



thingworx® kepware® server



Connectivity for Industrial Automation and the Internet of Things

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Importance of Industrial Data Access

Access to real-time plant floor data enables companies to improve processes, drive productivity, make better decisions, and maintain a competitive edge.

Control engineers and executives need access to real-time data from industrial control equipment through their MES, SCADA, Big Data, and analytics solutions.

A range of departments—including engineering, operations, quality assurance, IT, sales, supply chain, and accounting—can benefit from increased data access and visibility.

Communications Challenges

 Disparate, edge-based, and legacy devices are unable to connect to each other or to enterprise business systems.

 Big Data and IoT platforms need to connect to industrial control systems remotely and securely.

 Users must purchase, install, learn, maintain, and troubleshoot multiple communication solutions that have varying degrees of complexity.

 Data may be poor quality, outdated, or lost.

 Communication mediums between sources are often unreliable.

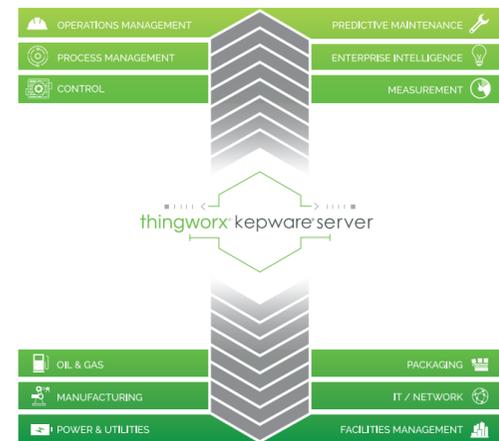
A Connectivity Solution

ThingWorx® Kepware® Server is a single solution for collecting, aggregating, and providing secure access to industrial operations data.

Its design allows users to connect, manage, monitor, and control diverse automation devices and software applications—from plant control systems to enterprise information systems.

ThingWorx Kepware Server offers:

- Connectivity to an ever-growing list of devices and applications in a scalable, secure architecture
- A streamlined interface that provides the convenience of installation, configuration, and support in one solution from a single vendor
- Direct, simultaneous connections to clients, including ERP, MES, HMI, SCADA, mobile, Big Data, Enterprise Asset Management, analytics, and IoT platforms
- Secure, authenticated, and encrypted communications from client to device across various network topologies



ThingWorx Kepware Server Features and Architecture



Connectivity

ThingWorx Kepware Server offers the broadest range of drivers available, supporting current and legacy devices across various verticals within the Industrial Automation Industry. Drivers support a variety of wired and wireless networks including Ethernet, serial, and proprietary networks and various telemetry mediums. ThingWorx Kepware Server provides connectivity to databases, custom software applications, and other OPC servers, and supports simulation for implementation and testing prior to deployment.



Optimization

Through data conditioning and reduction, customized load balancing, and protocol-specific communications optimization, ThingWorx Kepware Server improves communications and reduces network and device load. It also features Machine-to-Machine linking and redundancy.



Aggregation

ThingWorx Kepware Server maximizes data applications by supporting connections to thousands of data sources and providing information to hundreds of applications through a single architecture. This eliminates the need to purchase, operate, and maintain disparate applications for discrete connectivity.



Accessibility

ThingWorx Kepware Server provides accessibility to leading automation, Big Data, and analytics software via OPC, proprietary protocols, and IT protocols (including MQTT, REST, ODBC, and SNMP). Historical data is accessed through OPC standards, trend logs, and Electronic Flow Measurement (EFM) for hydrocarbons.



