


# logi.CAD 3

## THE ENGINEERING PLATFORM

IEC 61131-3, C and C++





From buses to hydroelectric  
power plants, from  
microcontrollers to industrial  
PC networks: automate  
efficiently and system-  
independently with logi.CAD 3

**WE EMPOWER AUTOMATION**

# logi.CAD 3

## PRODUCTIVITY

Reduced use of resources, continuous optimisation and shorter project times are the major trends of today. Depending on location and sector, employee qualification profiles can present a challenge.

logi.CAD is a highly powerful and flexible tool with significant advantages when it comes to complex scenarios.

## QUALITY

Thru higher quality, sustainable reduce costs, substantially increase availability. Increased pressure by the competition demands quality right from the start. Quality in the automated systems as well as in the creation process.

logi.CAD enables errors and inconsistencies to be recognised early and avoided. Analyses in the creation process aids in development, whilst relational views across projects increase quality.

## COLLABORATION

Bundle competencies and capacities – make collaboration amongst specialists across departments in all relevant project teams a reality. The competition does not make any allowances for inefficient structures. Neither within a business nor across project teams or companies.

The logi.CAD engineering tool contains comprehensive features for increasing efficiency. Adaptable to meet almost any challenges not just today but also in the future.



# The Advantages

## **EFFICIENCY & QUALITY IN ENGINEERING, FLEXIBILITY WITH HARDWARE**

### **Key features in logi.CAD 3**

- Simple C code integration
- Total solution with visualisation by PROCON-WEB and SpiderControl
- Functional security via test manager and static code analysis
- Sycon.NET I/O configurator in logi.CAD 3
- Microcontrollers starting at 8 bit, footprint from 10kB
- Support for Linux as host and target systems
- Custom Hardware (Custom PLC)
- Team Engineering

## **PLC DEVELOPMENT ENVIRONMENT**

### **Interfaces**

- IEC 61131-3 application import
- Support for integration of heterogeneous engineering environments (AutomationML)

### **Editors**

- Structured text (ST)
- Function block diagram (FBD)
- Sequential function chart (SFC)
- Device configuration
- Seamless integration of C/C++ code
- Seamless integration of Java Code\*

### **Debugging**

- Full featured debugging (Breakpoints, Single Stepping)\*

### **Visualisation**

- PROCON-WEB Designer
- SpiderControl Editor

### **Continuous integration**

- Text-based project files for efficient source code management (GIT, SVN)
- Connectors for Application Lifecycle Management (ALM) tools (e.g. Jira)
- Library management
- Variant management\*
- Integration into continuous integration test environments (e.g. Jenkins)

### **Functional security**

- Static code analysis
- Functional tests
- Generated C code base enables SIL certification

\* Available in 2018

# logi.RTS

## MAXIMUM PERFORMANCE FAST

### The runtime system logi.RTS

On out-of-the-box supported systems, logi.RTS is up and running within a half day.

The PLC runtime system logi.RTS converts any PC or microcontroller with logi.μRTS into an automation system (PLC).

Technical operations and procedures are processed cyclically. Highly portable, lean runtime systems in accordance with IEC 61131-3

## PLC RUNTIME SYSTEM

### Application

- From 8 bit microcontrollers to multi-core industrial PCs

### System services

- Software Development Kit (SDK)

### Connectivity

- OPC UA
- Machine-to-machine (M2M) communication, Internet of Things (IoT)
- Ethernet-based communication
- MQTT client and server

### I/O & Fieldbus

- I2C
- Modbus TCP / RTU
- EtherCAT
- CANopen

### Supported Systems

- ARM11 / ARMv6, ARM9, ARM9 EABI, ARM9 OABI, Cortex M3 / M4, ESP8266
- AVR ATmega 328
- Arduino, Raspberry Pi
- Linux RT
- OSEK
- RTOS-32
- Windows 7/8/10
- VxWorks 5.4, 5.5, 6.7, 6.9
- Proprietary in-house developments
- More upon request



# logi.CAD in action ...



**... in traffic:** Controllers programmed using logi.CAD are responsible for information and the comfort of drivers and passengers in three of four city buses and long-distance coaches.



**... in building automation:**

Thousands of controllers programmed with logi.CAD provide for safety and comfort in buildings.



**... in the energy sector:** Every third hydroelectric power plant in the world is automated by controllers programmed with logi.CAD.



**... in the industrial sector:**

Across the globe, thousands of tonnes of steel are rolled daily into high-quality sheets by systems programmed using logi.CAD.



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