### Unlock the Value of

# Industrial Data at the Edge



#### What is a Software-based Edge Gateway?

A software edge gateway is an application that connects operational technology (OT) devices like sensors, PLCs, and industrial equipment to a standard protocol. This is crucial to ensure that OT device data can be effectively utilized and acted upon by the organization. HiveMQ Edge is an MQTT gateway and protocol converter that runs on standard hardware and converts protocols such as Modbus, OPC-UA, and Siemens into standards-based MQTT.

#### **Business Impact of Edge Data Integration**

43%

#### **Lower Costs**

Edge computing reduces data transmission costs through local data processing (*Number Analytics*)

# **83**% Edge Adoption

Leading companies adopt edge to gain competitive advantage and market leadership (*Accenture*)

# **95%**Faster Insights

Edge optimization delivers real-time analytics and more valuable insights by reducing latency (*Gartner*)

#### How HiveMQ Edge Helps

HiveMQ Edge is a powerful, software-based MQTT gateway that translates diverse industrial protocols into MQTT, helping organizations bridge the OT/IT divide. It enables efficient and reliable data flow from edge to cloud, providing the foundation for scalable IIoT solutions and real-time operational visibility.

### **Accelerated OT-IT Integration**

Break down data silos by seamlessly connecting legacy OT systems with modern IT infrastructure. Unlock operational data to enable more collaborative and efficient decision-making across your organization.

# **Edge-Enabled Data Reliability**

Ensure continuous operations and zero data loss by buffering and forwarding data at the edge, even during connectivity disruptions. Trust that your critical information is always delivered securely and reliably.

# **Optimized Data Transmission**

Lower operational costs by processing, filtering, and prioritizing data locally at the edge. Only the most relevant and valuable information is sent to central systems, reducing bandwidth usage and network costs.

# Real-Time Edge Intelligence

Enable instant data processing and transformation at the edge for faster anomaly detection, process optimization, and reduced downtime. Gain actionable insights exactly where and when they matter most.

**HiveMQ Edge Adapters** 





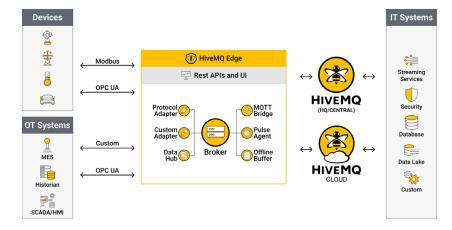
**SIEMENS** 



**BECKHOFF** 

#### **HiveMQ Edge Architecture**

HiveMQ Edge is a software-based MQTT gateway that converts protocols like Modbus, OPC UA, and BACnet into MQTT. Its built-in policy and transformation engine filters and enriches data locally, ensuring only high-value insights are sent to enterprise systems.



#### **Protocol Adapters**

Adapters for Modbus, OPC UA, Siemens S7, and more convert legacy protocols to MQTT. Custom templates enable quick integration across devices, accelerating connectivity in complex industrial environments.

#### **Standards-Based Broker**

HiveMQ fully supports MQTT 3.1.1 and 5.0, enabling advanced features like session expiry, topic aliases, and shared subscriptions for robust, flexible, and future-proof IoT messaging.

#### **Data Hub**

Built-in policy engine for filtering, transforming, and enriching data at the source. Ensures only high-value, contextualized data is forwarded, reducing noise, optimizing bandwidth.



Request a demo

#### "

"As more companies work toward IT/OT alignment, the CIO and the IT organization will be at the forefront of fostering relationships and changing the culture of the organization."

Kristian Steenstrup / Distinguished Analyst and Gartner Fellow

### **HiveMQ Edge Technical Capabilities**

#### Seamless OT Protocol Translation

Translate legacy OT protocols like Modbus, OPC UA, Siemens S7, and BACnet into MQTT to stream to modern IT infrastructure without replacing equipment.

#### **Event-Driven Data Backbone**

Use built-in MQTT broker and bridge capabilities to enable realtime, event-driven communication between edge devices and central systems.

### **Local Data Transformation and Filtering**

Process, enrich, and filter data at the edge to reduce bandwidth costs and ensure only relevant insights reach cloud or enterprise systems.

### **Open, Extensible Architecture**

Deploy open source or commercial editions with modular design for custom adapters, offline buffering, Kubernetes support, and full MQTT compatibility.

# Learn more at www.hivemq.com/products/hivemq-edge →

© HiveMQ www.hivemg.com