INDUSTRIAL AUTOMATION SOFTWARE

progea

Connext©

OPC UA Server & Historian

Connectivity, Gateway IIoT & Historian

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The OPC UA solution for every industrial connectivity, gateway and IIoT need

The Connext OPC UA Server software is an industrial communication server that allows instant communication with a large number of field devices to perform Data Server, Gateway, IIoT and Historian functions.

Progea's vast experience and know-how in industrial communication protocols and the OPC UA technology have resulted in offering their latest Connext Communication Server, OPC UA Server software. This software is based on the renouned Automation Platform.NExT architecture, a new generation industrial platform that offers the one all-inclusive data source for all your application needs. The Connext OPC UA Server has been designed to provide companies with seamless and effortless connectivity towards different types of field devices in the automation, infrastructure and process control sectors. The Server offers a large number of communication protocols and is easy to configure to manage connectivity and data collection systems that are capable of connecting to any enterprise-wide system using the OPC UA technology standards. The Server empowers you with the best connectivity technology to create Industry 4.0-ready solutions effortlessly and safely collect and publish data on the Cloud, manage business information flows towards ERP/MES business managerial systems, or simply connect field devices to software applications.

Indispensable for Industry 4.0 and IIoT

Connectivity between the different automation systems, remote production sites, production levels and IT levels, field systems and the Cloud is essential to any modern business that needs to increase their efficiency and competitiveness.

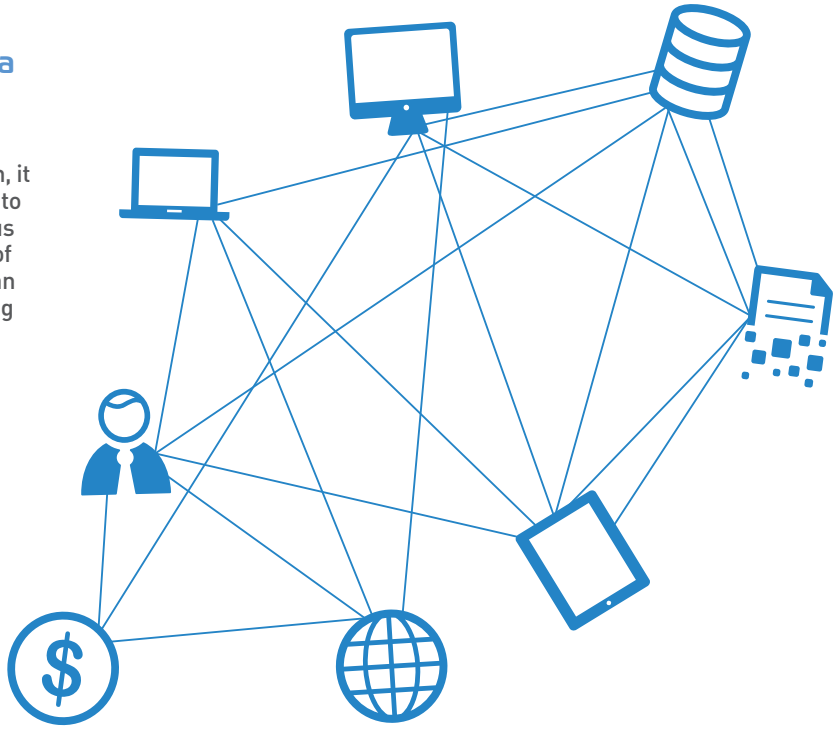
Connext is an open and flexible technology that meets the challenges of today's world. Business organizations are more than ever obliged to digitalize due to the ever-increasing demand to obtain all real-time data to improve efficiency aided by data analysis and machine to machine (M2M) communications. Connext is the ideal solution that empowers companies to meet these challenges and improve efficiency. It has been designed to connect to all field systems, handle real-time information and sort them through to other systems, transmit them to monitoring and control systems or business managerial systems to then be recorded and stored on a database or in the Cloud.

Information collection center and gateway to all business managerial systems.

Connext is a flexible and modular solution based on the OPC UA technology, the international IEC 62541 standard in industrial communication. It takes on the role of a data engine, a real-time information collection center serving any other business information system such as SCADA, HMI, MES and ERP or a gateway between field information and other local or remote systems.

Industrial Internet of Things (IIoT) for machine connectivity and collecting data to the Cloud.

