

KEPServerEX™

OPC Server Software – *Maximize the Promise of OPC™*

KEPServerEX is an OPC server which provides direct connectivity between hundreds of different PLCs, devices, and systems, and a wide variety of OPC client applications, including HMI, SCADA, Historian, MES, ERP, and countless custom applications.

Employing the universally accepted OPC standard, KEPServerEX maximizes the promise of OPC and expedites project development through the use of a single server interface, regardless of the control system in use. Multiple device drivers can be “plugged in” to one application which centralizes communications and greatly reduces user learning curves.



Ease of Use

A single server interface that simplifies your projects

Industrial Strength and Easy to Use

Our intuitive interface makes industrial connectivity so easy that within minutes you can be providing data to your application. KEPServerEX maximizes the promise of OPC through the use of a single server interface, ensuring shorter product learning curves, reduced system training and maintenance costs, and improved network reliability, regardless of the control system in use!

Methods used to manage and configure 3rd party OPC servers may vary from one manufacturer to the next. This results in a continuous process of learning each new OPC server when a new PLC or device is used. If the goal of OPC technology is to provide a single, well defined and reliable interface to share data, then it would seem only natural that this goal should be matched with a single user interface to simplify configuration.

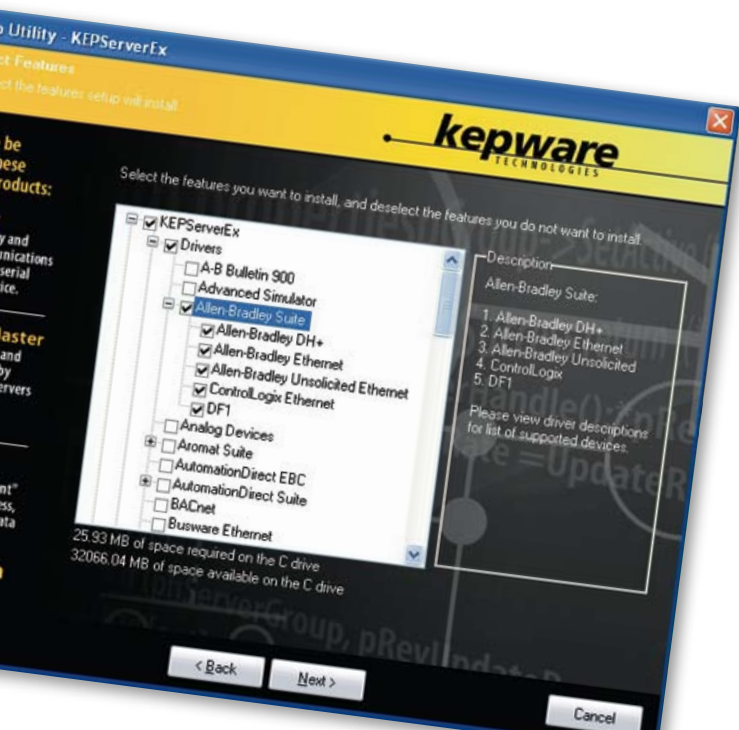
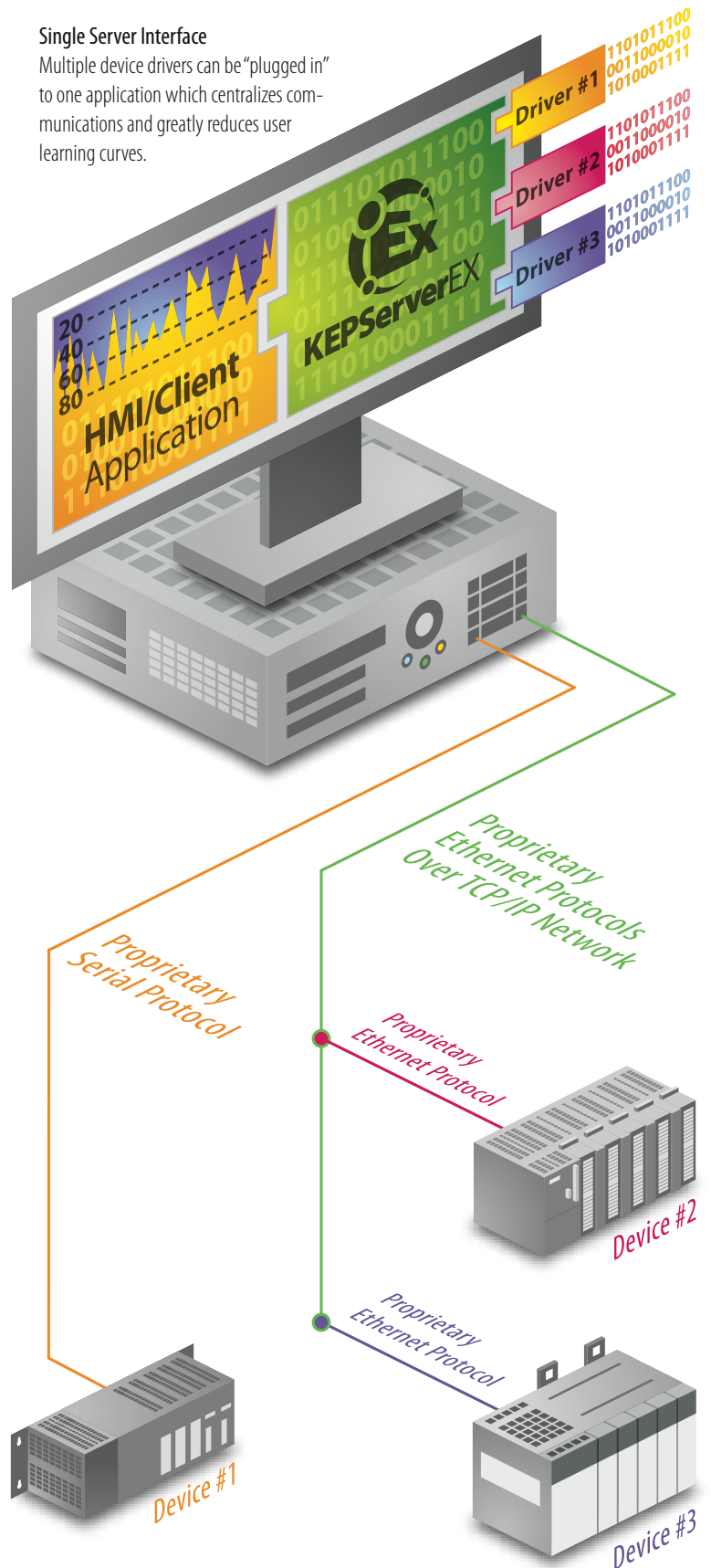
Unified User Interface for all drivers

