

Kepware Edge Datasheet

Linux-based Industrial Connectivity



Kepware Edge Overview

Modernize Industrial Connectivity – Secure, Scalable, & Maintainable

Kepware Edge is a new Linux-based industrial connectivity platform that simplifies deployment of industrial connectivity in manufacturing. Kepware Edge addresses manufacturers' need to modernize legacy architectures to enable data-driven operations with AI and automation while improving scalability, cost of ownership, and security of their industrial connectivity.

Manufacturers today are under pressure to close the gap between aging legacy systems and modern, data-driven operations. The missing link? **standardized, secure industrial connectivity** - the backbone of true digital transformation at scale.

Kepware Edge modernizes industrial connectivity by delivering connectivity in a **lightweight, Linux-based container** that's purpose-built for today's greatest manufacturing challenges. By **simplifying the deployment and management of OT data connectivity**, Kepware Edge enables a **seamless integration between legacy and modern operations** – making disparate devices a thing of the past.

The combination of **containerized deployment, robust device connectivity, data aggregation, and secure OT and IT integrations** allows Kepware Edge to build a **scalable foundation for a manufacturer's journey to data-driven operations**. By **standardizing and securing complex OT data**, and making that data **accessible to MES, SCADA, HMI, cloud platforms and AI/ML tools**, Kepware Edge unlocks opportunities for automation and insight. Kepware Edge works seamlessly with Kepware+ Manager to simplify and streamline the remote configuration and management of even the largest Kepware deployments.

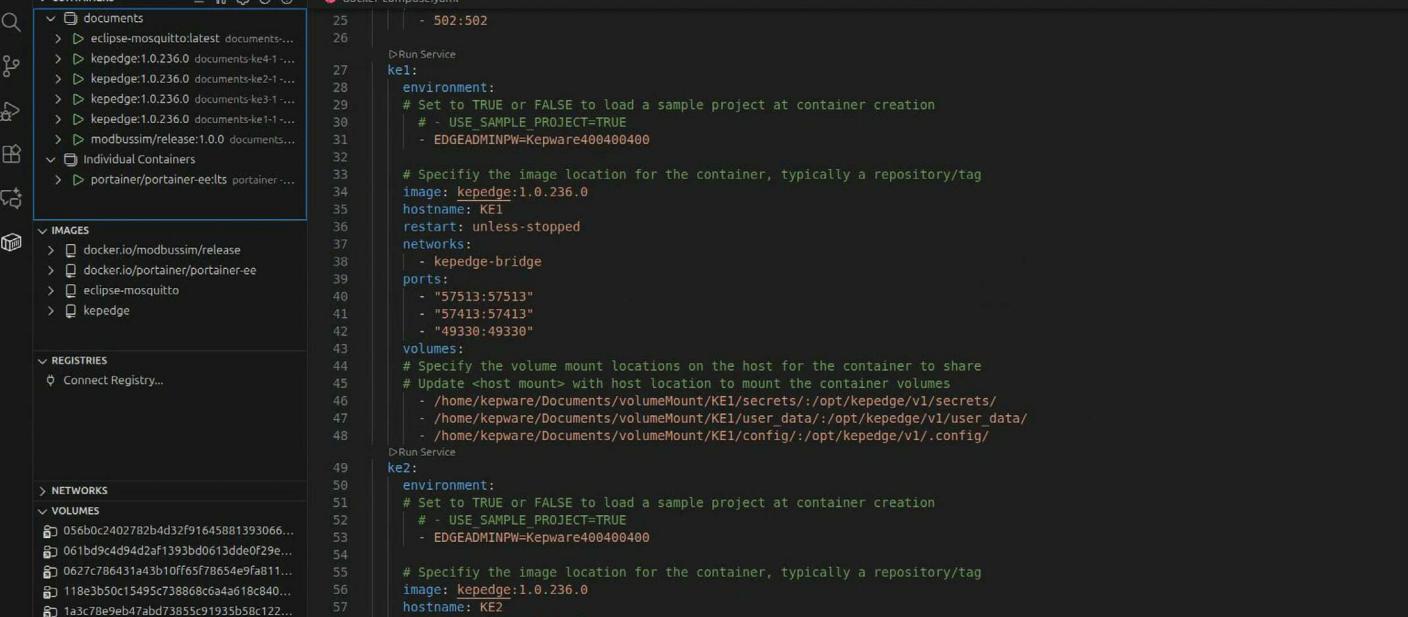
Kepware Edge delivers **best-of-breed connectivity without the need for hardware replacement or custom coding**. Backed by **decades of domain expertise** and a **commitment to interoperability**, Kepware Edge is the reliable platform for modernizing industrial data, helping you **transform operations and drive innovation**.

