Salzburg/Austria, July 14, 2016

CIGRE Session 2016, Level 1, Booth 140:

Software for Smarter Grids

COPA-DATA, the internationally active software manufacturer of the zenon software, is presenting its newest solutions for substation automation and substation HMI at the CIGRE Session in Paris, from August 21-26, 2016. Expert Partner, JS automation and COPA-DATA will jointly demonstrate the numerous possibilities of the software system for developing individual and ergonomic solutions within modern Smart Grids.

The CIGRE Session 2016 is again bringing experts from the energy industry together in Paris, with participants coming in from over 90 countries. COPA-DATA has been offering its HMI/SCADA software in this environment for many years and is continually bringing new innovative concepts for improved overview, safety and ergonomics in power plant and substation monitoring. The in-house designed drivers guarantee adherence to international standards such as IEC 61850 Edition 2, IEC 61400-25, IEC 60870 and DNP3. Hereby the strengths of zenon lie not only in the communication at field level via GOOSE, but also in the area of higher-level systems. Practical wizards simplify the IEC 61850-based engineering thanks to automatic import of SCD or SSD files for example. At booth 140 on the first exhibition level COPA-DATA and JS automation experts will introduce new highlights on the subject of “Automated Engineering” and the newest “Command Sequencer” zenon module for configuring complex command sequences even without PLC programming.

Command Sequencer

The [Command Sequencer](https://www.copadata.com/en/process-control-system/command-sequencer/energy-infrastructure-2/) is a new zenon module that can be used to configure, test and execute command sequences. The command sequences for the automation of substations are configured in an editor with excellent usability. The individual commands of a command sequence, also known as steps, are simply lined up together graphically. Testing is possible in a simulated environment and changes can be made directly. PLC programming is not necessary. This ensures accuracy, efficiency and flexibility. Complex command sequences can be configured with the Command Sequencer: Parallel branches for simultaneous use of switching commands, alternative branches for transitions (e.g. testing interlockings) or changing two-stage into one-stage commands in order to avoid unwanted stops. “A highlight is clearly the Teaching function of our Command Sequencer. Here, the system learns the command sequence while the user carries out the individual steps in simulation mode, in the usual single-line diagram. The command sequence editor records the actions and turns them into a sequence of commands. This can be tested and then used immediately”, explains Jürgen Resch, Industry Manager Energy at COPA-DATA.

Automated engineering with zenon

Integration in an existing configuration tool belonging to a manufacturer is carried out quickly by zenon, thanks to the extensive API (Application Programming Interface). As a result, project planning with zenon is simplified as it can adjust itself into the known configuration environment of the HMI engineering. The wizards in the zenon Energy Edition for the IEC 61850-based SSD and SCD import also offer increased [automated engineering](https://www.youtube.com/watch?v=6PLq9QoeX2c&list=PL7uTF2-62qoQ6bFfGNSScvwrxgse_A4sq).

The SCD import (System Configuration Description) reads the SCD file and creates communication configuration using the displayed data model of a substation therein. The report control blocks can be assigned to the various hosts per drag&drop. The variables can be imported due to the linked dataset information. As a result, a complete driver configuration with variable lists is created in no time, establishing direct communication with an SCD template to the devices.

The [SSD Import Wizard](https://www.youtube.com/watch?v=LCYwyFBCbZo&index=8&list=PL7uTF2-62qoQ6bFfGNSScvwrxgse_A4sq) (System Specification Description) in zenon automatically creates a precise, functioning single-line diagram from an SSD file. The generated graphic including the linked variables can be configured at anytime later in the zenon Editor.

HMI talks GOOSE

GOOSE messages (Generic Object Oriented Substation Events) distribute status information within IEC 61850 environments. All connected devices receive this information and may use it to complete specific tasks (e.g. interlocking). HMI applications running with zenon can listen in corresponding status messages via GOOSE. Using GOOSE supervision, zenon monitors time intervals between sent messages and checks if they are complete. The HMI thereby becomes the monitoring application for GOOSE communication. If necessary, zenon can go a step further. If, for example, a device that communicates via GOOSE were to malfunction, the zenon HMI would step in and manually transmit entered values to the remaining devices. This GOOSE substitution thereby serves to continue all tasks until the faulty device is replaced. Apart from the GOOSE protocol zenon includes a further 300 communication protocols as standard.

Caption

*Juergen\_Resch\_portrait.jpg: “At CIGRE Session 2016 we`re looking forward to the opportunity of presenting our smart software solutions for modern engineering in the energy industry.”*

Command-Sequencer\_zenon\_COPA-DATA.jpg: The Command Sequencer in zenon configures, tests and controls complex command sequences – entirely without PLC programming.

On COPA-DATA

COPA-DATA is the technological leader for ergonomic and highly dynamic process solutions. The company, founded in 1987, develops the software zenon for HMI/SCADA, Dynamic Production Reporting and integrated PLC systems at its headquarters in Austria. zenon is sold through its own offices in Europe, North America and Asia, as well as partners and distributors throughout the world. Customers benefit from local contact persons and local support thanks to a decentralized corporate structure. As an independent company, COPA-DATA can act quickly and flexibly, continues to set new standards in functionality and ease of use and leads the market trends. Over 100,000 installed systems in more than 90 countries provide companies in the Food & Beverage, Energy & Infrastructure, Automotive and Pharmaceutical sectors with new scope for efficient automation.

On zenon

zenon is COPA-DATA`s highly versatile product family for industry-specific ergonomic process solutions: from sensors through to ERP. It consists of zenon Analyzer, zenon Supervisor, zenon Operator and zenon Logic. zenon Analyzer provides templates to create tailor-made reports (e.g. on consumption, downtimes, KPIs) based on data from IT and automation. zenon Supervisor, an independent SCADA system, allows comprehensive process monitoring and control of redundant systems, even in complex networks and with secure remote access. zenon Operator guarantees, as an HMI system, safe control of machines and simple, intuitive operation – including Multi-Touch. zenon Logic, which is an integrated IEC 61131-3-based PLC system, allows optimum process control and logical data processing. As a platform-independent portfolio for process solutions, the zenon Product Family integrates smoothly into existing automation and IT environments and provides set-up wizards and templates to enable easy configuration and simple migration from other systems. The principle of "setting parameters instead of programming" is a characteristic feature of the zenon Product Family.

[www.copadata.com](http://www.copadata.com)

