

Your Safe PLC

logi.SIL RTS is the safe operating software for your device. Full access to all parameter functions for your low-end devices, an IEC 61131 runtime environment for your safe PLC.

The components developed according to IEC 61508 SIL 3 offer support for single- and multiple-CPU systems for one-channel, two-channel and – which is a distinctive feature – virtual two-channel processing of the PLC code. This function is completed by extensive test functions for validation and monitoring during operation. Easy integration in your firmware is - beside safety - our primary goal and of course the easiest way to your certified safety device.

Advantages of logi.SIL:

- Graphical IEC 61131-3 languages
- Open interfaces
- Test functions
- Change tracking
- Verification & Validation
- For any programming system
- For safe parameterizing
- More reliability and productivity through static code analysis
- More comfort without additional workload
- Component testing with delta engineering

tools & functions

logi.cals – all the more power

logi.cals Increases your productivity. As an independent software manufacturer logi.cals develops state-of-the-art software for automation technology, process industry and functional plant documentation. With

pre-fabricated, but open software modules logi.cals combines the components (hardware, software) of various manufacturers to complete solutions which are easily integrated in existing IT infrastructures. logi.cals' core products are the hardware independent IEC 61131-3 automation platform logi.CAD and the universal function plan tool logi.DOC.

DESIGN

logi.DOC®

Function Plan Tool

The universal function plan tool is the basis for a variety of further steps in the engineering process. logi.DOC describes the function of the plant to be realized and documents its behaviour.

logi.CED

Cause-and-Effect

The engineering tool logi.CED creates cause-and-effect tables. Those tables describe automation and monitoring tasks in easy-to-understand diagrams.

logi.DICT

Multilingualism

logi.DICT is an integrated terminology and translation database. With this tool the project engineer can store his notes and comments in the database in several languages.

AUTOMATION

logi.CAD®

Engineering

The hardware-independent automation platform logi.CAD allows easy handling of even complex and heterogenous automation projects. It supports you with planning and programming according to IEC 61131-3 and a multitude of other standards. Programming your system will be more efficient than ever.

logi.VIS

Visualization

The visualization platform logi.VIS is a perfect add-on for logi.CAD. Individual design of visualization tasks is done quickly and easily. Third-party systems are also supported.

DEVICE

logi.RTS

Runtime Environment I

Runtime system logi.RTS connects the automation application with the operating system of the target hardware. This environment provides process data of the automation system and processes it in cyclical and event triggered procedures. Multi-tasking and -resourcing, i.e. several virtual controls on one CPU is standard of logi.RTS.

logi.µRTS

Runtime Environment II

PLC runtime system logi.µRTS maps resources - engineered in logi.CAD - to single-tasking systems. logi.µRTS is specially optimized for use with micro controllers or micro systems without multi-tasking operating systems.

BUNDLES

logi.PLC

System Solutions

Based on logi.cals software products and hardware products of partners, logi.cals provides comprehensive system solutions.

logi.GUARD

Condition Monitoring

logi.GUARD is an open platform that perfectly combines Distributed Condition Monitoring (CM) and automation. The tool was developed together with Messfeld and monitors the condition of plants and machines.

Safety where you need it



INCREASE YOUR PRODUCTIVITY!

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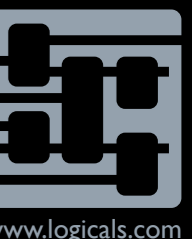
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Your Safety – Our Product – Your Solution

A unique safety concept makes your engineering process safe. Where you need it. We have already developed the safety software for it: with logi.SIL you can continue to use your favourite engineering tool. Safe parameterizing, programming, commissioning and modification!

Your key to safety

Most of the specific safety engineering systems are not easy-to-use, universal programming systems with safety functions are usually overpowered for safe automation tasks. Simply enhance your standard engineering system with logi.SIL! Immediately and without a special safety certification process you have a safety engineering system at hand. For safety applications according to IEC 61508 SIL 1-3, IEC 13849 PL-a-e and IEC 62061.