Kepware Edge Capabilities & Features

Rapid, Out-of-the-Box Connectivity for Data Access and Normalization

Fast, Flexible Deployment Through Containerization

By leveraging containerized deployment for Linux, Kepware Edge enables manufacturers to rapidly install and scale connectivity efficiently. With its lightweight architecture, Edge accelerates deployment, minimizes maintenance demands, strengthens protection against future cybersecurity risks. Kepware Edge also provides support for leading container runtime and orchestration tools, including Docker, Podman, and Kubernetes, making it simple to integrate into any modern IT environment. This holistic approach ensures consistent, reliable performance across sites, while empowering teams to manage connectivity with greater agility and control.



```
ke1:
  environment:
    # Set to TRUE or FALSE to load a sample project at container creation
    # - USE_SAMPLE_PROJECT=TRUE
    - EDGEADMINPW=Kepware400400400
    # Specify the image location for the container, typically a repository/tag
  image: kepedge:1.0.236.0
  hostname: KE1
  restart: unless-stopped
  networks:
    - kepedge-bridge
  ports:
    - "57513:57513"
    - "57413:57413"
    - "49330:49330"
  volumes:
    # Specify the volume mount locations on the host for the container to share
    # Update <host mount> with host location to mount the container volumes
    - /home/kepware/Documents/volumeMount/KE1/secrets:/opt/kepedge/v1/secrets/
    - /home/kepware/Documents/volumeMount/KE1/user_data:/opt/kepedge/v1/user_data/
    - /home/kepware/Documents/volumeMount/KE1/config:/opt/kepedge/v1/.config/
  >Run Service
ke2:
  environment:
    # Set to TRUE or FALSE to load a sample project at container creation
    # - USE_SAMPLE_PROJECT=TRUE
    - EDGEADMINPW=Kepware400400400
    # Specify the image location for the container, typically a repository/tag
  image: kepedge:1.0.236.0
  hostname: KE2
  restart: unless-stopped
  networks:
    - kepedge-bridge
  ports:
    - "57413:57413"
  >Run Service
```

Seamless Device Connectivity

Three words – simplified industrial connectivity. Kepware edge provides pre-built drivers that enable seamless communication between legacy and modern devices, driving industrial connectivity. Whether integrating Siemens, Allen-Bradley, Modbus-enabled equipment, or other industrial devices, Kepware Edge eliminates the need for custom coding or hardware replacement. With Kepware Edge, manufacturers can unify diverse data streams and gain reliable access to OT data, fueling smarter decisions and accelerating digital transformation.

Unified Data Aggregation for Reliable Operations

Kepware Edge consolidates OT data from devices, production lines, and entire manufacturing sites, serving as a comprehensive industrial connectivity platform. By providing a single, secure interface for all operational data, it eliminates the need to manage complex point-to-point integrations between devices and systems - reducing both operational complexity and cybersecurity risks, especially as deployments scale. This unified approach ensures that critical data is readily available by any IT or OT application, anytime and anywhere. With Kepware Edge, manufacturers can streamline data management, securely share information across systems, and break down data silos to improve visibility throughout their operations.