This level of consistency comes from KEPServerEX's plug-in design. Each of the 100 plus drivers plug into the KEPServerEX OPC server core. In addition to housing all of the OPC functions, the server core also manages all interaction with users, thus ensuring a consistent style for each driver. The result is a streamlined configuration process regardless of the underlying control system or device. For users, it means only needing to learn a single configuration method and development tool.

The plug-in nature of KEPServerEX also simplifies the operational environment of the PC. With KEPServerEX, more than one driver can be plugged into the core at one time, thus allowing systems that collect data from a wide range of devices to be implemented with only a single OPC server.

Single Server Interface

Multiple device drivers can be "plugged in" to one application which centralizes communications and greatly reduces user learning curves.



Features

Real world features for real world applications

Application Connectivity Support:

- OPC Data Access Version 1.0a, 2.05a, 3.0
- Fastddc & Suitelink for Wonderware, PDB Interface for iFix
- DDE Format CF_Text, DDE Format Advanced DDE

Plug-in Device Driver Connectivity

KEPServerEX supports serial and Ethernet connectivity to the widest range of industrial control systems, including: Allen Bradley, AutomationDirect, BACnet, GE, Honeywell, Mitsubishi, Modicon, Omron, Siemens, Texas Instruments, Yokogawa and many more...

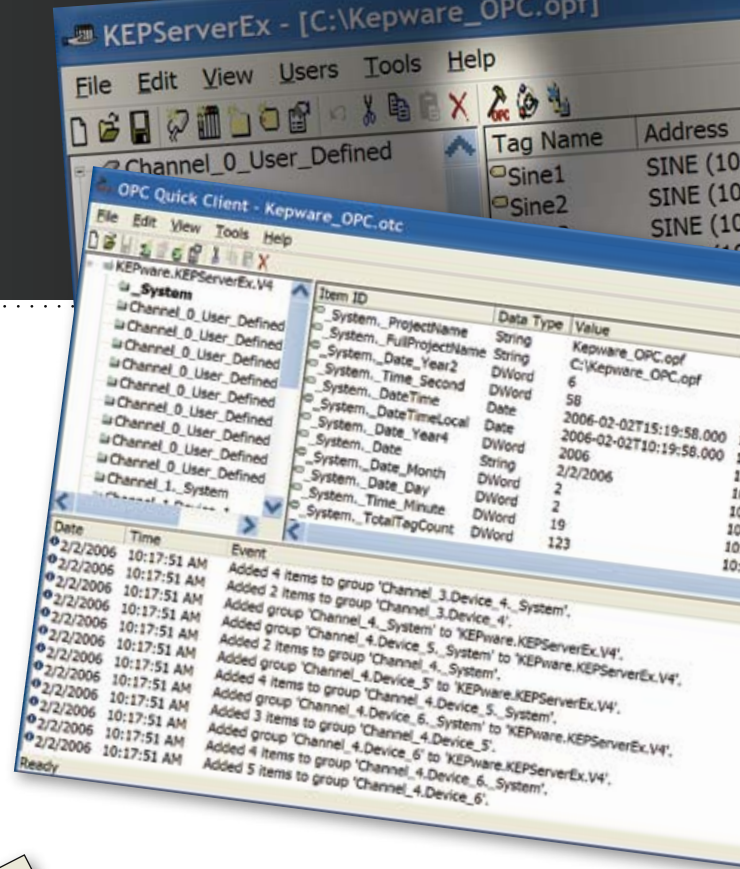
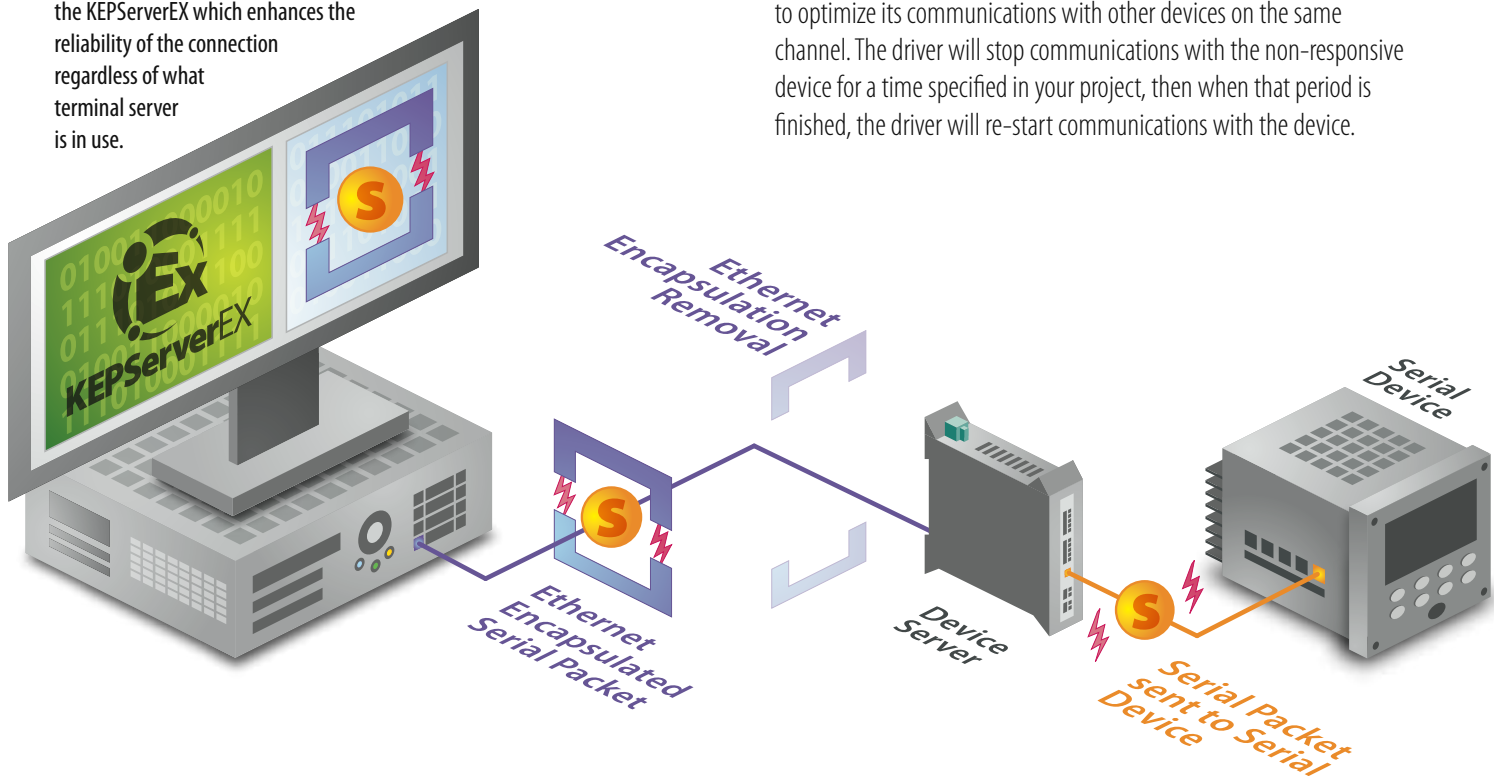
Modem Support:

The server supports the use of dial up modems to connect to remote devices. Special Modem Tags in KEPServerEX become available at the channel level when a dial-up network connection has been created. These tags can be used to dial a remote device, monitor the modem status while connected, and terminate the call. Modem support is enabled at the Channel level in the server project.

Ethernet Encapsulation:

This allows KEPServerEX serial drivers to communicate to devices with serial communication over Ethernet. The driver will communicate in Ethernet Encapsulation mode over Ethernet to a Terminal or Device Server, which then provides the serial communications to the device. This allows users to incorporate legacy serial devices into their Ethernet network. Ethernet Encapsulation is enabled at the Channel level of KEPServerEX.

Ethernet Encapsulation is supported directly in the KEPServerEX which enhances the reliability of the connection regardless of what terminal server is in use.



Quick Client:

We include an OPC Quick Client application to assist you with your initial connectivity testing. It is a full-featured OPC client application, included free with the KEPServerEX demo product suite from our website. Using Quick Client, you can access all data available to the server application, including System, Diagnostic, and User-defined tags. After you've created a simple KEPServerEX project, auto launch Quick Client from the server toolbar to test your device connection.

Auto Demotion:

This parameter allows a driver to temporarily place a KEPServerEX device off-scan in the event that a physical device is not responding. By placing a non-responsive device off-line, the driver can continue to optimize its communications with other devices on the same channel. The driver will stop communications with the non-responsive device for a time specified in your project, then when that period is finished, the driver will re-start communications with the device.

Cont'd

Features

Real world features for real world applications

Tag Creation & Management:

Tag Grouping, Drag and Drop editing, and CSV Import / Export are basic features provided to make it easier for you to organize your next project. A feature that users find most useful is **Automatic Tag Database Generation**. KEPServerEX supports automatic generation of tags for select communication drivers. Drivers that support this feature can either read tag information directly from a device or generate tags from stored tag data (like ladder logic files). The user no longer needs to enter OPC tags into the server.

On-Line Fulltime:

KEPServerEX is on-line all the time, allowing your application to be modified while the server is communicating with client applications. Almost all parameters can be changed while the server is running, including com port and baud rate configuration, along with tag editing and additions.