Know-how and expert knowledge will persist

Your benefits: no costs for a new programming system, no extensive user training. Existing know-how can be used for realizing safe applications.

Component testing/partial tests makes engineering safer and more efficient

With the safety-related compare function of logi.SIL you can identify all changes and reduce the necessary test and verification workload. Only changed objects have to be verified. In doing so, not only intended changes can be verified, but also accidental changes can be detected.

Integration in existing engineering processes

As a safety-add-on, logi.SIL integrates in your engineering process. It serves as a safety bridge between your non-safe engineering software and your safe control. Freely programmable or just easy to parameterize.

Continue to use existing data/projects

logi.SIL can process the data of any compatible parameterization and programming tools. Continue to use your automation projects and control programmes. This will secure your previous expenditure on the existing code basis.

Ease of use without additional workload

The safety-add-on provides functions for ease of use which are unique in safety-related engineering environments. State-of-the-art functions of well-established programming environments are automatically available. Nevertheless, no additional engineering steps are necessary – compared to „real“ safety-related programming systems.

Static code analysis with logi.LINT

The tool logi.LINT allows for more reliability and productivity by performing a static code analysis already before the verification and validation with logi.SIL. Static code analysis detects errors that would prohibit the generation of correct code.

logi.SIL – the Safety-Add-On

Open Standards

logi.SIL processes data compliant with the open and standardized PLCopen XML format. PLCopen is the generally accepted and independent member organisation of all well-known manufacturers and many users from the automation section.

Safe Parameterizing with Standard Tools

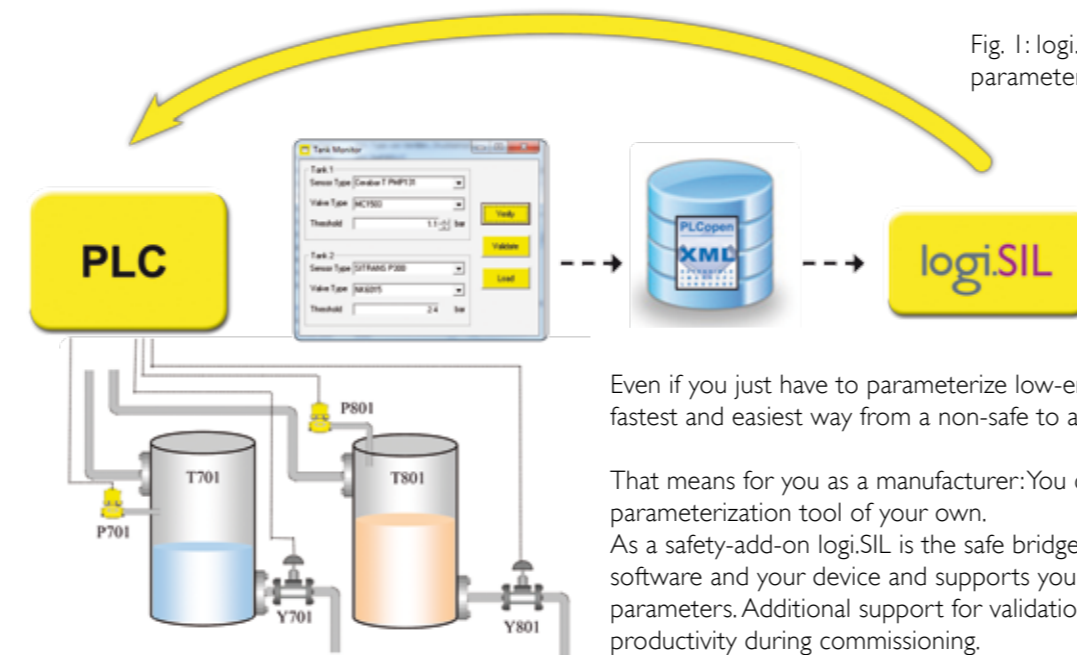


Fig. 1: logi.SIL integrates in the parameterization process.

Even if you just have to parameterize low-end systems safely: logi.SIL is the fastest and easiest way from a non-safe to a safe solution.

