

Industrial OEMs Solutions Brief

Enabling Industrial OEMs and ISV to Deliver Digital Transformation



Competitive advantage, innovation and product differentiation are fundamental to creating successful commercial offerings that resonate with customers and help vendors capture market share.

Enabling Digital Transformation at the Edge

Achieving competitive advantage is critical to the OEMs and ISVs supplying fast moving and highly competitive markets such as industrial and building automation.

With the advent of the Internet of Things (IoT) industrial users are increasingly seeking new solutions that allow them to leverage their equipment data in ways not previously possible. This includes the ability to deploy new IoT enabled applications that utilize the latest advances in Al, ML and software analytics to improve the efficiency of their operations.

Industrial OEMs and ISVs are responding with the next generation of software defined solutions that are far more configurable and extensible than was previously possible. In particular the ability to connect to any OT device and interoperate with different IT/Cloud endpoints is critical to achieving this flexibility.

IOTech Edge ConnectTM is a software framework which helps major Industrial OEM and ISV partners leverage the product's multi-vendor OT connectivity, cloud interoperability and high-performance, real-time edge processing capabilities to create a new generation of protocol-agnostic edge solutions.

Solution Benefits

By providing a range of configurable, high performance IoT capabilities that can be easily integrated into any third party edge solution, Edge Connect is helping industrial OEM and ISVs accelerate digital transformation for their customers.

- Enhances edge solutions with extensive IoT capabilities
- Configurable architecture allows users to choose only the capabilities they need
- Simple integration into 3rd party software stacks
- · Low memory overhead, high performance data acquisition and processing
- Extensive OT protocol and Cloud connectivity to enable interoperability between OT and IT systems
- Simplified OT device onboarding and management through standard APIs
- Reduces development costs and time to market for new IoT capabilities

Use Cases

- Providing embedded IoT services such as OT and Cloud connectivity, and local edge processing within next generation software defined industrial automation controllers
- Integrated OT connectivity and device management capabilities for smart Building Management Systems (BMS)
- Configurable, lightweight edge IoT framework for the creation of connected edge applications running on Micro Controller Units (MCUs) and Microcomputers



Edge Connect Product Description

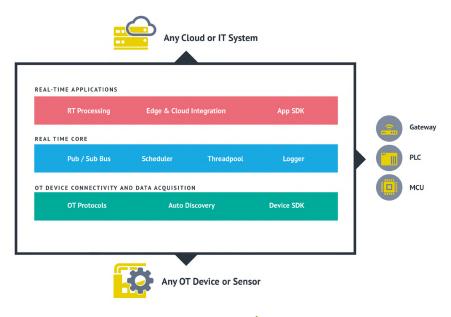
The Edge Connect software framework provides a suite of capabilities implemented as a set of components that are deployed andorchestrated by a lightweight microcontainer.

Through simple configuration the framework allows users to easily select which components to deploy for each use case, including standard Connect components (e.g., OT connectors) provided with the product and also user defined components.

Key Features

- Supports all major industrial protocols including Modbus, BACnet, OPC UA, ErtherCAT, EtherNet/IP, PROFINET, s7, Zigbee BLE and more
- Provides an SDK for creating new OT connectors
- Standard OT device management API based on MQTT
- Auto-discovery of OT devices
- Configure versus code
- Pluggable, deterministic real-time processing and analytics, including dynamic scripting
- Runs on ANY computing node easily ported to legacy systems
- Integrates with ANY Edge or Cloud platform
- Ultra low latency data acquisition (µSec)
- Ultra low memory footprint (KBs)
- Native and containerized deployments

Edge Connect Diagram



Summary

Edge Connect is a key enabler for Industrial OEMs and ISVs looking to enhance their edge offerings with the latest IoT capabilities. It helps vendors in markets such as industrial and building automation to accelerate the transformation of their customer's operations through the deployment of new data driven technologies.

IOTech's Edge Connect provides a low overhead, high performance IoT engine that can be easily integrated or even embedded within 3rd party solutions to enable extensive OT and IT /Cloud connectivity and real-time edge processing.



For additional information about our products, contact us at info@iotechsys.com

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