System & Diagnostic Tags

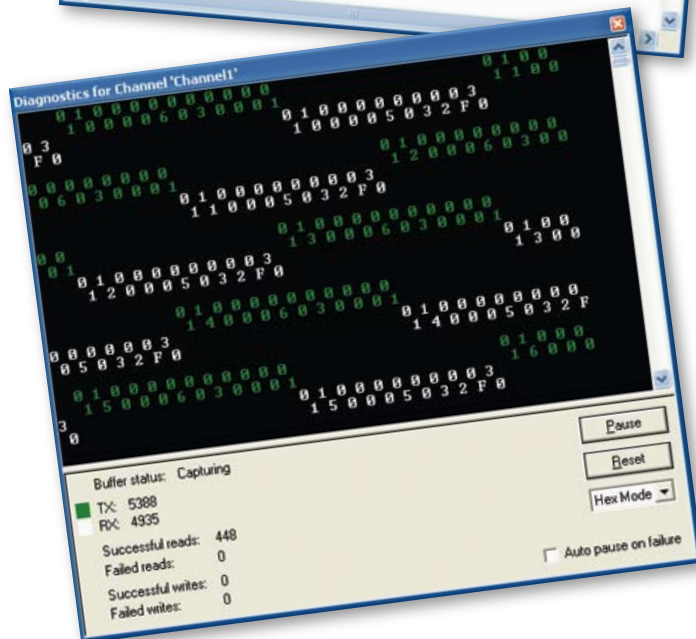
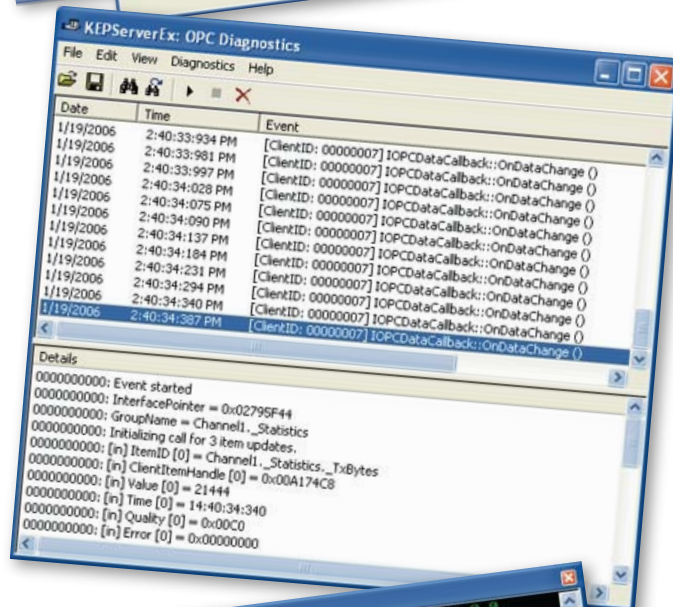
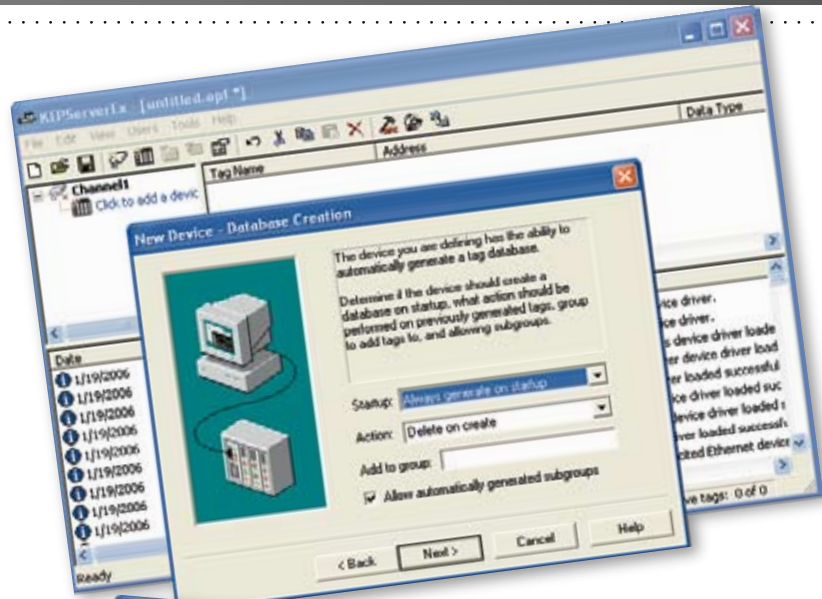
These tags exist in any KEPServerEX project. Although they cannot be seen in the server tag view, they are browseable and available to OPC clients. Use these tags to read as well as modify certain server parameters from their runtime application. **Examples include:** `__Error`, `__Enabled`, `__SuccessfulWrites`, `__DeviceId`, `__EncapsulationIp`, `__AutoCreateTagDatabase`, `__NetworkAdapter`, `__ConnectTimeout`

