



## Web-Visualization

## HMI & SCADA

### The 5-star SCADA!

With its SCADA products, SpiderControl™ brings a quantum leap in design and operation. Keywords such as „Mechatronic Units“, „Ubiquitous Computing“, „Automated Engineering“ or „Industry 4.0“ are transformed into functionality by SpiderControl™.

### The SpiderControl™ solutions offer enormous advantages:

- Productivity boost in engineering
- Lower engineering effort because only one tool needs to be used
- The import of the Web-Visu as well as the trend and alarm logs from the PLC simplifies SCADA configuration
- Also available on cost-effective platforms, such as RaspberryPi, Android, embedded Linux, etc.

# PLAIN AND SIMPLE CODE WITH YOUR APP OR BROWSER

## The SpiderControl™ control system: SCADA with more efficiency

### How can visualization become more efficient?

1. In Engineering: If you never have to do a job twice.
2. In hardware costs: If the software can run anywhere.

### How is this achieved?

- The innovative SpiderControl™ can be used for both the programming of a HMI on a PLC as well as for a SCADA system. This increases productivity considerably: One tool masters everything, from the smallest display to the control system!
- The SpiderControl™ SCADA Server is available on most operating systems. Powerful solutions can be implemented on standard Windows PCs. On low-cost embedded systems, e.g. Raspberry Pi, embedded Linux, Android or Windows CE / WEC, SpiderControl™ works as a small SCADA system. Like this, both edge computing platforms but also modern Linux-based PLCs can be used as a SCADA platform. And SpiderControl™ runs in the popular cloud platforms, too. This makes no difference for the SCADA project's configuration.
- SpiderControl™ allows the development of customer-specific macros, which allow a much more efficient configuration. HMI controls are no longer linked to data points, but macros are linked to objects. The macro sets a filter to browse the matching objects.
- A web-based automation infrastructure should be able to exchange data with other web servers and be programmed via a browser. SpiderControl™ has http-based protocols for the networking of different SCADA servers as well as for connecting SQL databases via Apache and PHP scripts. The Web-HMI editor which is integrated into each SCADA server allows the design of simple HMI pages directly with the browser.
- Until now, drivers were compatible on a binary level. In the future it is about semantic compatibility. SpiderControl™ can read and use components such as HMI or configurations from the PLC.

## Web-Visu Import: Read from the controller

The SpiderControl™ SCADA HMI Editor is able to read and convert web visualizations directly from the controller. The user only needs to specify the URL of the corresponding HMI project on the PLC, and the tool automatically imports the entire project, which is displayed as thumbnails. From this selection, whole pages can be inserted into a SCADA project or existing HMI objects can be reused in new pages by copy-paste. Web-Visu projects created with SpiderControl™ or an OEM version can be imported as CODESYS Web-Visu projects.

## Trend and alarm harvesting: Read more from the controller

This SCADA can recognize a variety of common formats of alarm and trend recording on the PLC, and automatically collect them at the push of a button and record in the long term. All information from the log recording as well as the message texts stored on the PLC are automatically transferred to the SCADA.

## MicroBrowser clients: Convergence of HTML5 and embedded

The proven SpiderControl™ MicroBrowser clients are used worldwide in high quantities. They cover a wide range of runtime systems and offer performance even in low-cost embedded systems.

## Two-way extensibility with HTML5: no boundaries

The HTML5 code generated by SpiderControl™ can be extended in two directions with foreign resources: Any widget libraries from the web can be combined with SpiderControl™. And objects within SpiderControl™ can be expanded with own code and methods.

## Codegenerator: Automatic generation of HMI projects

The automatic generation of Web HMIs via a software API interface is used for recurring tasks. With the code generator, the path to zero engineering is also possible for abstract project descriptions in a database or an Excel document.

Low engineering effort and the reduction of hardware costs: this can only be achieved with SpiderControl™.