

# PLCnext Technology

## PLCnext Engineer

Presentation by Antonio Gordillo



Brief  
overview



Competitive  
Advantages



PLCnext  
Control



Functional  
Safety



Edge  
Computing



Security



PLCnext  
Engineer



PLCnext  
Store



PLCnext  
Community

PLCnext Technology Ecosystem

## PLCnext Technology

**Much more**  
than just a great vision –  
enhanced automation today!



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# PLCnext Technology<sup>®</sup>

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PLCnext Control

## Open Control Platform

Devices in various performance classes including PLCnext Runtime System and accessories



PLCnext Engineer

## Engineering Software

Engineering tool for commissioning, configuring and programming PLCnext Control



PLCnext Store

## Software Store

Apps for functional extension of PLCnext Control and PLCnext Engineer



PLCnext Community

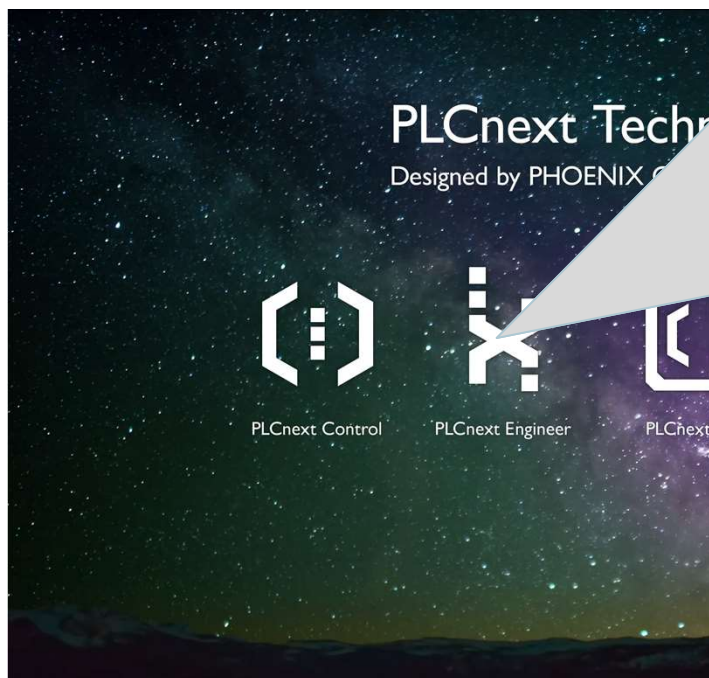
## Collaboration & Resources

We offer our community information, support and helpful resources, including FAQs, forums, tutorials, and a GitHub presence



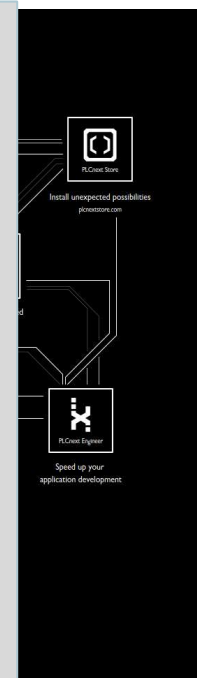
PLCnext Ecosystem

## PLCnext Technology



### Engineering Software

Engineering tool for commissioning, configuring, and programming PLCnext Controls

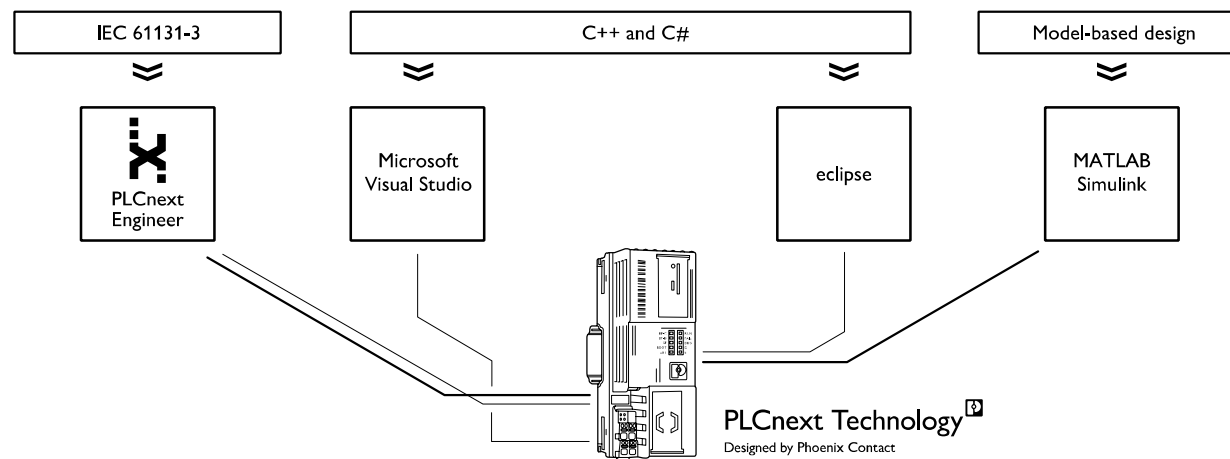


enhanced convenience

## Engineering and Application Development

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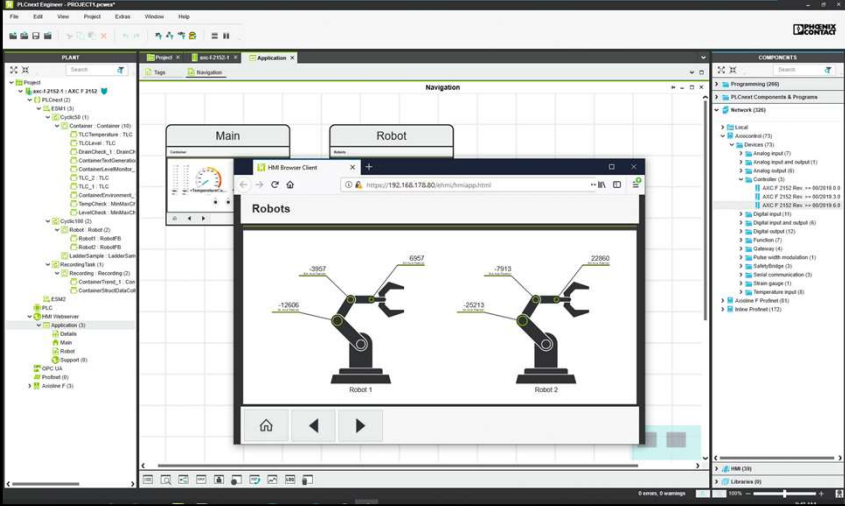


