

# IoT Gateway for KEPServerEX®

The IoT Gateway is an advanced plug-in that extends the capabilities of the KEPServerEX connectivity platform. It presents RESTful web servers for integration with web services in MES and other systems, and seamlessly streams real-time industrial data directly into device clouds and Big Data analytics platforms across the enterprise.

The IoT Gateway connects Operations with IT to support the Industrial Internet of Things (IIoT). This enables decision-makers to search, monitor, analyze, and visualize data for real-time insight into plant floor operations—leading to increased system security, improved customer service, streamlined automation, and better decisions across the enterprise.

### Performance

- Streams real-time data from KEPServerEX to mobile, Big Data, Enterprise Asset Management, analytics software, and IoT platforms
- Leverages the 150+ drivers within KEPServerEX to collect data from thousands of industrial sensors and machines, including PLCs, RTUs, PACs, DAQs, controllers, and more
- Provides four agents to stream data over the MQTT, HTTP/ REST, and the ThingWorx® AlwaysOn™ protocols
- Offers advanced message formatting for client agents to support multiple data modeling requirements, such as JSON, XML, CSV, and custom models
- Includes advanced features such as deadbanding, support for reading and writing data arrays, multiple simultaneous agents and application connections, Cross Origin Resource Sharing (CORS) restrictions, and CSV tag import and export
- Offers third-party and remote configuration for all agent types through the KEPServerEX Configuration API

# Supported Interfaces

- MQTT Client
- RESTful Web Services Server
- · RESTful Web Services Client
- · ThingWorx AlwaysOn

# **MQTT Client Agent Features**

- Supports MQTT Version 3.1.1, including publish and subscription methods
- Supports advanced formatting for multiple data models (JSON, XML, CSV and custom)
- Supports MQTT security and data integrity features, including Transport Layer Security (TLS), certificate-based authentication, username/password authentication, Last Will and Testament, and Quality of Service message delivery

# **REST Client Agent Features**

- Offers HTTP PUT or POST methods for publishing data to web servers
- Supports advanced formatting for multiple data models (JSON, XML, CSV, and custom)
- Supports HTTP security and data integrity features, including Secure Socket Layer (SSL), customizable HTTP header, serverside data receive confirmations, and Basic Authentication via username/password

# **REST Server Agent Features**

- Provides intuitive drag-and-drop configuration, automatically creating tag URLs
- Supports HTTP GET and POST methods, enabling web clients to browse, read, and write to any tag available within KEPServerEX
- Supports HTTP security and data integrity features, including Cross Origin Resource Sharing (CORS) restrictions, Secure Socket Layer (SSL), and Basic Authentication via username and password

# ThingWorx Agent Features

- Leverages Java SDK for a native AlwaysOn connection to the ThingWorx IoT Platform
- Groups tags in different ThingWorx Agents to gate server data and easily model assets in the ThingWorx IoT Platform
- Supports Secure Socket Layer (SSL) certificates for enhanced security

## **Supported Operating Systems**

- · Windows 8 and 10
- · Windows 7 Professional/Enterprise/Ultimate
- · Windows Server 2012 and 2012 R2
- Windows Server 2008 R2
- · Windows Server 2016

#### System Requirements

- · 2.0 GHz Processor
- · 1 GB installed RAM
- 180 MB available disk space
- Ethernet Card
- · Super VGA (800x600) or Higher Resolution Video

#### Available Languages

· English

#### Current Version: 6





# **About Kepware**

Kepware's software solutions connect diverse automation devices and software applications and enable the Industrial Internet of Things.

Kepware's flagship product, KEPServerEX, is the industry's leading connectivity platform that leverages OPC and IT-centric communication protocols to provide a single source of industrial automation data to all of your applications. Its platform design allows you to connect, manage, monitor, and control diverse automation devices and software applications through one intuitive user interface.

#### **Business Value**

KEPServerEX provides the global connectivity, usability, and performance required by the enterprise—offering competitive benefits that can be experienced from the plant floor to IT to the boardroom.

- IoT-ready, interfacing with on-premise web servers and off-premise Cloud applications for real-time insight into industrial operations
- Compatible with leading hypervisors like VMware and Hyper-V for deployment on public and private clouds
- Integrates with IT applications for visibility into assets on the plant floor at any time and from any location
- Enhanced messaging security via SSL and TLS for secure, authenticated, and encrypted communications across various network topologies
- Advanced application security features to meet site security requirements
- Sophisticated access control to the server, data source, and data values
- Multiple redundancy options to ensure resiliency, highreliability, and uptime in critical applications
- Scalable unified architecture, providing the flexibility to combine drivers and consume multiple protocols in a single server
- Streamlined interface for simple installation, configuration, maintenance, and troubleshooting

Visit Kepware online to learn more and download free, fully-functioning demonstration software.

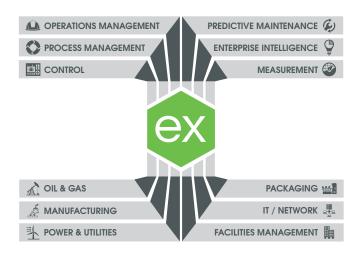
## Support

Kepware offers pre-sales consultations and a comprehensive service plan to support customers from purchasing to upgrading to troubleshooting. To learn more, please contact Kepware's Sales team.

### **Contact Information**

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Kepware is a software development business of PTC Inc. located in Portland, Maine. Kepware provides a portfolio of software solutions to help businesses connect diverse automation devices and software applications and enable the Industrial Internet of Things. From plant floor to wellsite to windfarm, Kepware serves a wide range of customers in a variety of vertical markets including Manufacturing, Oil & Gas, Building Automation, Power & Utilities, and more. Established in 1995 and now distributed in more than 100 countries, Kepware's software solutions help thousands of businesses improve operations and decision making.

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