SmartServer™ IoT Ushers in New Era in Convergence of IT, OT and Cloud Services

Echelon now gives customers power to embrace existing industrial devices; extend legacy systems to emerging IoT protocols and IP systems with a proven data layer and programmable interfaces; and enhance operational efficiency and ROI with insights from cloud analytics and artificial intelligence (AI) services through modern IoT messaging and connectivity protocols.

Key features include:

- Interfaces for the most popular Industrial IoT protocols including LON, BACnet, Modbus and M-Bus, as well as other field protocols, eliminating the requirement to develop and integrate protocol stacks
- Connectivity to cloud services based on MQTT for secure and easy IT set up
- Built-in management apps and services such as scheduling, data logging and alarming running at the edge for responsive and reliable systems
- Open REST APIs that provide standard web services interfaces for accelerating web application development
- Linux platform with standardized development tools for simplifying controls applications and custom interfaces or drivers
- Central Management System (CMS) application with a user-friendly web-based UI for simplifying workflows
- Multi-channel support with optional I/O expansion for flexibility and lower system cost
- Compatibility with existing open installation tools for creating and provisioning networks

URL

www.echelon.com
System architecture

SmartServer IoT helps OEMs and integrators by reducing industrial IoT solution development and deployment time from months or years to days or weeks with: built-in network management for edge protocols; a proven data management solution; and secure cloud connectivity, all in a single programmable system with flexible, easy-to-use APIs.

**OEM benefits:**

- Faster time to market: Out-of-the-box support for industrial protocols and services
- Differentiated, competitive offerings: Choice in cloud hosting, choice in network types, choice in supported devices
- Focus on core competency, not on networking: Easy-to-use APIs without the need for extensive networking and cloud experience

**Integrator benefits:**

- Better project ROI: Reduced development time, faster project deployment
- Flexibility in implementation: Choice of multiple interfaces and protocols, ecosystem of interoperable devices
- Customer satisfaction and business outcome: Cloud analytics and insights

**SmartServer IoT APIs based on IAP (Internet of Things Access Protocol)**

The SmartServer IoT features a rich set of standardized APIs that is both easy to use and extremely flexible, enabling developers to create applications that:

- Access, log and analyze data in edge devices
- Provision and manage devices
- Monitor system performance
- Create alerts and notifications

Any applications using the APIs can run in a variety of places:

- Remote browsers for a custom web UI
- Remote (cloud) servers for analytics, AI, and other web services
- Locally hosted on the SmartServer IoT

Two complementary sets of APIs are available:

- REST – ideal for remotely-based web pages and dashboards
- MQTT – ideal for local and remote IoT applications

**Companion modules**

- U60 Modules add a USB to LON interface
- IOX Expanders enable data collection, logging and display, with optional metering