**With PLCnext Technology, several developers from different generations, with different skill sets and expertise can work on one controller program, in parallel and yet independently, using different programming languages.**

enhanced convenience

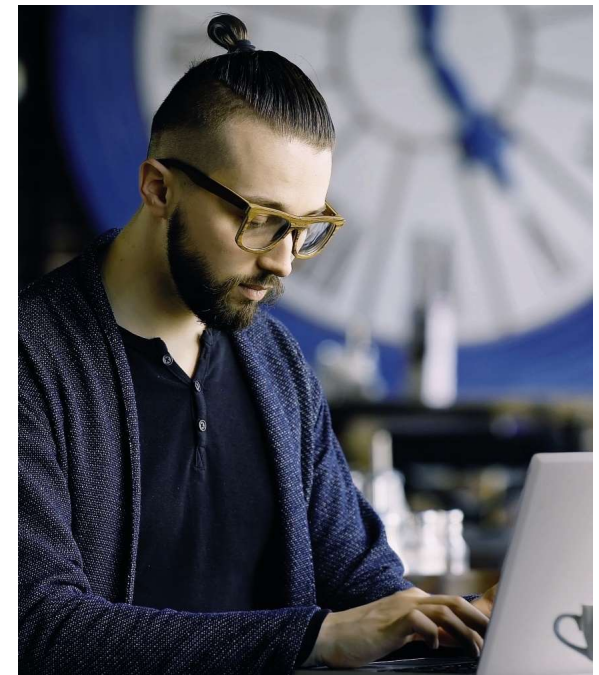
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## IEC 61131-3 Programming with PLCnext Engineer



The screenshot displays the PLCnext Engineer software interface. The main window shows a graphical representation of a robotic system with two robots, labeled 'Robot 1' and 'Robot 2', positioned on a grid. The interface includes a 'Navigation' panel on the left with a tree view of the project structure, a central workspace with a 'Main' and 'Robot' tab, and a right-hand panel with a list of components and programs. A large white stylized logo is overlaid on the right side of the screenshot.

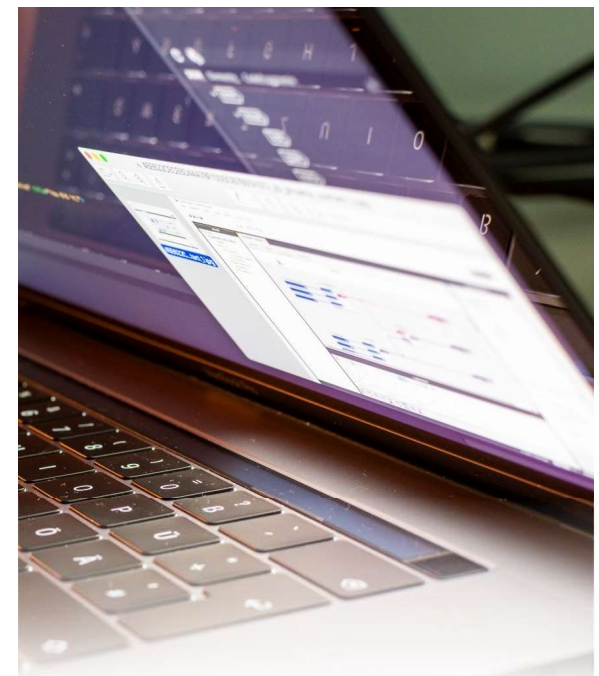
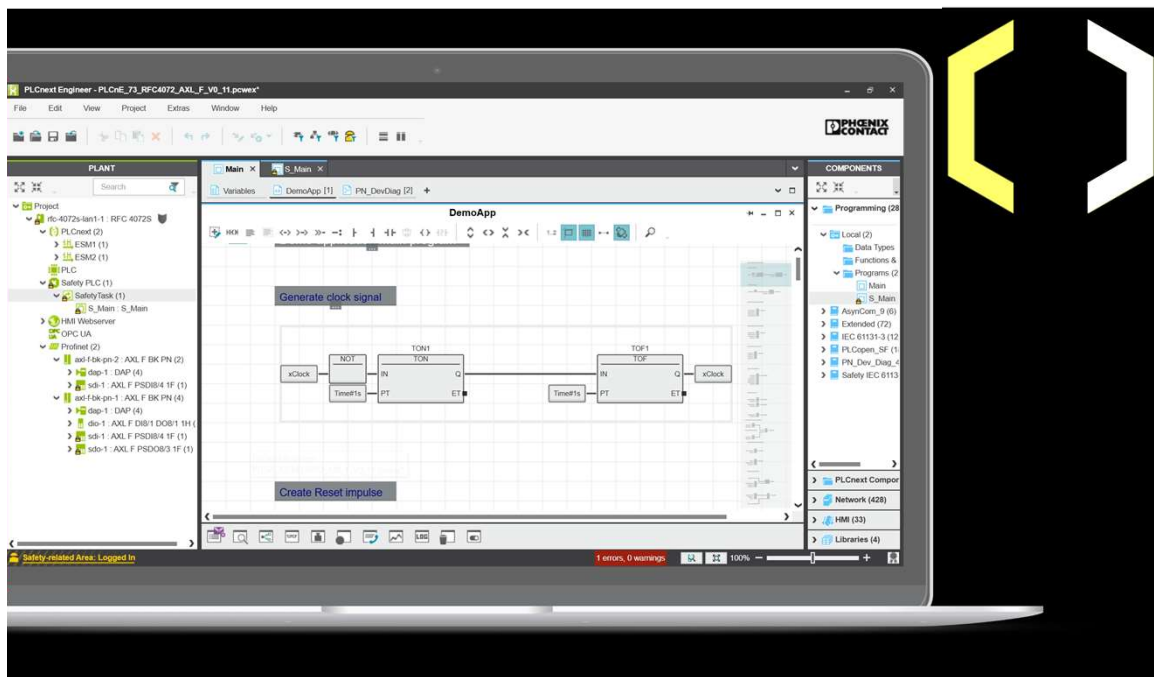
Use the innovative and easy to use features of PLCnext Engineer.