OPC & Device Diagnostics:

This window provides both real-time and historical views of OPC events between the client and server application. Device driver diagnostics provide real-time data on the performance of your plug-in driver. All read and write operations can be viewed in the diagnostic display window of the server, and can be tracked directly in your OPC client application. This diagnostic feature is useful to Kepware's support team on the occasions when connectivity problems occur during customer evaluations.

NT Service:

KEPServerEX runs as an NT Service under Windows NT/2000/XP/Server 2003. Service operation is completely user-configurable from the Tools|Options menu and can be changed at any time, allowing you to move from normal, stand-alone program operation to NT service mode. Running as an NT service is crucial for many applications where the server provides data to OPC clients via DCOM. While running as a service, the server can continue to supply OPC data across user log-in sessions and can be configured to interact with the desktop, allowing changes to your server project.



Performance

Reliable connectivity for industrial applications

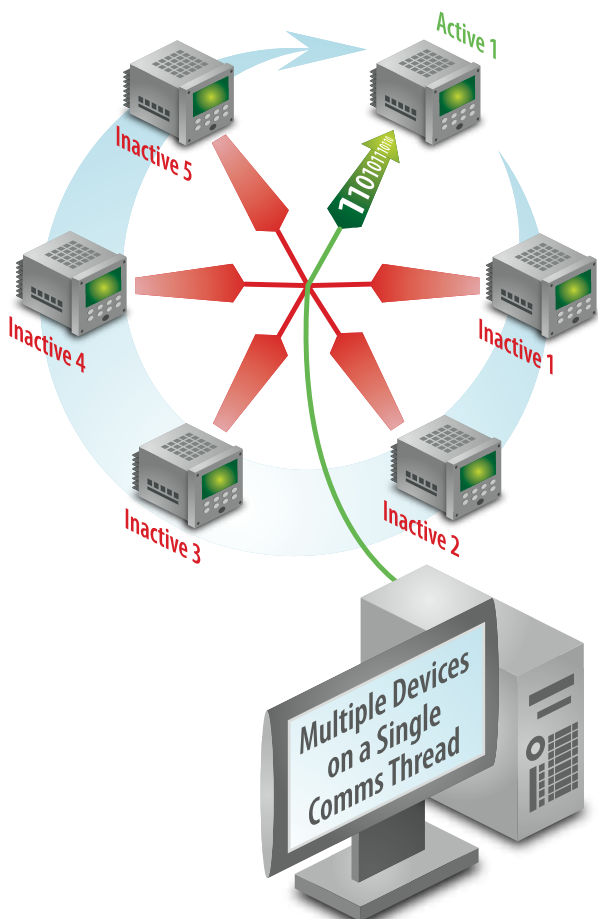


Experience High Performance Communications

KEPServerEX is designed for efficient operation throughout the entire product. Each driver plug-in is developed to take advantage of any operational gain that a given PLC or device offers for enhanced communication speed. Kepware's development team has written drivers on nearly every Microsoft platform dating all the way back to DOS. This depth of development experience keeps us keenly aware of how to develop and maintain high performance connectivity without sacrificing quality.