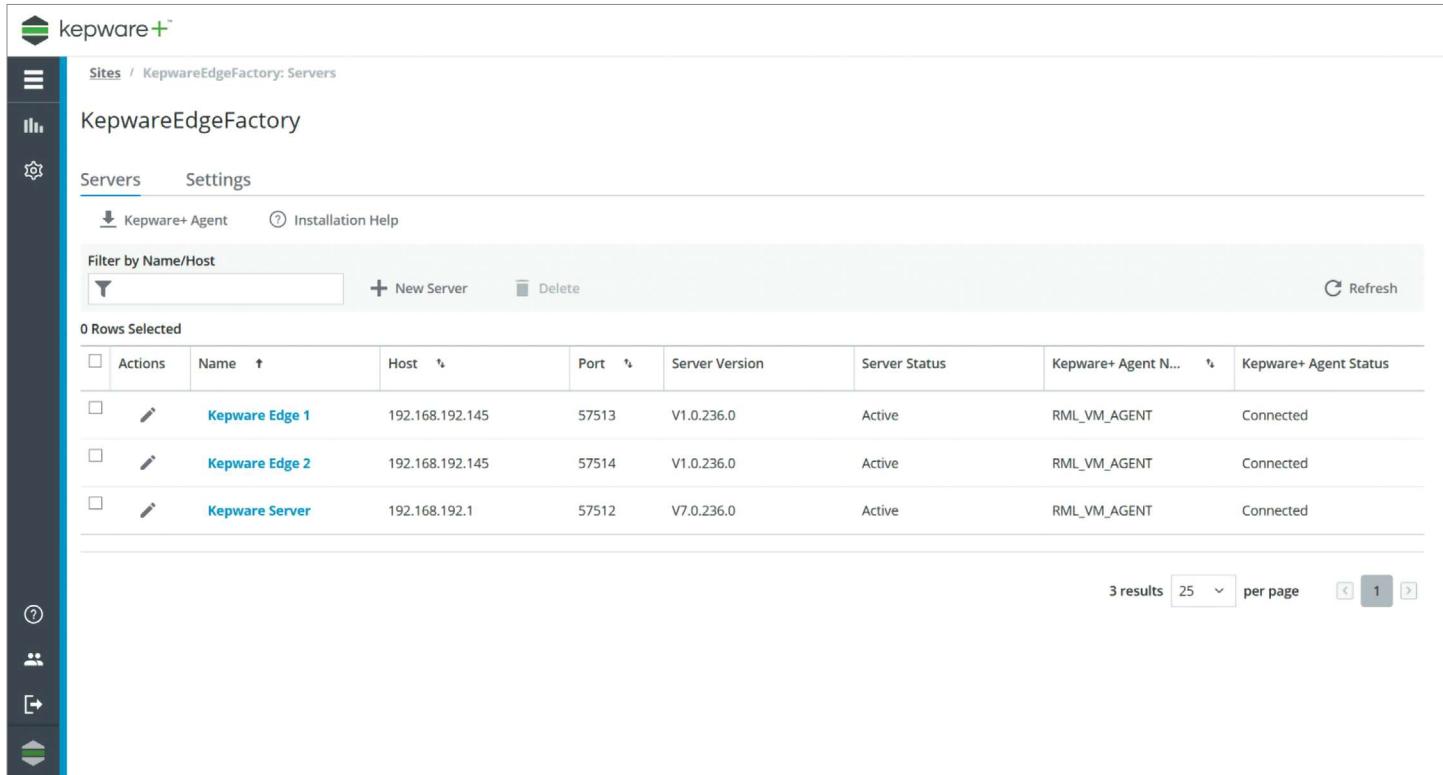
Secure Data Standardization

Kepware Edge streamlines industrial data management by converting proprietary device protocols into secure, open standards such as OPC UA and MQTT. This protocol conversion ensures that data from diverse sources is consistently formatted and easily accessible across IT and OT systems and simplifies future integrations with enterprise applications.

Seamless OT & IT Integration

With Kepware Edge, OT and IT integration couldn't be any easier. Manufacturers can quickly connect their OT data to a range of enterprise applications including ERP, MES, SCADA, IoT platforms and historians. Cloud environments are also easily integrated through built-in support for both AWS and Microsoft cloud storage, as well as AI and ML tools. This flexibility ensures that critical industrial data can flow securely and reliably between OT and IT systems.

Remote Configuration with Kepware+ Manager



Actions	Name	Host	Port	Server Version	Server Status	Kepware+ Agent N...	Kepware+ Agent Status
	Kepware Edge 1	192.168.192.145	57513	V1.0.236.0	Active	RML_VM_AGENT	Connected
	Kepware Edge 2	192.168.192.145	57514	V1.0.236.0	Active	RML_VM_AGENT	Connected
	Kepware Server	192.168.192.1	57512	V7.0.236.0	Active	RML_VM_AGENT	Connected

Kepware+ Manager with Kepware Edge & Kepware Server

Kepware Edge is fully compatible with Kepware+ Manager, empowering manufacturers to monitor, configure, and manage large-scale deployments with ease. This integration provides a secure, centralized control plane, streamlining the oversight of multiple Kepware instances across diverse environments. Kepware+ Manager compatibility ensures that scaling industrial connectivity remains simple, secure, and efficient - no matter the size or complexity of your operations.

