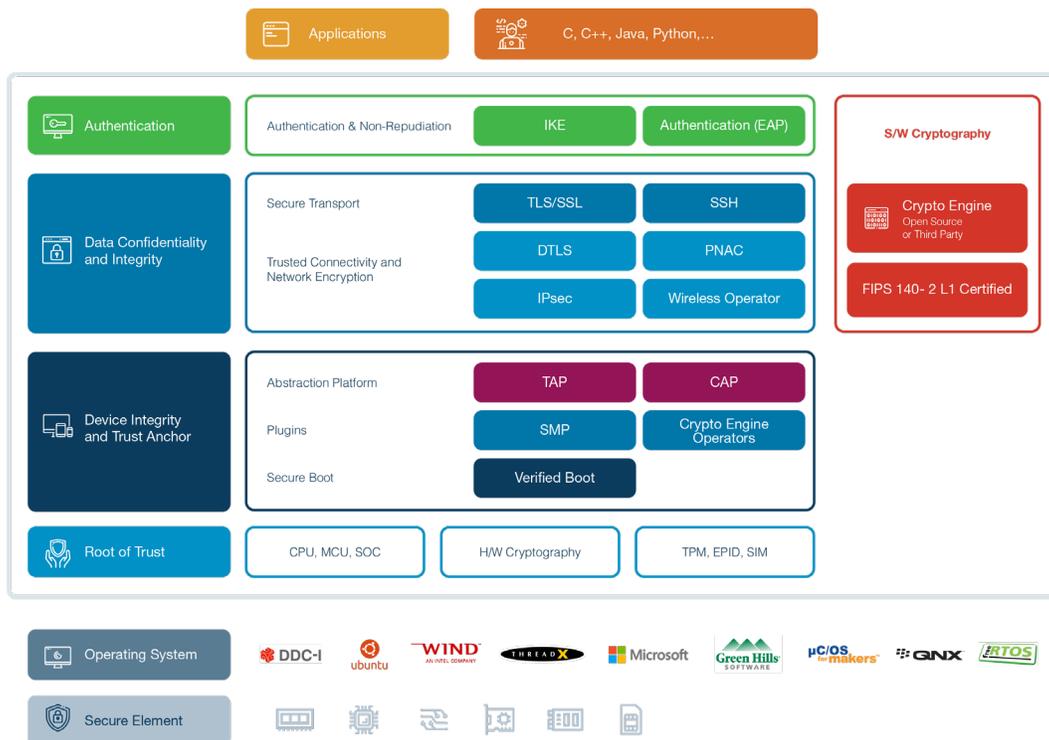


Figure 2. Mocana's Comprehensive, Full-Stack IoT Development Platform

About Mocana

Mocana protects more than 100 million devices worldwide and is trusted by the largest aerospace, industrial, energy, healthcare, and communications companies. Find out more at www.mocana.com.

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