

Diagnosis/Start-up/Project maintenance

Ergonomics in engineering [5/5]

zenon projects grow with the demands of the users. Ideally production processes and machinery should be continually optimized if the software also goes along with this. Are you working with methods such as Lean Management, Six Sigma or TPM? zenon optimally supports you in reaching your goals.



FLEXIBILITY IN MAINTENANCE

The good usability of the zenon Engineering Studio also enables people on-site to carry out maintenance works of a project. If required, several people can easily maintain and further develop third party projects. The principle “set parameters instead of programming” creates the necessary transparency and traceability for this.

CENTRAL MAINTENANCE

With “zenon remote transport”, zenon projects can be transported to any PC in the network at the click of a mouse. Furthermore, the start project can be set remotely and Service Engine can be started or stopped. In addition, Remote Transport system information can be read off, log data can be requested and the operating system can be restarted.

TOP PRIORITY - THE EQUIPMENT MUST RUN

With Hot-Reload changes can be transferred to Service Engine during operation and reloaded there without restarting. The hot reload operates consistently right through to the native web client. The integrated redundancy in the network guarantees maximum system stability. Before a project becomes operational you can test each connection using integrated simulation tools – without hardware. With zenon’s integrated IEC 61131-3 environment, you can simulate directly with “real” PLC code under live conditions. This creates security and speed for the start-up.

FAST FACTS

- ▶ Flexible maintenance and ongoing optimization
- ▶ Stable running of equipment with zenon
- ▶ Hot-Reload for Service Engine updates without restarting
- ▶ Overview of project versions and changes
- ▶ Selective deactivation of sections of equipment possible

PROJECT VERSIONING AND PROJECT COMPARISON KEEP THE OVERVIEW

If required, zenon can generate automatically consecutive versions of your projects. The project comparison in zenon enables the differences between two project versions to be precisely analyzed. This information is available via an XML Export in external versioning tools.

HISTORY OF CHANGES

In addition, all amendments to the project can be logged in full, if required (amended object, type of change, time stamp, user, workspace, old value, new value, a freely definable comment field). When used in conjunction with zenon’s version administration, you can ensure project states are always backed up and you can retain an overview. It is always possible to trace who made which changes and when.

ZENON DIAGNOSIS SERVER

If there are communication problems in the network, or with drivers, for which the cause cannot be determined, the zenon diagnosis server can help. It is a centrally-located interface which collects the logging data of all zenon modules and makes an in-depth analysis of the system possible. The zenon diagnosis server consists of three components:

- ▶ **Diagnosis Server:** writes and administers log files. It writes a log file in a freely-configurable time period. In doing so, an ongoing check is made to see if the lifecycle of the logging information has expired or is less than the minimum configurable hard drive space available.
- ▶ **Diagnosis clients:** send the logging information to the diagnosis server.
- ▶ **Diagnosis Viewer:** evaluates the data and displays all information gathered in a clear, tabular form. Its filtering and sorting functionality make targeted error analysis possible. The zenon diagnosis server analyses historical data offline, but also supports online analysis in the Service Engine. Because the output is in plain text, an immediate on-site investigation is possible.

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zenon Diagnosis Server	<p>Components:</p> <ul style="list-style-type: none"> ▶ Diagnosis Server ▶ Diagnosis clients ▶ zenon Diagnosis Viewer
Time control	<ul style="list-style-type: none"> ▶ Time-related ▶ Cyclically
Security	<ul style="list-style-type: none"> ▶ Password protection with authorization levels in zenon Service Engine and Engineering Studio ▶ 128-bit to 256-bit encryption with RSA or SHA algorithms ▶ Full traceability via change history ▶ Windows user administration available, complete active directory support ▶ zenon Service Engine as a Windows service ▶ Configurable communication ports
Protection from loss of data	<ul style="list-style-type: none"> ▶ Data changed in Service Engine, such as recipes or user lists, can be read back into the Engineering Studio again ▶ Integrated version administration
Cross references	<p>A cross-referenced list shows all relationships between:</p> <ul style="list-style-type: none"> ▶ variables, ▶ functions, ▶ screens, ▶ recipes, ▶ and many more, <p>and finds variables and functions which are no longer in use. Particularly helpful for expansions and maintenance work.</p>
zenon Telecontrol	<ul style="list-style-type: none"> ▶ Control remote computers ▶ Control remote equipment ▶ Several computers can access the target system at the same time ▶ Target system remains operable ▶ Transfer data to remote Service Engines ▶ Online reload
Versioning	<ul style="list-style-type: none"> ▶ History of changes ▶ Versioning of recipes ▶ Integrated version administration