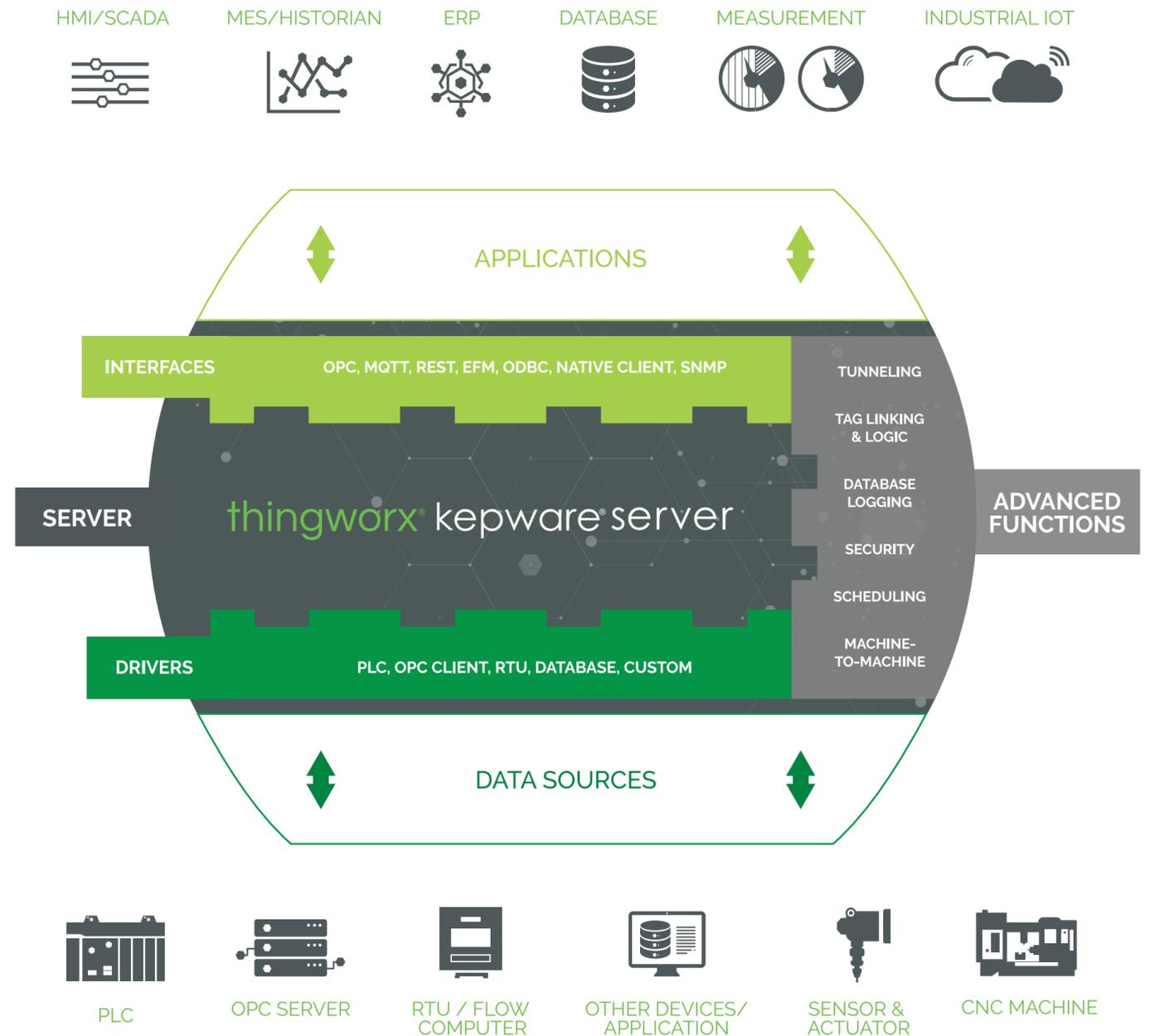
Security

Tools within ThingWorx Kepware Server expand administrators' abilities to control user access and regulate browse/read/write privileges for secure data communications. ThingWorx Kepware Server supports a number of secure client standards including SNMP, OPC, and HTTPS to further restrict access to the server, as well as a number of secure device protocols to meet the requirements of DNP3, SNMP, and OPC UA data sources.



Diagnostics

ThingWorx Kepware Server provides robust communications diagnostics to easily isolate and troubleshoot device and application communications.



PLC



OPC SERVER



RTU / FLOW
COMPUTER



OTHER DEVICES/
APPLICATION



SENSOR &
ACTUATOR



CNC MACHINE

thingworx® kepware® server

Download Now

PTC offers free, fully-functional demonstration software. Download, install, and configure ThingWorx Kepware Server in under 5 minutes. Complimentary pre-sales consultations are available upon request.



For your free trial, visit
www.ptc.com/thingworx-kepware-server-demo

About ThingWorx Kepware Server

Trusted in more than 75,000 sites world-wide, ThingWorx Kepware Server provides a single source of industrial data to all automation devices, machines, and software applications. With built-in security, scalability, and a library of more than 150 drivers and advanced plug-ins, ThingWorx Kepware Server has the flexibility to overcome any data connectivity challenge.

To learn more and try a free demo of ThingWorx Kepware Server, visit www.ptc.com. While there, you can explore our library of device drivers, client drivers, and advanced options to fit your unique industrial control system requirements.

About PTC (NASDAQ: PTC)

PTC unleashes industrial innovation with award-winning, market-proven solutions that enable companies to differentiate their products and services, improve operational excellence, and increase workforce productivity. With PTC, and its partner ecosystem, manufacturers can capitalize on the promise of today's new technology to drive digital transformation.

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