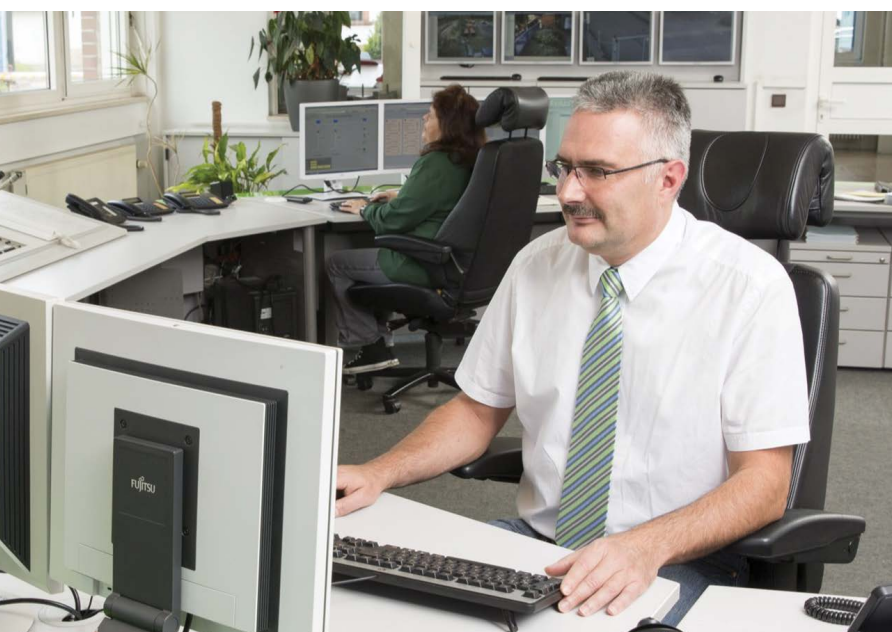


CASE STUDY

MicroSCADA Pro, managing more than just power in the multi-utility Stadtwerke Kaiserslautern.



An upgrade to the latest version of MicroSCADA Pro offered an opportunity for the customer multiutility Stadtwerke Kaiserslautern to design a completely new user interface, based around their unique combination of services.

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01 Stadtwerke
Kaiserslautern

Stadtwerke Kaiserslautern provides electricity, gas, water and district heating. The company started in 1858 delivering gas, adding electricity 1894, water and district heat.

Customer requirements

Stadtwerke Kaiserslautern initially installed MicroSCADA Pro at the end of last century, to mitigate any potential issues around the centennial date change – the so-called Y2K bug. Since then the company has expanded the utilities on offer, and extended the distribution network, prompting the decision to upgrade the software. When the utility initially decided the time had come to upgrade their SCADA software to the latest version of ABB’s MicroSCADA Pro, their key requirement was the ability to create a customer specific man-machine interface, designing custom icons and visualizations of the network.

As Stadtwerke Kaiserslautern is operating as a multi-utility company it means that the system needs to be able to support multiple protocols that connects all the diverse equipment. For this installation ABB had to use a mix of communication protocols and interfaces as well as narrowband radio modems for locations beyond the reach of wires and fibers.

ABB Solution

Stadtwerke Kaiserslautern is an old customer of ABB, having used MicroSCADA Pro for more than a decade. Customer’s expansion to new utilities required to provide them with an interoperable system and long-term support to ensure the support for customer’s evolving systems also in the future. The decision to upgrade MicroSCADA Pro was carefully taken, and the result of its scalability and adaptability.

ABB's MicroSCADA Pro allowed Stadtwerke Kaiserslautern to create its own user experience; from process flow to icon design, creating a custom installation integrated with protection equipment from ABB's Relion® series, Remote Terminal Units (RTU) and FOX communication products. ABB provided only the software platform, and suitable support for Stadtwerke Kaiserslautern's own engineers who created the customized user experience. The software now controls hundreds of devices managing the new heating-delivery services, along with hundreds of secondary substations many of which have also benefited from migration to ABB's RTU500 series bringing the benefit of improved cyber security, support for Ethernet protocols, and better fault diagnosis.

The service agreement ABB has signed with Stadtwerke Kaiserslautern not only ensures that spare parts are always available, but that skilled engineers are always available to fit them, and maintain the rest of the system as necessary.

Customer benefits

Integrating multiple utilities into a single user experience isn't something every ABB customer needs to do, but for Stadtwerke Kaiserslautern it provides an instant view to

earth faults and short-circuits monitoring, with alarms overlaid onto a map of the entire medium-voltage grid. So faults can be immediately identified, and quickly remedied. Integrating multiple services, electricity, gas, and district heating, into a single interface, is essential for a utility delivering such a range of services, and something MicroSCADA Pro's flexibility provides.

The use of MicroSCADA Pro simplifies the management of a complex multi-utility as it enables the integration of the different utilities into a single control interface. For example the delivery of heated water to homes adds another level of complexity to the Stadtwerke Kaiserslautern system, but is a very efficient way to supply both heating and hot water within a district. The extension of that service into the nearby US Military Community (home to more than 50,000 Americans) has further increased the efficiency, which gains from scale, but leaves Stadtwerke Kaiserslautern with hundreds of controlling devices to manage. MicroSCADA Pro can deliver such flexibility and utility. Stadtwerke might have installed the software to avoid the millennium bug, but a decade and a half later the software continues to expand and extend, just like the customers using this integrated device.

Contact your local service and sales support team to discuss your requirements further.

For further information visit:
www.abb.com/microscadapro

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