Standard and safety programming in one engineering software

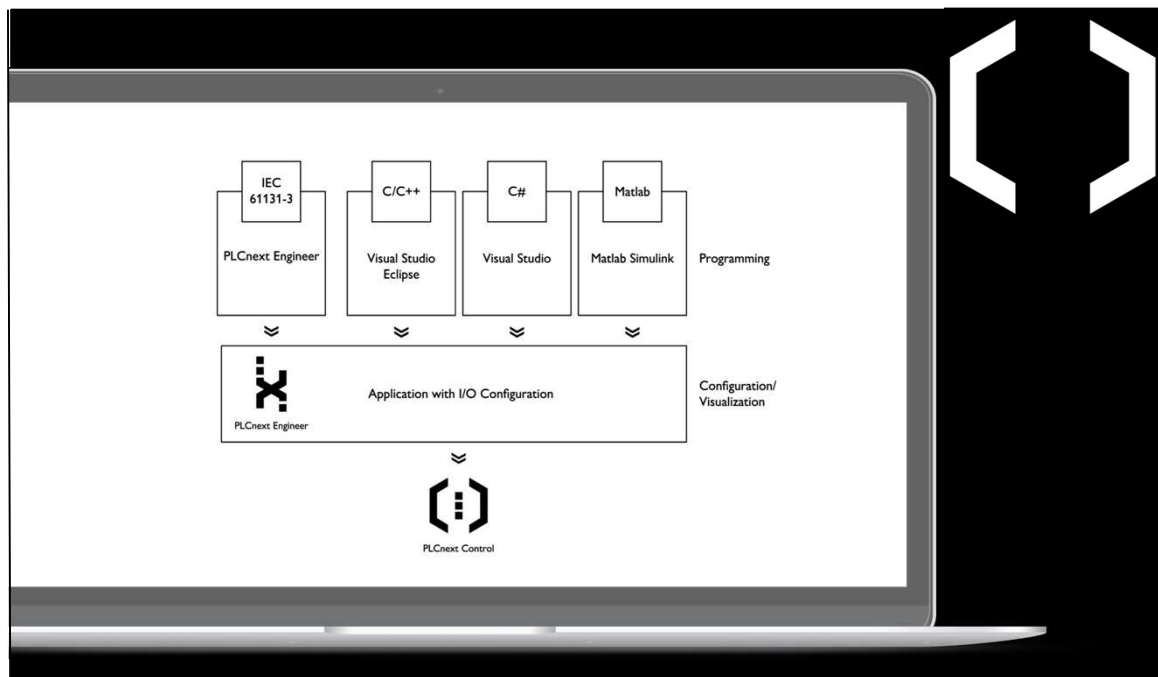
## PLCnext Engineer

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PLCnext Technology – Limitless engineering options

## PLCnext Engineer



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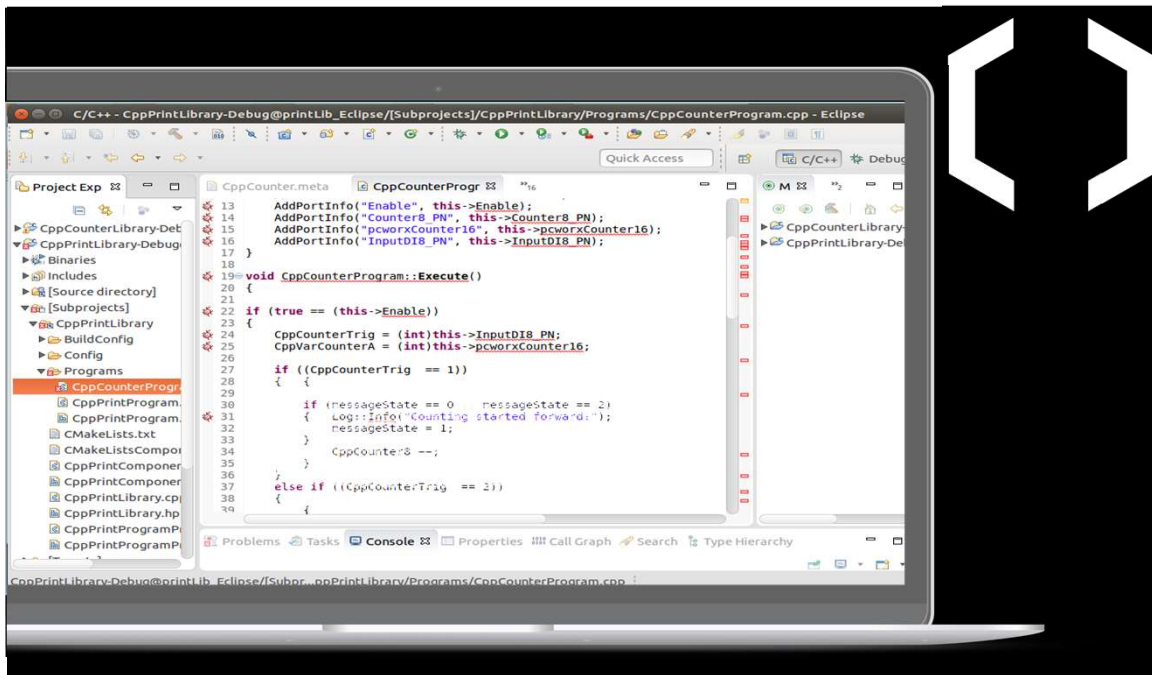




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## Programming – C/C++

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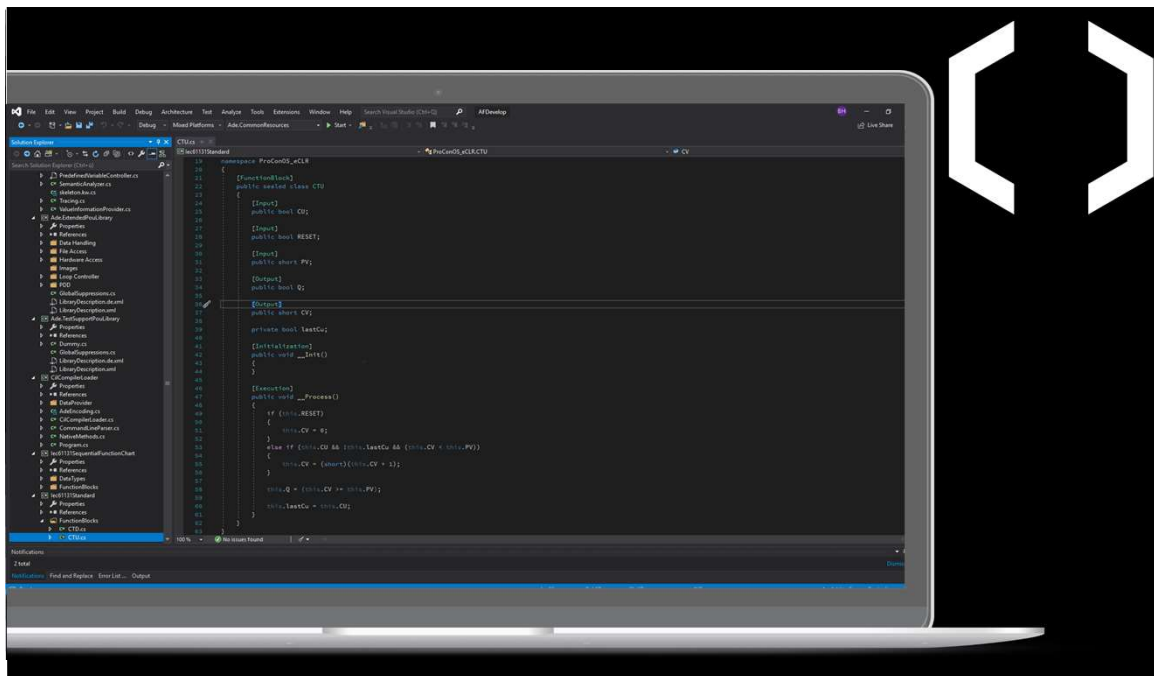


