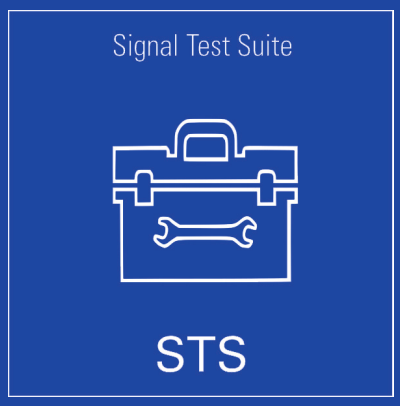


Native Client

The H&S Native Client represents a highly compatible IEC 61850 client that interacts seamlessly with all standard-compliant IEC 61850 servers. In addition to the comprehensive execution of all services defined in IEC 61850-7, the Native Client is characterized by a wide range of convenient functions that enable your technical staff to work efficiently with this tool. Smooth handling of all testing and inspection tasks is ensured by importing all necessary connection parameters via an SCL file, automated download of the data model from a connected IEC 61850 server, and periodic monitoring of any data points. A clear display of all controllable data points allows the user to trigger the corresponding switching commands in a targeted manner. The views of the H&S Native Client are specially optimized for everyday use, but can also be customized to the user's preferences as needed.

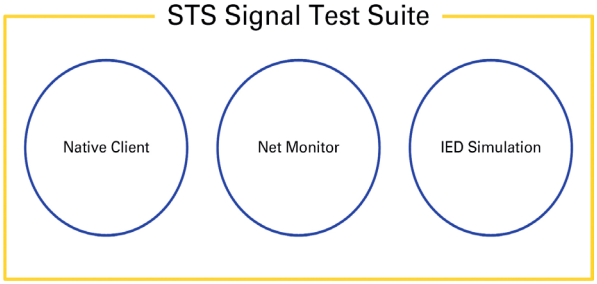
This makes the H&S Native Client a versatile tool ideal for testing and troubleshooting, the initial operation of substations and hardware development in accordance with the IEC 61850 standard.

H&S technologie

STS – SIGNAL TEST SUITE

Multifunctional diagnostic and control tool for use in substations

The Signal Test Suite (STS) is a versatile diagnostic and control tool designed specifically for use in substations or for factory acceptance tests (FAT) and site acceptance tests (SAT) of IEC 61850/IEC 60870 components. This suite cleverly combines several H&S components to cover all the required areas. The individual tools within the suite are closely linked to enable seamless and efficient work. The NetMonitor is the centerpiece of the STS. In addition to classic network sniffing, it also displays the commands executed by the Native Client integrated in the STS. This provides a chronological cause-and-effect overview. The integrated IED simulation usefully rounds off the comprehensiveness of the testing process.



NETMONITOR

The NetMonitor is a robust network sniffing tool designed specifically for analyzing IEC 61850 and IEC 60870 network traffic. When connected to a mirror port of the communication network, the NetMonitor enables the reading and clear display of IEC 61850 MMS, GOOSE and IEC 60870 telegrams, with filtering possible as required. By loading an SCL file, the NetMonitor can interpret the received signals so that the user is shown the plaintext names defined in the file. This makes it easy to interpret the communication process and, if necessary, to quickly diagnose errors. The NetMonitor is therefore an indispensable tool for analyzing and monitoring network traffic in the context of IEC 61850 and IEC 60870.

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STS – SIGNAL TEST SUITE

IED SIMULATION

The H&S IED simulation, as a simulation of communication servers at the IEC 61850 interface, supports the testing of systems and components in control and instrumentation systems. This makes it possible to create and simulate control applications according to individual specifications using the leading manufacturer-independent IEC 61131-3 automation software. A specially developed, standard-compliant communication stack is used for communication according to IEC 61850-8-1. If required, complex applications can also be simulated by connecting to Codesys Connect. The IED simulation enables software-based simulation of one or more IEDs (Intelligent Electronic Devices) of a control system at the communication interface. This opens up a wide range of applications for system and component testing. In combination with the H&S Configuration Validation Tool (CVT), the IED simulation offers additional application possibilities, such as testing gateway components.