Connext provides a large number of communication protocols that can connect to all field devices. In addition, it also provides IIoT protocols that can be specifically used to efficiently manage gateway solutions between the various field devices and Cloud solutions based on the 'Internet of Things'. Thanks to these technologies, data collection can now become solutions open to Cloud applications needing to obtain field information from wherever it may be.



Historian and Data Loggers make Connext much more than just a simple OPC UA Server

Connext offers powerful data recording tools that record and archive all collected data on a Relational Database or in the Cloud.

Connext not only means connectivity. In addition to publishing all data connected to field devices in the OPC UA address space, the Server also offers the option to record the collected data directly on a Database or in the Cloud by using the integrated Historian and Data Logger functions. Users can either opt to use the Historian which offers a time-series data recording model, or the Data Logger which offers the classic model of recording data on tables containing columns. Each table column represents a variable and each record represents a recording. Both functions use the most modern technology to interface with the most popular Relational Databases, such as SQL Server, My SQL and Oracle, or Cloud using SQL Azure. Maximum security is also ensured with the option to use Archive Redundancy for mission critical and fault tolerant applications.

Big Data, IIoT and Cloud: The challenge of the future.

Modern business organizations are fully aware of the importance to have all real-time information available. Connectivity is therefore a key feature of every organization's strategy plan to improve its competitiveness within a now globalized economy. This is where Connext steps in. It has been designed to satisfy all the requirements of those companies who are looking for future-proof data collection solutions. It is an OPC UA standard-oriented solution that serves as a gateway to the Internet of Things to collect and handle data, including Big Data, within a Cloud-base context.

OPC UA Specification and Certification

Connext is a certified OPC Foundation I/O server offering the best guarantee in terms of OPC technology and communication model operativity. The Server not only supports the Data Access (DA) specification to exchange data, it also supports the Alarm & Conditions (AC) specification to manage alarm notifications for OPC UA Clients. In addition to the Historian functions, it also supports the Historical Access (HA) specification to allow OPC UA Clients access to Historical data.
The Connext Server is a powerful, all-inclusive, modular and flexible I/O Server engine.

Key Features

OPC UA Server Certification
The Connext Server is certified by the OPC Foundation and supports the Data Access, Alarm & Conditions and Historical Access specifications.
Connext also supports connectivity as OPC UA Client.

Tag Import
Each Connext communication protocol supports automatic tag importation from the field or PLC for smoother and faster communication configuring.

Gateway
Simultaneous execution of different communication protocols. Each Server Tag, in a MultiDriver configuration, can be connected simultaneously to communication protocols of any type.

Historian and Data Loggers
The Connext Server offers the Historian as an option to record data on relational database (default SQL Server) or in the Cloud (SQL Azure).

Alarms & Conditions
Alarms can be configured in Connext Server to manage specific Alarms & Conditions in OPC UA Clients when needed.

IIoT
The Connext Server offers IIoT protocols to create network connectivity solutions.

Redundancy
The Connext Server fully supports the Redundancy (Hot Backup) function.

SDK C#
Maximum openness: The Connext Server offers a SDK to allow .NET developers to integrate their own custom protocols in Connext's suite of protocols.

Scalable License
Scalable Licensing model to ensure cost effectiveness. License sizes refer to the number of Tags (Variables) needed. Tags count for any type of variable connected to the field: bit, byte, word, float and double/long 64bit including those defined as structure or array members. Byte and word variables, for example, can be pointed to single bits. (Note: Each member in Structure and Array type variables count as one Tag).

Communication Protocols
Each OPC UA Connext Server offers a suite of communication protocols. Users can activate them one at a time or several at a time when using the Multidriver option.

Automation
- Modbus RTU
- Modbus TCP Master or Slave
- Siemens S7 TCP
- Siemens S7-MPI, PPI
- Siemens TIA PORTAL
- Allen Bradley Rockwell Ethernet/IP
- Omron FINS Ethernet
- Omron Ethernet IP
- Profibus DP
- ProfiNET
- Mitsubishi FX Series
- Mitsubishi FX3U TCP
- Panasonic FP MEWTOCOL
- SAIA-Burgess
- Beckhoff TwinCAT
- GE Ethernet

Telemetry
- IEC 60870-5-104
- IEC 61850 (coming up)
- Lacroix-Sofrel LACBUS

Facilities
- BacNET/IP
- Konnex – EIB
- SNMP Manager (as Agent)

IIoT
- PubNub
- OPC UA Azure IoT
- MQTT

More drivers are being prepared.

Visit our website at www.progea.com for update

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