- C/C++ acc. to standard
- Easy interface to the PLCnext Runtime System
- Support of remote debugging
- Use the tool you are familiar with

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## Programming – C/C++

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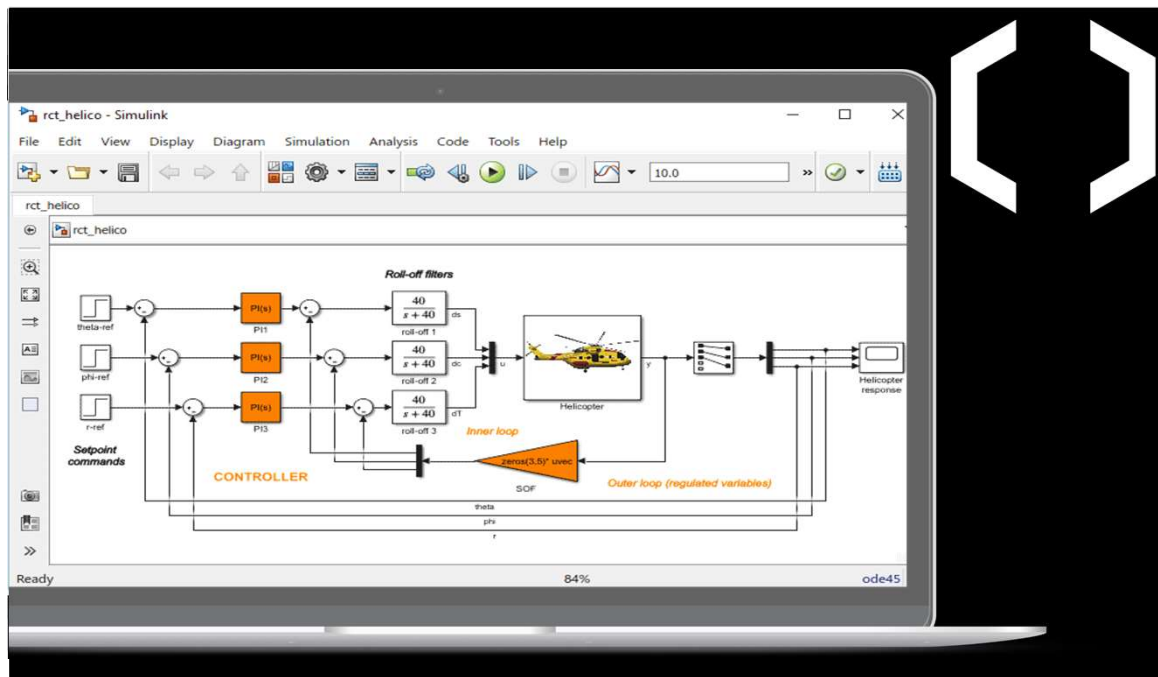


- Development and integration of function blocks with C#
- Dedicated plug-in for Visual Studio.
- Execute C# function blocks in real-time with the eCLR runtime system.

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## MATLAB Simulink

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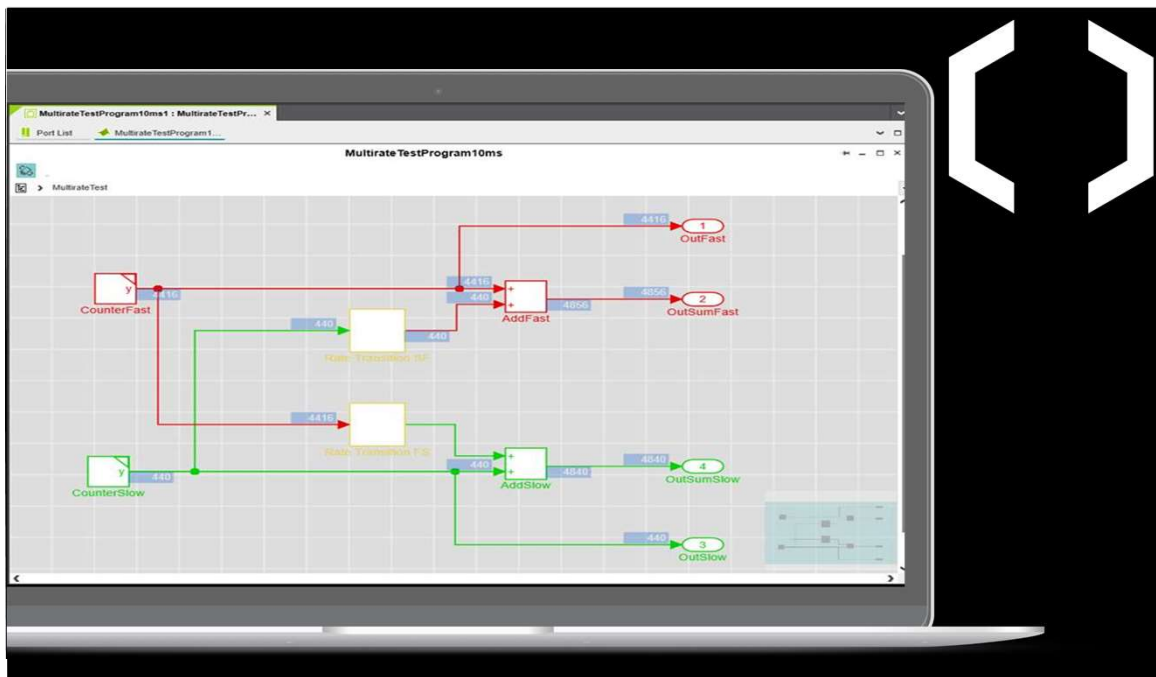


Seamless integration of model-based design & development with MATLAB Simulink.

enhanced convenience

## MATLAB Simulink & PLCnext Engineer

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Seamless integration of model-based design & development with MATLAB Simulink and PLCnext Engineer.