That means for you as a manufacturer: You can save on developing a safe parameterization tool of your own. As a safety-add-on logi.SIL is the safe bridge between your parameterization software and your device and supports you with the verification of your parameters. Additional support for validation („test on device“) increases your productivity during commissioning.

Your Programming System is the Basis – logi.SIL Adds Safety

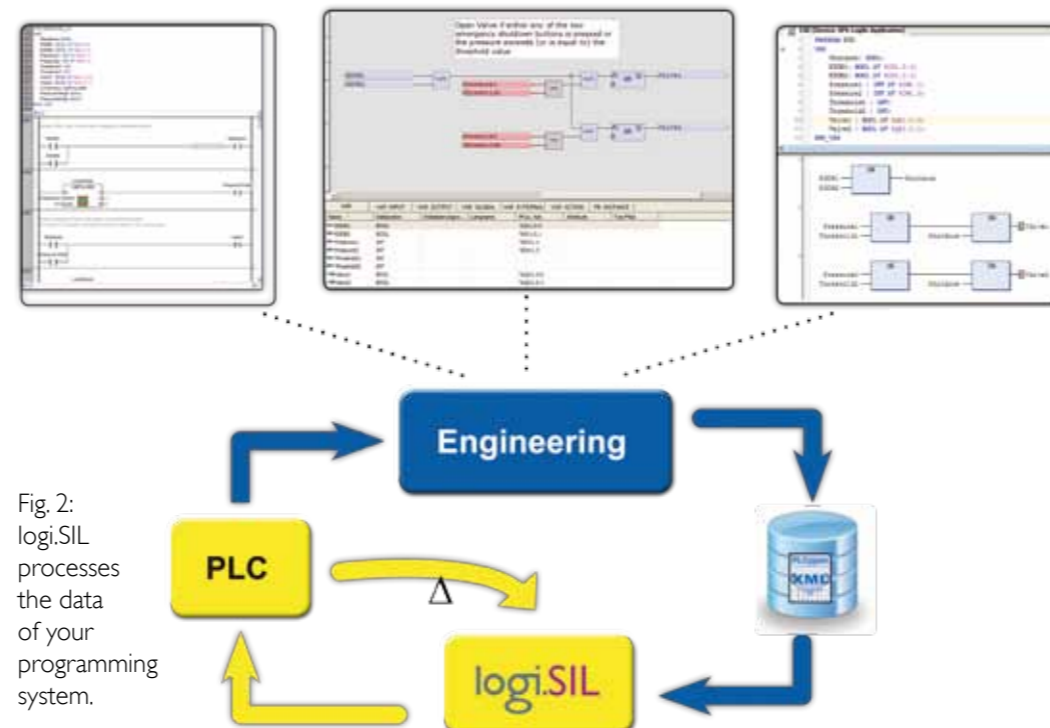


Fig. 2: logi.SIL processes the data of your programming system.

Also while programming, the safety-add-on interconnects your programming system and your control (PLC). Due to open interfaces logi.SIL can process data of all established programming systems. Major parts of project verification are performed rule-based and automatically. If necessary, a check by the user completes the verification process. Programming data are presented graphically, just as in the original (function plan, ladder diagram). Whether you have to programme simple safety-terminals or complex safety-PLCs, logi.SIL is definitely the most efficient way. The safety-add-on integrates in your standard engineering system, not only in a technical sense, but also with its look & feel.

Integration

You decide on the „depth of integration“ of the logi.SIL safety components. logi.SIL V&V Offline with its verification and validation functions can be integrated as a component of your engineering software. logi.SIL V&V Online can be used either as a stand-alone programme or as a communication component for the test interface of your engineering software.

