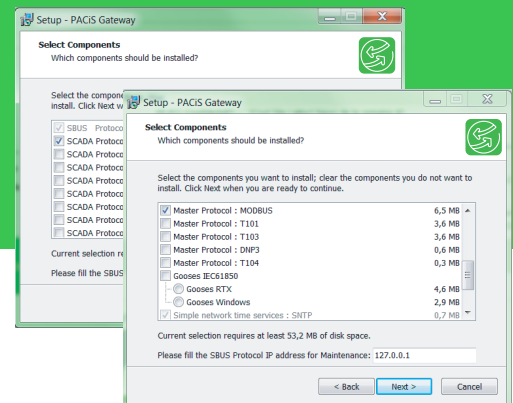


Gateway software for EcoStruxure™ Substation Operation

Communication front-end software
for digital substations



Product at a glance

The Gateway software (formerly PACIS Gateway) is a IEC61850 based solution to respond to the demanding communications needs of electrical utilities and electro-intensive industrial substations.

- IEC 61850 compliant
- Support deployment of cyber secure systems
- Scalable and interoperable
- High level of availability
- Smarter networks powered by IEC 61131-3 automation engine

The Gateway software is a new generation of application dedicated to the substation front- end communication of EcoStruxure Substation Operation.

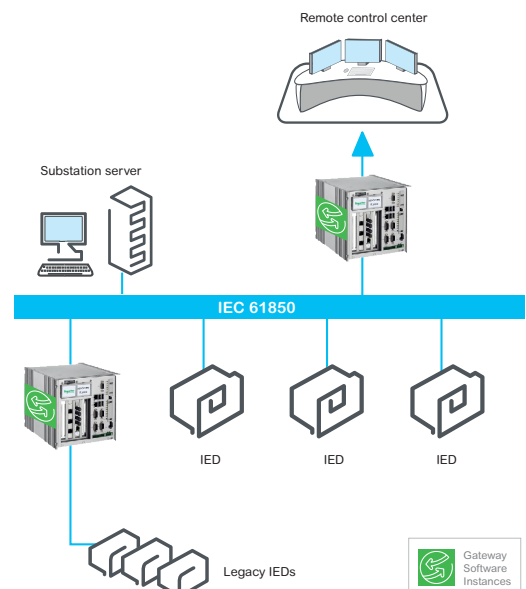
This software can operate on industrial PCs. In such applications, it allows the connection of bay IEDs to remote monitoring and control systems.

The Gateway software includes a powerful protocol converter capability which makes it an excellent fit for versatile solutions.

Full compliance with IEC 61850 standard

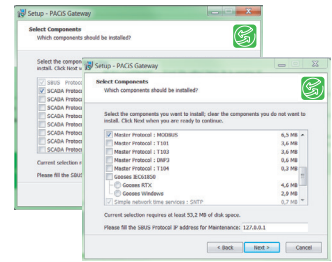
The Gateway software is a certified IEC61850 solution to interface compliant IEDs.

The Gateway software may be delivered with its IEC 61850 engineering tool suite.



Gateway software

Description



Scalable and interoperable

The Gateway software allows users to configure a large range of communication channels to enable scalable connectivity of the various networks of the plant.

In data concentrator applications, the Gateway software permits the management of TCP/IP or serial slave devices connected in a downstream communication link.

The interoperability operated by various protocols contributes to facilitate solution deployment, upgrade or extension.

High level of availability

The Gateway software redundancy option provides an ideal option to significantly increase the full system availability.

A consolidation mechanism, called network split, allows the continuity of data polling in cases of communication disconnection along the IED daisy chain between the two redundant gateways.

Smarter networks powered by IEC 61131-3 automation engine

The Gateway software is designed to process real-time automation tasks based on IEC 61131-3 standard language. This allows execution of distributed automation over collaborative networks, a significant step towards smarter grids.

Technical data

Supported protocols

Master/Client protocols:

- IEC 61850 Client (Ed. 1 & Ed. 2)
- IEC 60870-5-101/104
- IEC 60870-5-103
- Modbus RTU and TCP/ IP
- DNP3 over IP

Slave/Server protocols:

- IEC 61850 Server (Ed. 1 & Ed. 2)
- IEC 60870-5-101/104
- Modbus RTU and TCP/ IP
- DNP3 serial and over IP,
- OPC DA2

Communication capability

- 2 x IEC61850 station bus – full proxy function between LANS
- Up to 6 simultaneous active remote control-centre links
- Up to 16 simultaneous active fieldbus links
- Up to 500 fieldbus IEDs

Cyber Security

- Role-Based Access Control (RBAC)
- Security logs management
- Whitelisting to help to prevent from malware
- Hardening for OS and unused resources

Other software features

- G980-HELPS : embedded fieldbus IED simulator software
- Gateway device redundancy
- Network split management for master Modbus RTU
- Automation based on IEC 61131-3

Associated hardware

Industrial fanless PC

- Magelis PCBOX
- MiCOM A300
- MiCOM G950 (IEC 61850-3 certified)

Industrial workstation PC

- IPC-A500 range

Ethernet board, for PCs:

- MiCOM H182 for IEC 62439-3 HSR/PRP
- MiCOM H172 for RSTP protocol

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