# enhanced development

Connected coworking

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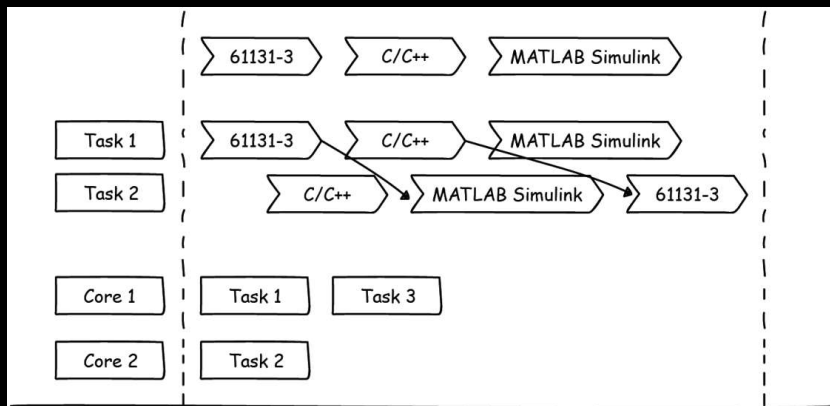
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With PLCnext Technology, several developers from different generations can work on one controller program independently of each other using different programming languages. Thus, you can develop complex applications quickly using the advantages of the classic PLC world and the openness and flexibility of PLCnext Technology.



enhanced performance – PLC-typical Real-time Performance

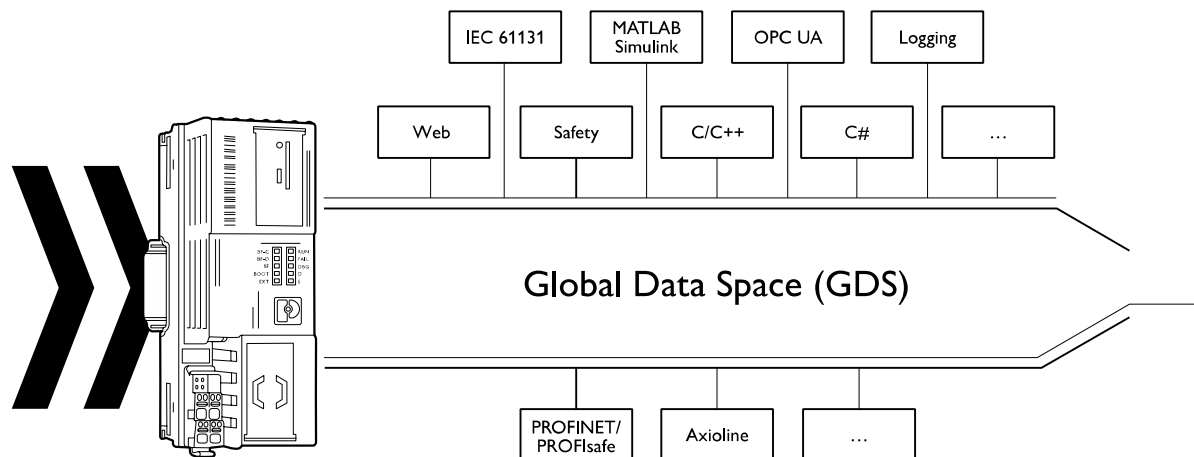
## Execution & Synchronization Manager



The patent-applied-for task handling of PLCnext Technology lets program routines of different origin run like classical IEC 61131 PLC code. Your high-level language programs become automatically deterministic.

enhanced performance – Data Consistency

## Global Data Space



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**Fast and consistent data exchange between user programs, fieldbuses, and system programs. Access via Data Logger, HMI, and OPC UA. Security aspects for user management.**

# PLCnext Technology<sup>®</sup>

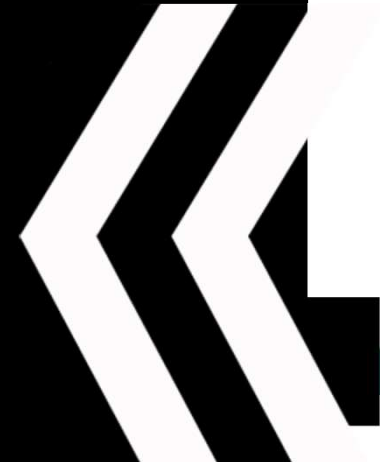
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PLCnext Engineer modular software platform



PLCnext Engineer

Speed up your  
application development



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## PLCnext Technology Configuration and Engineering

### Fast and flexible configuration

- C-Code, Simulink models, function components, IEC61131-3, Safety, HMI

### Extendable

- By licensed add-ins like the Viewer for Simulink

### Easy handling

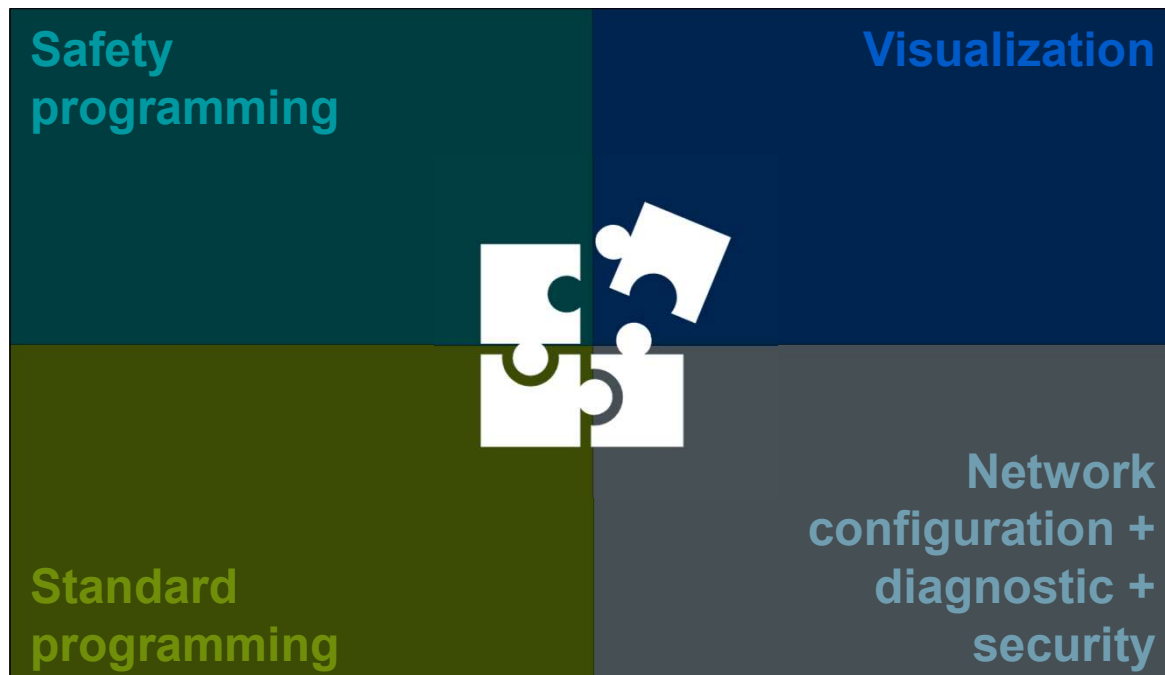
- Intuitive user interface
- Clear structures

