

Scalable and future-proof with zenon

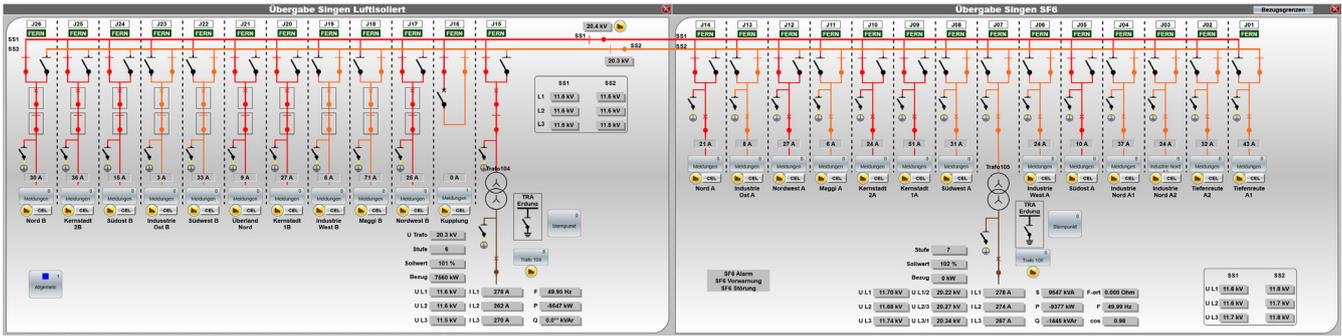
Thüga Energienetze migrates to new distribution management system

The network operator Thüga Energienetze GmbH has converted its distribution management system from SICAM® 230 to zenon from COPA-DATA. The scalable, easily expandable platform is future-proof and ideally suits the business model of the company, which also offers services related to its distribution management system to its customers.



Thüga Energienetze GmbH, headquartered in Schifferstadt, Germany, operates electricity, water, heat and natural gas grids in southern Germany as a partner to municipalities, municipal utilities, private households and industry and trade. The company supplies more than 120 municipalities in Baden-Württemberg, Bavaria and Rhineland-Palatinate with natural gas and electricity in a reliable and environmentally friendly manner. Special challenges include contemporary trends such as digitalization, renewables and electromobility, as well as the large-scale expansion of infrastructure.

In addition, Thüga Energienetze offers complete services from a single source for municipalities, commerce, the energy industry and private customers – including certified fault management across the 24-hour distribution management system; network monitoring; network and operational management; the hosting of control system platforms; and installation, commissioning and maintenance of communications and distribution management technology.



Power transfer station for the city of Singen and surrounding districts

UPGRADE TO A FUTURE-PROOF SOLUTION

With the SICAM® 230 process control system Thüga Energienetze GmbH used formerly, the company was no longer able to offer its customers a future-proof solution. No energy industry-specific enhancements had been developed for the product in recent years. „SICAM 230 product support will be phased out over the next few years. We didn’t want this to impact our customers,“ says Heiko Bölli, head of Network Services for Secondary Technology at Thüga Energienetze, describing the problem.

The company therefore decided to switch to zenon Energy Edition from COPA-DATA, the core system of SICAM® 230. The integrated software platform is characterized by its high flexibility. Thanks to its multi-hierarchical project structure, modular design and numerous interfaces to various products, it can be expanded quickly, and functions can easily be removed or added as required. This is an essential requirement, since Thüga Energienetze not only uses the distribution management system for its own operations, but it also offers it as a solution to customers – for example, in the form of network monitoring services. „With the highly scalable zenon software platform, we can parameterize and do not have to program anything. It fits in much better with our business model than any other product available on the market,“ summarizes Bölli.

DEALING DIRECTLY WITH THE SOFTWARE MANUFACTURER

Thüga Energienetze GmbH virtualized its entire server landscape several years ago in order to simplify the backup and recovery processes of individual process control servers.

This offers another benefit as zenon version updates can be performed easily and without risk. Bölli states: „The server on which our control system runs is located at the end customer’s site; we only map the redundancies. This means that if the connection to the distribution management system fails, the customer can still take care of everything related to the grid themselves.“

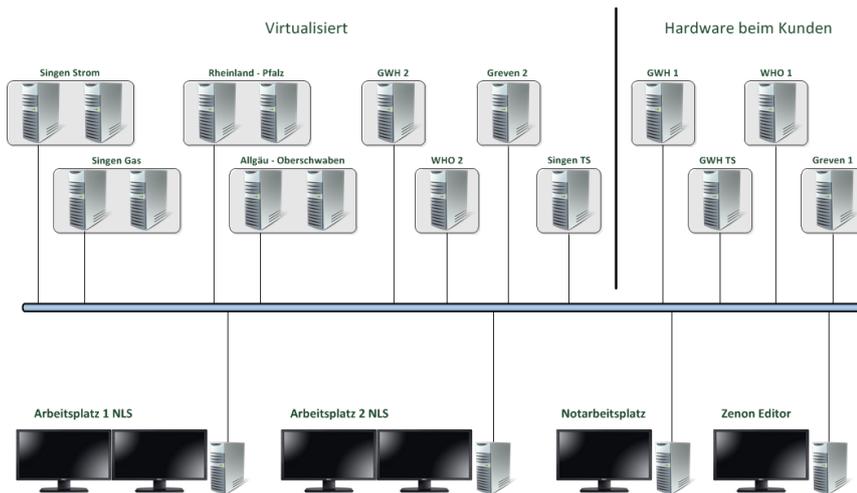
zenon is not only innovative, but also sustainable and future-proof: „As a consequence of our switching to work directly with the software manufacturer, our customers don’t have to worry that SICAM® will be discontinued at some point,“ explains Bölli.

FAST AND EFFICIENT MIGRATION

Since both systems are based on the same product, the changeover went smoothly and quickly. After the first stage of the migration, one workstation was equipped with zenon, while the other continued to run the old system. Before long, Thüga Energienetze switched entirely to zenon. In total, the migration took just five months. „The total of around 40,000 variables could be migrated almost one to one. A complete data point test was not necessary; the temporary parallel operation was sufficient for system comparison – and provided enormous time and cost savings,“ says Bölli.

COMPREHENSIVE SUPPORT THROUGH COPA-DATA

An orientation phase was also unnecessary. „We have known zenon since 1999 – that is, as long as we’ve used SICAM® 230. The source code for both systems comes from COPA-DATA; only the add-ons were developed for SICAM® 230,“ explains Bölli.



zenon System Overview – Choose either complete virtualization or the option of setting up a master server at the customer site with a standby server at Thüga Energienetze GmbH.

Some of these features – such as topology or screen alarming – had to be reconfigured during migration. „That was the only challenge. But since COPA-DATA has always supported us with fast solutions, the migration went absolutely smoothly. Our contacts at COPA-DATA were available around the clock.“

Thüga Energienetze is already in talks with potential migration customers. Regular consultations are essential, emphasizes Bölli. „The energy market is subject to constant change. The requirements are always changing, and this means the software must be adaptable too. With COPA-DATA, we have a professional and reliable partner by our side.“

HIGHLIGHTS:

- ▶ Multi-hierarchical project structure
- ▶ Flexibly expandable solution with numerous interfaces
- ▶ No programming required and high scalability
- ▶ Sustainable, future-proof solution
- ▶ Fast, easy backups and updates
- ▶ Direct support contact with manufacturer
- ▶ Fast, smooth migration of some 40,000 variables
- ▶ No data point test required
- ▶ Comprehensive support through COPA-DATA