Kepware Edge sets a new standard for industrial connectivity, delivering enhanced security through rapid deployment and a lightweight, containerized architecture that minimizes risks and reduces costs. Its robust 64-bit performance empowers manufacturers to handle large data sets efficiently, while offering best-of-breed connectivity without the need for hardware replacement or custom coding. Trusted by 90 of ABI's Top 100 Manufacturing Companies and backed by over thirty years of domain expertise, Kepware Edge is the reliable industry standard for modern operations. With a steadfast commitment to interoperability, Kepware Edge breaks down data silos and enables seamless integration across the enterprise—helping organizations unlock the full potential of their industrial data.

Technical Specifications & Details

Topic Name	Details
Devices & Protocols	<p>Supported Protocols</p> <ul style="list-style-type: none"> • EtherNet/IP • Modbus Ethernet • Siemens Industrial Ethernet <p>Supported Devices</p> <p>Rockwell Allen-Bradley</p> <ul style="list-style-type: none"> • CompactLogix 5300, 5400 & 5500 series • ControlLogix L7 & L8 series • FlexLogix 5400 series • MicroLogix 1000 to 1500 Series • PLC5 series Broad Support • SLC5 & 500 series Broad Support • SoftLogix 5800 Series <p>Modbus</p> <ul style="list-style-type: none"> • Modbus Open Ethernet Devices (*Client device models only) <p>Siemens</p> <ul style="list-style-type: none"> • S7-200/300/400 series • S7-1200/1500 series • netLink MPI-S7-300/400 • netLink 50-MPI S7-300/400 • netTap 40-MPI-S7-300/400 <p><small>*Please review the Help & Product Manual documentation for extended device support details.</small></p>

Topic Name	Details
IT/OT Integrations	<p>MQTT Specifications & Features</p> <p>Supported Specifications</p> <ul style="list-style-type: none"> MQTT 3.1.1 <p>Supported Features</p> <ul style="list-style-type: none"> Offers customizable JSON data format to support most MQTT and REST applications Supports MQTT Version 3.1.1, including publish and subscription methods Supports advanced formatting for multiple data models (JSON, XML, CSV and custom) Supports deadband to limit data throughput Supports tag import and export for quick project configuration and deployment Has a configurable Publish Rate Has a configurable data package size for single transactions 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 Supports self-signed client certificates, enabling certificate authentication for integration <p>OPC UA Specifications & Features</p> <p>Supported Specifications</p> <ul style="list-style-type: none"> 1.02 optimized binary TCP <p>Supported Features</p> <ul style="list-style-type: none"> Standard UA Server Profile UA-TCP UA-SC UA Binary <p>ThingWorx Native Interface Cloud Integrations</p> <ul style="list-style-type: none"> AWS MSFT Azure
Data Standardization	Robust protocol translation into OPC UA, MQTT and ThingWorx AlwaysOn
Supported Operating Systems	<p>Any modern x86-64 operating system</p> <p>Examples include but are not limited to RHEL, Ubuntu, Fedora, Windows, Windows Server, MacOS, (and more.)</p>
Supported Container Orchestration Systems	<p>Any modern docker/OCI container runtime</p> <p>Examples include but are not limited to docker, podman, rancher, and kubernetes</p>
Licensing	License Server – Deployed On-Premises
Demo Version	Trial licenses are available upon request. Please contact us for more information on how to get started.
Documentation	<p>Release Notes</p> <p>Kepware Edge Help Manual</p> <p>Siemens Ethernet Driver Manual for Kepware Edge</p> <p>Modbus Driver Manual for Kepware Edge</p> <p>Allen-Bradley Driver Manual for Kepware Edge</p> <p>IoT Gateway Manual for Kepware Edge</p>
Other Technical Details	<ul style="list-style-type: none"> Available in English only Simulator Driver is included

Driving Industrial Connectivity Forward

Kepware and Kepware Edge deliver a unified approach to industrial connectivity that meets the demands of modern manufacturing. Kepware offers trusted, enterprise-grade solutions for complex OT environments, while Kepware Edge brings agility with containerized deployment and secure data integration. Together, they enable manufacturers to bridge legacy systems and future-ready architectures – driving efficiency, scalability, and innovation across operations.