OPC is the interoperability standard for secure and reliable data exchange in the industrial automation sector and in other industries. It ensures the seamless flow of information among devices from multiple vendors.

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Based on more than 20 years of experience, Softing is the OPC partner of your choice. It offers a complete set of OPC UA and OPC Classic development tools and end user products. These provide a comprehensive set of functionality for implementing state-of-the-art data exchange solutions addressing all individual connectivity issues.

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OPC UA and OPC Classic Development Toolkits

Fast Development of OPC Servers and Clients

Softing’s OPC Development Toolkits enable the fast integration of OPC UA or OPC Classic connectivity capabilities in automation applications. The toolkits are built by a comprehensive set of libraries featuring a simple and well-documented programming interface. Relevant example applications as well as test and simulation tools allow for a short time-to-market of OPC enabled products.

Complete Solution Addressing All Customer Requirements

- Comprehensive set of building blocks offering encapsulation and easy-to-use functionality required for implementing OPC UA Clients and Servers
- Modular design to scale OPC UA functionality according to actual requirements
- Wide range of available functionality, including Extended Security, Data Access, Complex Data, Events, Alarms & Conditions and Historical Access
- Integrated security concepts allowing safe remote data transfer actively addressing modern security threats
- Applicable for time-critical control tasks as well as for complex automation projects
- OPC UA Servers and Clients capable to move data and information between factory floor and enterprise level

Comprehensive Scope of Delivery for Easy and Fast Development

- Optimized Application Programming Interface (API) and easy to understand documentation
- Complimentary how-to example applications, step by step tutorials, complex test and simulation clients and servers for a lean getting started with OPC UA development

Investment Security Through Innovative License Model

- Implementation according latest OPC UA Client respectively OPC UA Server specifications
- Free migration to upcoming OPC UA Development Toolkit versions thanks to toolkit software and 3 years’ right to updates to future versions
- Technology proven by use in Softing’s OPC Server and middleware products
OPC UA and OPC Classic Servers, OPC Middleware

All-In-One Software Solution for OPC Communication

The dataFEED OPC Suite offers a full package of components for OPC communication within a single product. It enables access to the controllers of leading manufacturers. Additional functionality eliminates DCOM problems of OPC Classic and improves the communication between the PLCs, OPC Servers and OPC Clients, independent of the use of OPC UA or OPC Classic.

Easy and Independent Access to Controllers
- Read and write access to data in PLCs of leading manufacturers
- No changes to control program required
- Easy integration of legacy and new controllers into "Industrie 4.0" solutions
- Integration of non-OPC UA-ready components like Siemens S5 controllers into OPC UA applications
- Cost savings through continued use of existing OPC Classic components
- Gateway functionality for connecting controllers and components with integrated OPC UA Server to OPC Classic applications

Comprehensive Processing System
- Wizards for fast and easy setup of database connections
- Storage of OPC Server data and local data in databases via SQL statements
- Features for performing required proof and analysis tasks
- Suitability for use in process optimization

No Need for DCOM Configuration
- Easy industrial communication by avoiding DCOM and its complex security settings
- Time-saving configuration of OPC Classic communication across networks
- Minimum requirements on configuration of PCs used in network
- Compliance with corporate computer and network security policies, e.g. firewall settings

Easy Configuration
- State-of-the-art, intuitive graphical user interface for rapid configuration of OPC communication
- Use of intelligent, practice-oriented defaults, setup wizards and drag-and-drop support
- Time savings through effective and efficient configuration of distributed automation systems comprising a large number of OPC Servers
**OPC UA Gateways**

**Embedded OPC UA Server Gateway for Siemens and Modbus PLCs**

Softing’s OPC UA gateway portfolio offers everything needed to make existing and new systems ready for “Industrie 4.0”. It provides OPC UA Server functionality enabling easy and secure data connection to higher-level management systems such as ERP, MES or SCADA systems. The OPC UA gateways are compact, sustainable and at the same time industry proven many times over.

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**edgeGate** – Reliable Connectivity of Siemens an Modbus PLCs to IoT Hubs from Different Cloud Vendors

- Bidirectional data exchange between controllers and Microsoft Azure connected factory
- Chance for analytics, storage, computing applications in cloud solutions from different vendors, e.g. Amazon AWS, IBM Bluemix, Microsoft Azure
- Generic MQTT Publisher and OPC UA Server functionality for connecting industrial networks to IT applications running on-premise or in cloud
- OPC UA technology supporting easy local and global networking as well as routing through firewalls
- Usage of high security standards for protecting transferred data
- Suited to new applications such as IoT or analytics functionality while dedicated to retrofit upgrades

**uaGate SI** – Gateway for OPC UA and MQTT Communication Upgrade of Siemens Retrofit Plants

- Integration of modern OPC UA communication functionality
- Easy integration with Siemens PLCs
- Access to SIMATIC S7-300, S7-400, S7-1200 and S7-1500 controllers
- Direct symbol import from SIMATIC STEP 7 and TIA Portal projects
- Usage of high security standards for protecting transferred data

**uaGate MB** – Gateway for OPC UA and MQTT Communication Upgrade of Modbus TCP Plants

- Integration of modern OPC UA communication functionality
- Access to Modbus controllers, e.g. from Schneider Electric, Wago, Beckhoff, Phoenix Contact, etc.
- Symbol import of controller data using web interface
- Usage of high security standards for protecting transferred data
**Education and Additional Services**

**OPC Training and Consultancy, Lead by Experience**

Softing offers a complete bundle of services, ensuring the successful entry to OPC technology. These include offerings fitting to the specific needs of manufacturers of OPC products, software developers or users of OPC technology. All services are driven by Softing’s rich OPC experience and are technically sound, practical and targeted to the participants’ requirements.

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**OPC Development Training and OPC Consultancy**
- Custom-specific developer-to-developer consultancy on design, development, optimizing and testing of customer-specific OPC enabled products based on Softing OPC Development Toolkits
- Available for both OPC UA and OPC Classic technologies
- Access to top-level experience on selecting suitable OPC specification, optimal architectural options and tools for implementation
- Porting of OPC Client or Server Development Toolkit to customer-specific operating systems and hardware platforms

**OPC Development Services**
- Project-based development of tailor-made OPC solutions according to specific customer requirements
- Consultancy for pre-certification and certification support

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**OPC User Training and OPC UA Technology Jump Start**
- Efficient OPC UA jump start for decision makers, technical leaders, and product managers
- Compact but well-founded introduction into OPC UA
- Evaluating the relevance of new OPC UA technology
- Support of decision about right time and approach to start OPC UA development

**OPC Book**
- From OPC Data Access to OPC UA
- Overview of fundamentals, implementation and application of standardized data exchange via OPC
- Key focus on OPC UA
- Discussion of tools and demo programs
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