**The software for configuration and engineering**



PLCnext Engineer

## Complete Integrated System



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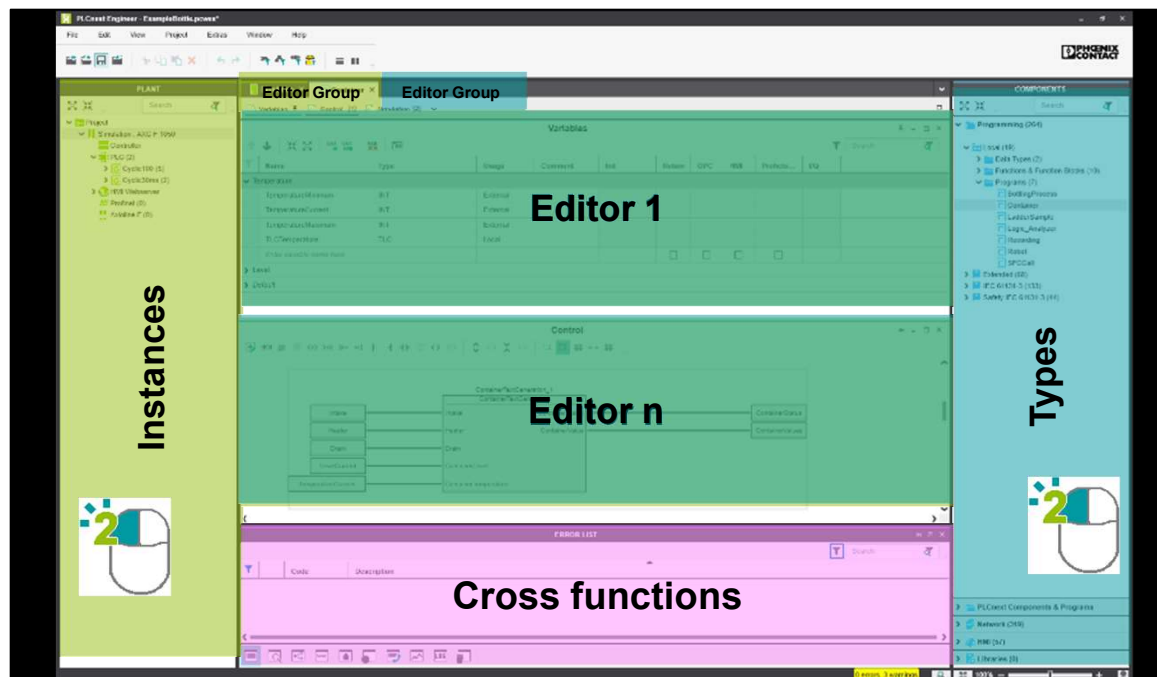




PLCnext Engineer – User Interface

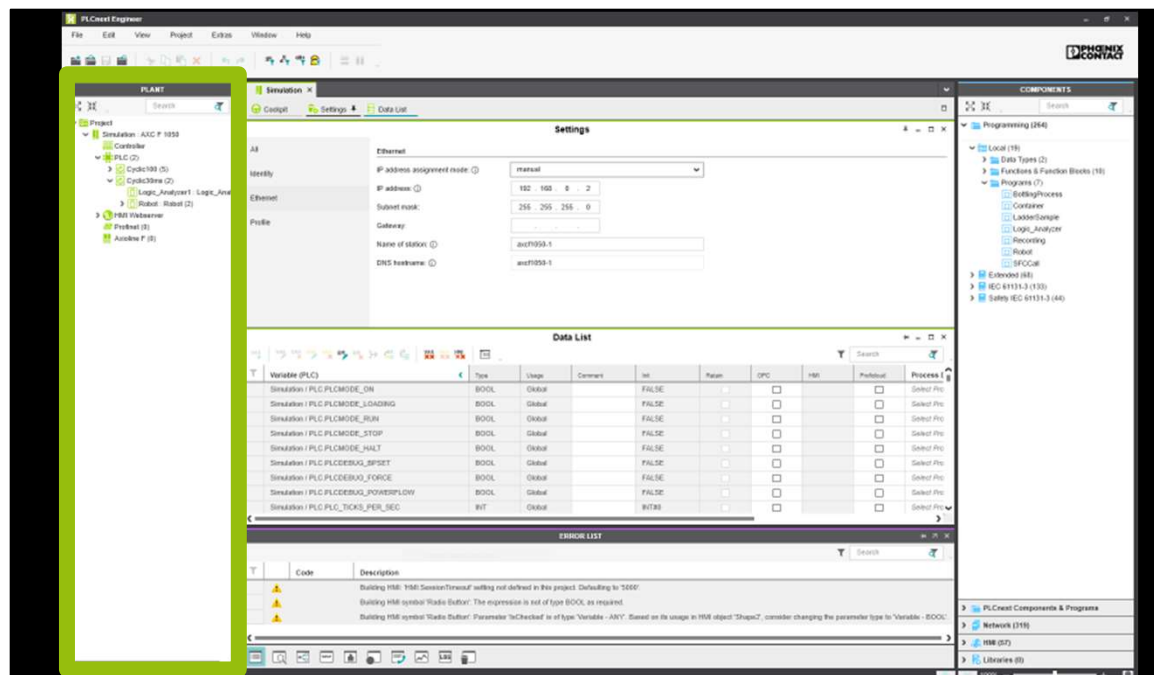
## Information Architecture

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## PLCnext Engineer – User Interface