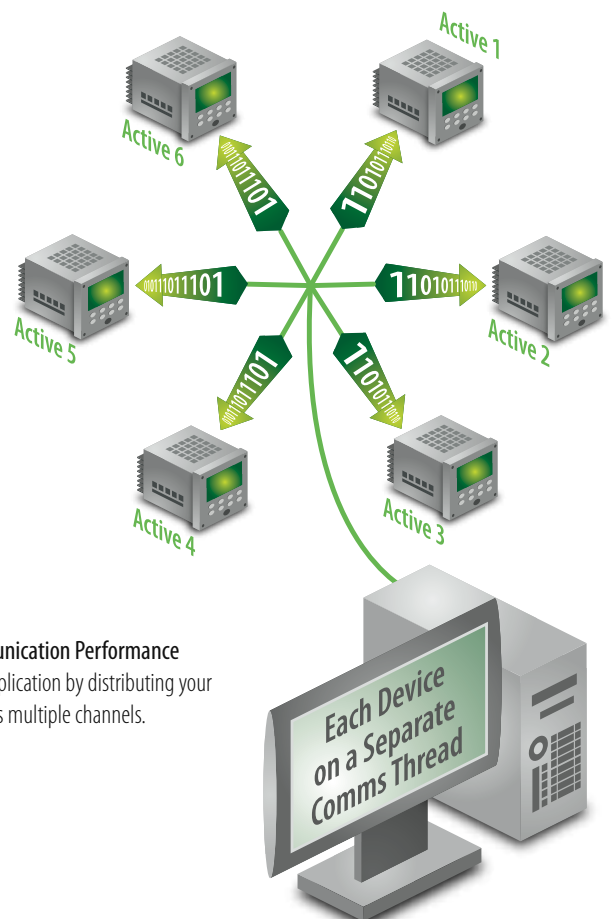
Minimum Effort – Maximum Throughput

KEPServerEX is a truly multi-threaded application where drivers support up to 100 channels of communication and each channel is a separate task running inside the server application. By distributing the communication load across multiple channels, maximum throughput can be achieved. The use of multiple tasks to improve communication performance may immediately raise the concern about potential negative impacts on the host PC. Rest assured, KEPServerEX has been real-world tested in applications actively polling over one-hundred-thousand tags, producing only a negligible effect on the host PC's CPU usage and memory.



Improve Communication Performance

Optimize your application by distributing your device load across multiple channels.



Genuine Kepware Quality

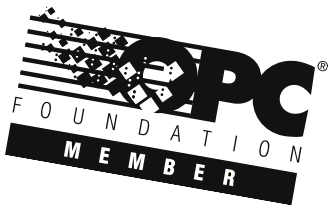
Flawless 24/7 operations of your industrial application

Reliability through higher standards

Kepware recognizes that product quality assurance should be separate from product development. Developers build and maintain the software, and Quality Control personnel perform all testing. The QC team implements extensive testing methodologies to insure that products will meet the 24/7 performance and reliability needs of industrial applications. The goal is to eliminate troublesome issues so customers have a flawless experience in the field. Every KEPServerEX driver plug-in is tested by Kepware's Quality Control Team.



Our Technical Support Specialists are familiar with the PLCs and devices supported by KEPServerEX and we keep this hardware in house so the Kepware team can quickly investigate customer problems if encountered.



OPC Foundation Compliancy Tested

As the leading OPC server provider, Kepware maintains close working relationships with major OPC client vendors so our QC Team can maintain compatibility with ongoing releases of 3rd party client products. Additionally, Kepware developers attend yearly Interoperability Workshops sponsored by the OPC Foundation to test Kepware products with products by other foundation members. Finally, the OPC Foundation offers a compliance certification that requires OPC servers to be tested using a special test application. Once passed, an OPC server can be listed as "Compliant".



A Message From Our President

We take the quality of our products very seriously, and will not release a product until it has successfully completed all stages of our rigorous quality control process. We also post product updates and revision histories on our website so customers have instant access to the latest versions of our products once released. Please visit our website for free product downloads and don't hesitate to contact us if you have any questions or feedback.

Mark Hensley, President

Support

World-Class Support Specialists



Support Online

As with any Kepware product, technical support is available from before the purchase right through commissioning and beyond!

Upgrades and demo software are available for download directly from the Kepware website at: www.kepware.com

Technical Support:

207-775-1660 or 1-888-Kepware extension 211
technical.support@kepware.com

Product Updates:

Available for download from the Kepware website:
www.kepware.com

Sales:

Pricing, Quotes and Pre-Sales Support
207-775-1660 or 1-888-Kepware extension 208
sales@kepware.com

Orders:

online: www.kepware.com
email: orders@kepware.com
phone: 207-775-1660 or 1-888-Kepware extension 228
fax: 207-775-1799
mail: Kepware Technologies
Attn: Sales Dept.
P.O. Box 579
Portland, ME 04112

Note: With all purchases please include Company Name, Your Name, Daytime Phone Number, Shipping and Billing Addresses, Your Email Address, Product Description, Product ID and Product Quantities.



