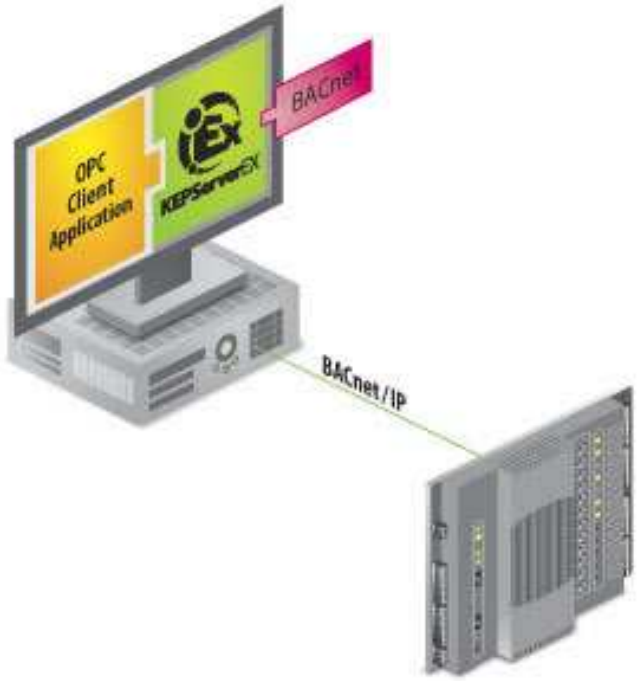
BACnet OPC Server

The BACnet Device Driver was designed to plug-in to our industrial based communications server KEPServerEX and is intended for use with Building Automation and Control Networks. This product supplies data access to any HMI, SCADA, Historian, or Enterprise application that supports OPC, DDE, Advanced DDE, FastDDE, or SuiteLink. It provides connectivity to equipment using the BACnet protocol over Ethernet (often referred to as ("BACnet/IP" or "Annex J"). Devices on other BACnet network types may be accessed using BACnet gateway devices. The BACnet OPC Driver is also included in the Building Automation Suite.



BACnet Resources:

The official BACnet specification, "ANSI/ASHRAE Standard 135-2001 BACnet A Data Communication Protocol for Building Automation and Control Networks", describes all aspects of the BACnet protocol. It is recommended that users of this driver be familiar with the standard BACnet objects and properties discussed in Clause 12 of the specification. In addition, you should be familiar with the particulars of BACnet/IP outlined in Annex J of the specification. The specification document, as well as many other useful resources, is available through the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE) or the official BACnet web site www.bacnet.org.

Plug-in Driver Features:

- Supports APDU (Application Protocol Data Unit) which affects message segmentation
- Supports Command Priority which prioritizes write requests
- Supports subscription to Change of Value (COV) event notification for many properties
- Automatic Tag Database Generation for BACnet supported object types
- Supported Objects: Most properties of all of the standard object types are supported.
  Analog Input, Analog Output, Analog Value, Averaging, Binary Input, Binary Output, Binary Value, Calendar, Command, Device, Event Enrollment, File, Group, Life Safety Point, Life Safety Zone, Loop, Multi-state Input, Multi-State Output, Multi-State Value, Notification Class, Program, Schedule, Trend Log
- Supported Services:

BACnet Service	BIBB	Initiate	Execute
Who-Is	DM-DDB-A	X	
I-Am	DM-DDB-A		X
ReadProperty	DS-RP-A	X	
ReadPropertyMultiple	DS-RPM-A	X	
WriteProperty	DS-WP-A	X	
WritePropertyMultiple	DS-WPM-A	X	
SubscribeCOV	DS-COV-A	X	
SubscribeCOVProperty	DS-COVP-A	X	
ConfirmedCOVNotification	DS-COV-A		X
UnconfirmedCOVNotification	DS-COV-A		X

Protocol

- BACnet/IP (Annex J)

Application Support

- OPC Data Access (OPC DA) Versions 1.0a, 2.0, 2.05a, 3.0
- OPC Alarms and Events (OPC AE) Version 1.10
- OPC Unified Architecture (OPC UA) Version 1.01
- OPC Express Interface (OPC Xi) Version 1.00
- SuiteLink and FastDDE for Wonderware
- NIO Interface for iFIX
- DDE Format CF_Text and AdvancedDDE

Supported Devices

- This driver can be used successfully with devices that use the BACnet/IP (Annex J) protocol, are visible on or from an Ethernet network, and support the objects, properties, and services supported by this driver. You should consult the Protocol Implementation Conformance Statement (PICS), available from your hardware vendor. Conformance data for this driver is given in Supported Objects and Services found under the features tab

Additional Information and Resources:

- KEPServerEX OPC Server Features
- BACnet Revision History
- KEPServerEX Revision History
- Connecting Visual Basic to BACnet
- System Requirements
- OPC Compliancy Testing
- KEPServerEX v5 Licensing
- Upgrade Pricing

Related Products:

- LinkMaster OPC Bridging Software
- OPC UA Client Driver
- OPC DA Client Driver
- DataLogger Option for KEPServerEX
- Advanced Tag Option for KEPServerEX
- RedundancyMaster OPC Redundancy Software
- Support and Maintenance Agreement
- Support and Maintenance Agreement Pricing
- Legacy Pricing Policy

Drivers "Plug-in" to KEPServerEX

The Beckhoff TwinCAT OPC Server is a plug-in device driver for KEPServerEX. A "Plug-in" is a software program (.dll) that extends the capabilities of KEPServerEX to fit the communication requirements of a specific device or system. The plug-in driver handles all of the proprietary communications between the device/system and the OPC layer, KEPServerEX. The KEPServerEX core then handles all OPC and Proprietary Client communications between the plug-in driver and the Client application. For a complete list of features and capabilities please visit the KEPServerEX overview page.

- OPC Foundation Certified - The Best of OPC on the Market
- High Performance - Multi Threaded - Runtime Configurable
- Detailed Protocol Diagnostics - Communications Trace
- Detailed OPC Diagnostics - Communications Trace
- Native Interfaces - Client Connectivity Beyond the OPC Standards
- Stratus High Availability Computing - Certified
- Marathon High Availability Computing - Certified
- Kepware 2 Hour Demonstration Mode on all Products