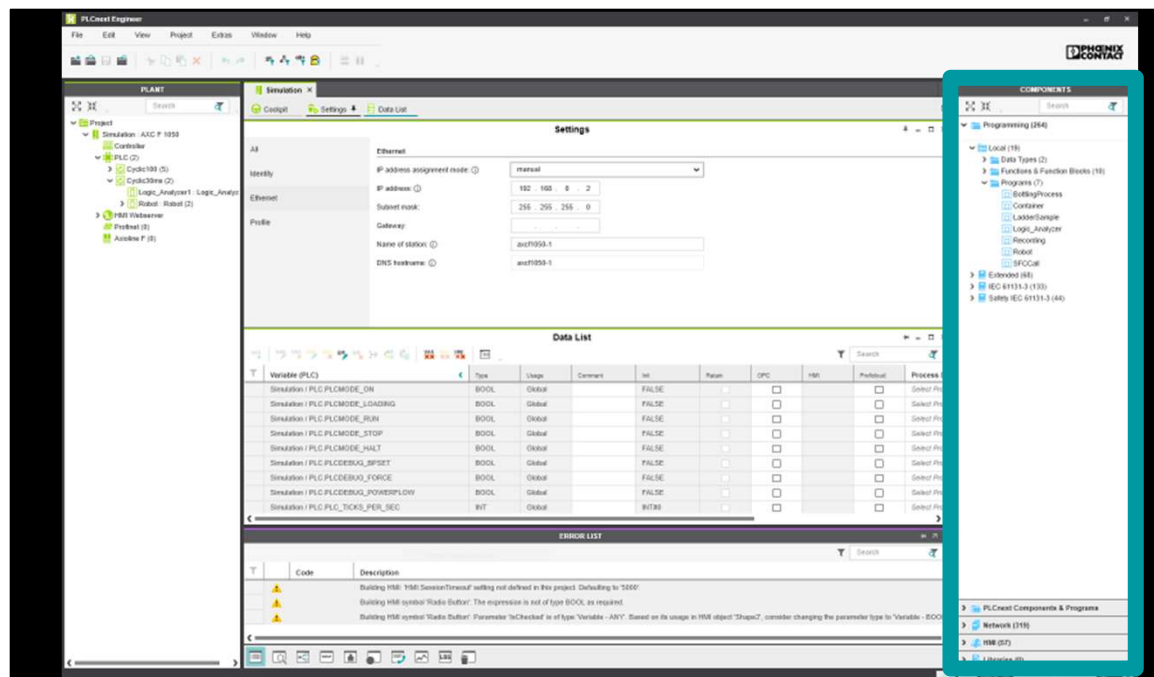
# The User Interface – Plant Area



- Instance trees
  - Programs
  - Visualization pages
  - IO configuration
- Task configuration
- Controller configuration
- Central Cockpit
  - Application control
  - Device information

## PLCnext Engineer – User Interface

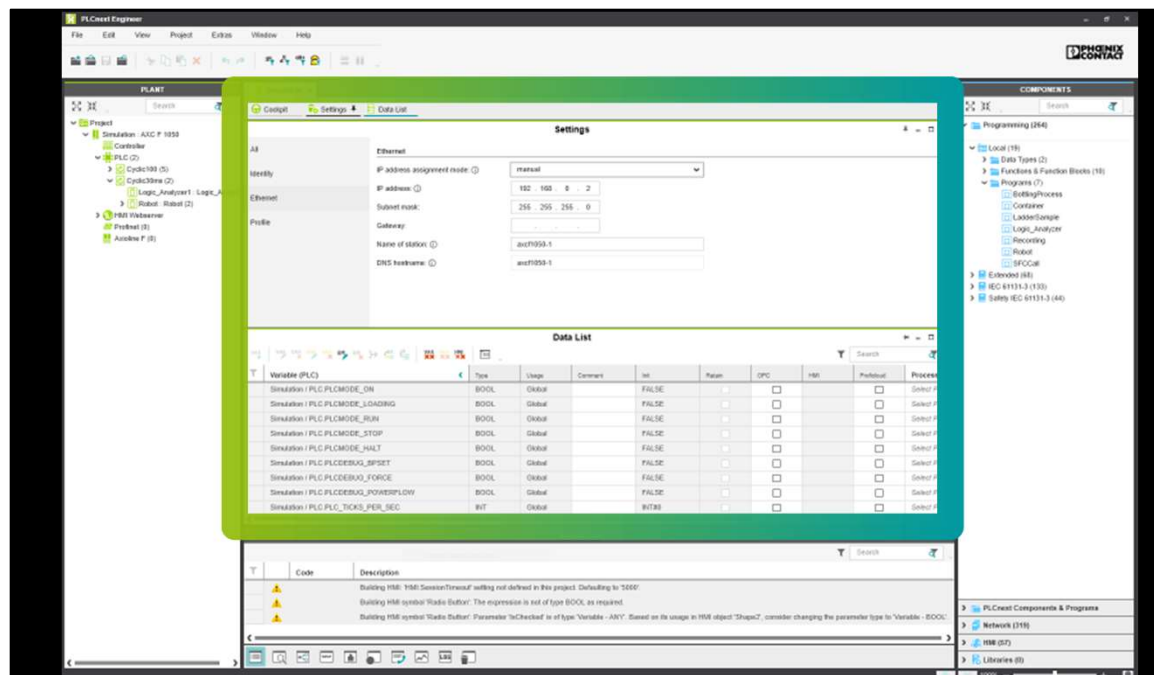
# The User Interface – Component Area



- IEC 61131-3
  - Programs, functions and function blocks
  - Data types
- Device catalogue
  - Import of devices
- Visualization symbol library
- References to libraries

## PLCnext Engineer – User Interface

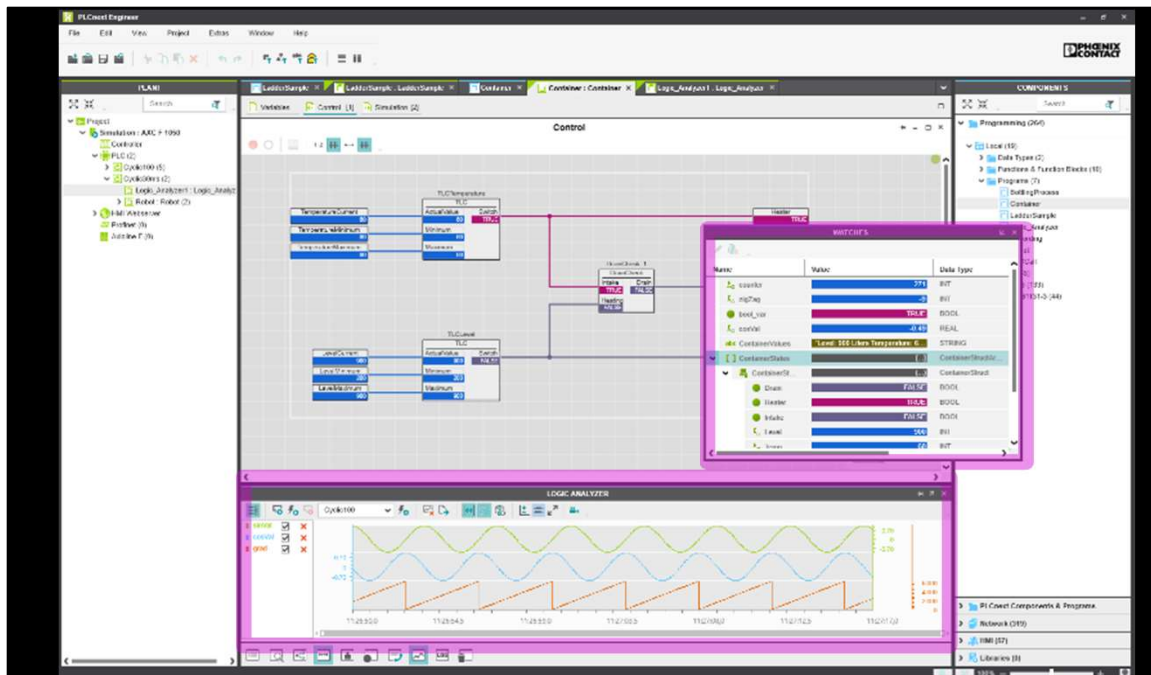
# The User Interface – Editor Area



- Central editing
- Split view windows
- Full screen windows
- Arrange multiple editor windows
- Type or instance Editor color highlighted