Automation's Best Friend
1.888.Kepware
info@kepware.com
www.kepware.com

System Requirements:

Complete product and system requirements and recommendations available at: www.kepware.com

Supported Operating Systems:

Windows 98
Windows NT
Windows 2000
Windows Server 2003
Windows XP

PC Hardware:

Minimum

Pentium 200 MHz CPU
32 MB RAM
10 MB of Free Hard Drive Space

Recommended

Pentium 400 MHz CPU
64 MB RAM
10 MB of Free Hard Drive Space

Driver-Specific

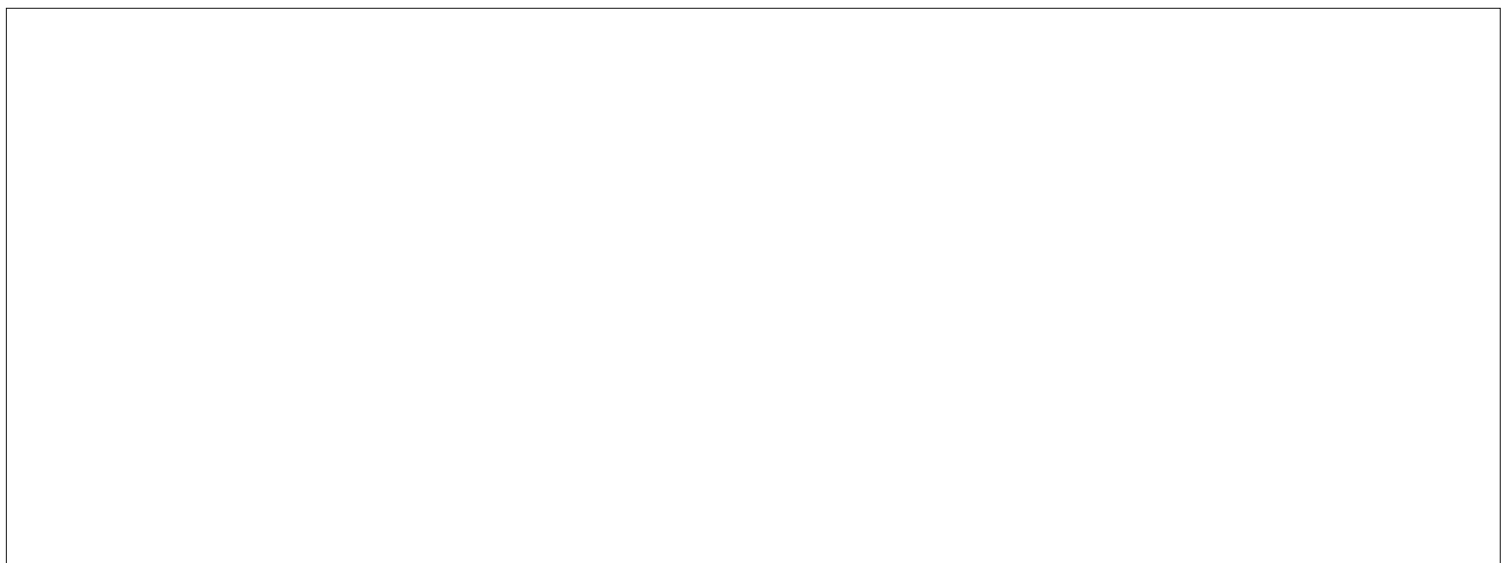
Hardware Requirements:

For specific hardware requirements and recommendations, please visit Kepware online at: www.kepware.com

This computer program is protected by copyright law and international treaties. Unauthorized use, reproduction or distribution of these programs, or any portion of them, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. Modicon, U-CON, BACnet, Allen-Bradley, Yokogawa, Mitsubishi, and Siemens are registered trademarks or trademarks of their respective owners. All other marks are the properties of their respective owners.

Your local Kepware Technologies Representative

Contact your local Kepware Representative/Distributor for more information:



Automation's Best Friend™
www.kepware.com