Component Testing with Delta Engineering Increases Your Productivity

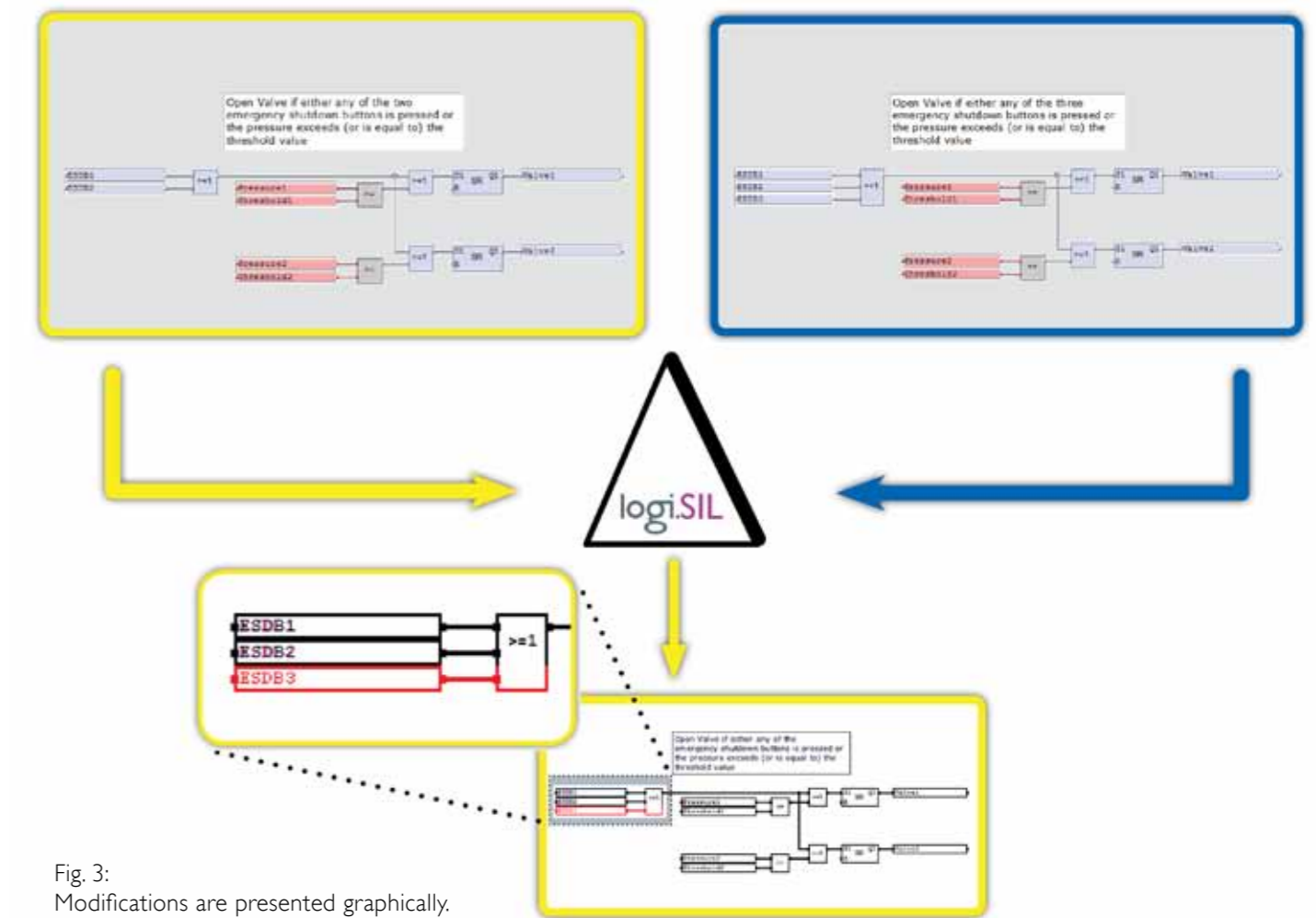


Fig. 3: Modifications are presented graphically.

Creating a safe (automation) application is just the first step. Tracking and labelling changes or modifications are the subsequent challenges in the engineering process and have to be accomplished while testing and commissioning as well as during operation. Delta engineering with logi.SIL is the outstanding solution for optimal efficiency and even more safety.

Due to the automatic tracking and labelling of all changes performed, the amount of verification and validation can be remarkably reduced. Increase safety by detecting unintended modifications.