



straton
do it your way

**straton® –
IEC61131-3 PLC**



STRATON® INTEGRATED DEVELOPMENT ENVIRONMENT

▶ WHAT CAN IT DO FOR YOU?

- The straton® integrated development environment is a set of powerful text and graphic editors for IEC 61131-3 languages: Sequential Function Chart (SFC), Function Block Diagram (FBD), Ladder Diagram (LD), Structured Text (ST) and Instruction List (IL).
- The workbench runs under Windows® and allow the programming and control of the straton® runtime.
- straton® offers you the easiest way for developing your application with a wide range of powerful features

▶ FEATURES

Fast: All the various features of straton® allow a faster development and an optimization of your applications.

Open: The dataserver is open for optimal management of your system components: I/O, applications generator and other aspects

Ease of integration: It is easy to integrate straton into any kind of bespoke Integrated Development Environment.

Customizable: COPALP are happy to offer customization of straton with your branding. You can use the straton IDE in your products in a seamless manner

Compatible SCADA: straton® is integrated as a standard into zenon SCADA.



Workbench: straton® is a development environment which supports several languages: English, French, German, Italian, Korean and Spanish. With a single window for user friendliness and a simple toolbar which allows easy adaptation for the user. The workbench uses a "Drag&Drop" technology and has a powerful online help.

IEC 61131-3 languages: The 5 programming languages of the IEC 61131-3 standard are supported: Sequential Function Chart (SFC), Function Block Diagram (FBD), Ladder Diagram (LD), Structured Text (ST), and Instruction List (IL).

Conversion of language: The editors integrate a very powerful tool in order to convert automatically a straton® program written in an IEC61131-3 language to another language. Any conversions in between ST, IL, LD and FBD languages are supported.

A powerful compiler: straton® includes a high performance compiler that provides, as an option, different types of code.

Powerful Online change:

- You can freely add variables and function block instances during a change.
- You can change the mapping of individual I/O channels.
- You can lock and force any I/O or internal variable.

Online tools:

- Built-in simulation: A straton® runtime is integrated in the workbench for simulation
- Cycle by cycle mode
- Individual start/stop program
- Debug instances of function blocks
- Breakpoints
- Call stack
- Recipes
- Soft oscilloscope

XML & Text Buffers Library: Set of ready to use function blocks for reading and parsing XML texts, plus a rich set of additional functions for managing text buffers longer than a STRING variable.

Communication Functions Blocks: straton® includes a set of functions blocks to manage the communication through a serial link and TCP/IP. Protocols can be implemented directly using the IEC61131-3 languages.

Other features:

- Generation of a complete HTML document
- Complete standard library
- Monitoring viewer
- Creation of animated graphics; Re-use of these graphics in an Internet navigator.
- Creation of your own application by using graphic components and ActiveX technology.
- Comparison of projects
- Cross reference management

Database:

- Variable editing in several formats
- Instant access to variable lists
- Open to any third party tools or applications





Data types supported: Boolean, Integer (8bit, 16bit, 32bit, 64bit), Real (32bit, 64bit), Timer, String, Array (up to 3 dimensions), Data structures

Application distribution: The straton® runtime permits exchanging real-time data among different runtime systems through TCP-IP. The event based protocol technology used ensures high performance and very low network traffic at runtime. The T5 protocol is based on a “publish-subscribe” model. Each runtime system may publish many variables on the network and consume variables from other runtime systems. The same published variable can be consumed in several destination nodes.

The value of the variable is sent on the network only when it changes in order to ensure low network traffic at runtime.

Fieldbus configuration tool: Configure your fieldbus by a few simple clicks. Configuration or importing a fieldbus configuration is easy. Supported fieldbus are MODBUS (Master/Slave), ASi, Profibus, Profinet, CAN/CANopen, Interbus, BACNet, DNP3, IEC60870, IEC61850.

Connectivity: Flexibility at the management of:

- Input/Output boards
- Profiled variables (Properties associated with each variable)
- Embedded symbols
- OPC

zenon® HMI/SCADA integrated solution: The zenon HMI/SCADA system integrates as a standard the straton® workbench. This is the ideal tool to manage big project in one development tool.

- Multi-user: several people on the same project
- Integrated management of versions (check in/check out)
- SQL database
- Single declaration of variables for both PLC and SCADA

Project Automation: This feature allows creating and modifying partial or complete projects with standard development tool chains like VBA, zenon, C# and ‘C’. It allows automation of the import/export of actual information from your database (xml, MS Excel, SQL, etc) or other tools directly into the straton application. Typical information can be variable definitions and I/O configurations as well as programs generated automatically or copied from template.

COPALP S.A.

10 Rue de Chamechaude
Sassenage, 38360
France

t: +33 (0) 438 26 00 75
f: +33 (0) 476 26 34 17

info@copalp.com
www.copalp.com