## PLCnext Engineer – User Interface

## The User Interface – Cross Function Area



- Undockable windows
- Message window
- Global find & replace
- Cross references
- Watch window
- Debug information
- Logic analyzer
- Logging
- Recycle bin
- PLC Online state



## PLCnext Engineer – User Interface

### User Interface – Menu Bar



- **Standard functions**  
Windows conform
  - Project handling
  - Cut / copy / paste objects
  - Delete objects
  - Undo / redo
- **System filter**  
Show or hide information
  - Programming objects
  - Network related objects
  - HMI related objects
  - Safety related objects
- **Split Screen function**  
Arrange two editor groups
  - Horizontal split mode
  - Vertical split mode

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## License Structure

Free of charge

# PLCnext Engineer

Configuration  
Programming  
Visualization

## Licensed AddIns

...	Code Analysis	Reporting	 SAFE	FL Config	IEC 61850	 ACI	Safety Extended
 SFC	HMI Alarm	Safety Basic	HMI Trending	 MV	Source Code Management	....	Vis. Wizard



Icon = available AddIn



No icon = Idea about future AddIns

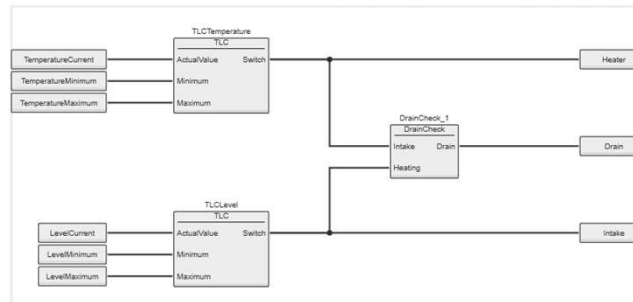
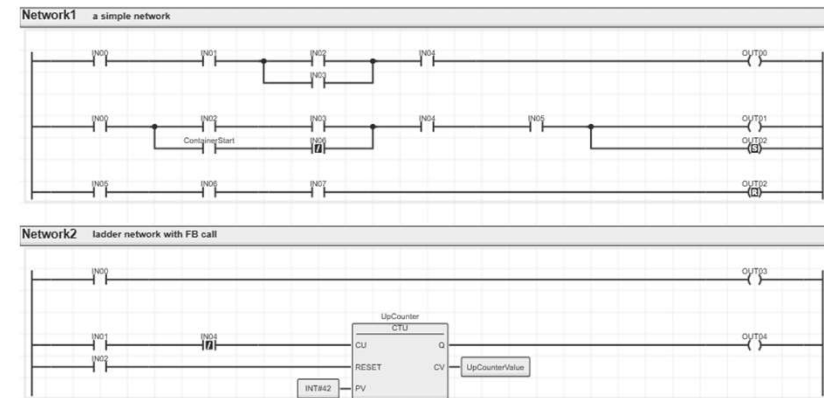




**PLCnext Engineer**  
Engineering Software

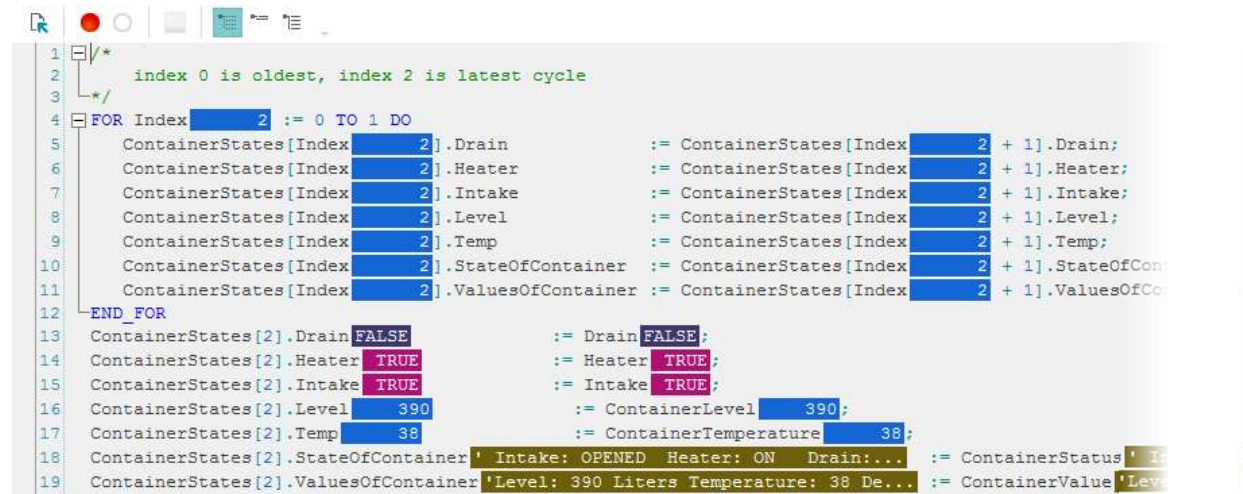
## IEC 61131-3 Editors

- Graphical programming
  - Function Block Diagram (FBD)
  - Ladder (LD)
  - Network based or free graphical editor
  - Methods on function blocks in graphical languages



## IEC 61131-3 Editors

- **Structured Text (ST)**
  - Syntax highlighting
  - Autofill assistant
  - IntelliSense function
  - Folding of code segments
  - RolePicker assistant
  - Templates for statements
  - Methods on function blocks



```
1  /*  
2     index 0 is oldest, index 2 is latest cycle  
3  */  
4  FOR Index := 0 TO 1 DO  
5      ContainerStates[Index].Drain := ContainerStates[Index + 1].Drain;  
6      ContainerStates[Index].Heater := ContainerStates[Index + 1].Heater;  
7      ContainerStates[Index].Intake := ContainerStates[Index + 1].Intake;  
8      ContainerStates[Index].Level := ContainerStates[Index + 1].Level;  
9      ContainerStates[Index].Temp := ContainerStates[Index + 1].Temp;  
10     ContainerStates[Index].StateOfContainer := ContainerStates[Index + 1].StateOfContainer;  
11     ContainerStates[Index].ValuesOfContainer := ContainerStates[Index + 1].ValuesOfContainer;  
12 END_FOR  
13 ContainerStates[2].Drain FALSE := Drain FALSE;  
14 ContainerStates[2].Heater TRUE := Heater TRUE;  
15 ContainerStates[2].Intake TRUE := Intake TRUE;  
16 ContainerStates[2].Level 390 := ContainerLevel 390;  
17 ContainerStates[2].Temp 38 := ContainerTemperature 38;  
18 ContainerStates[2].StateOfContainer 'Intake: OPENED Heater: ON Drain:...' := ContainerStatus 'Intake: OPENED Heater: ON Drain:...';  
19 ContainerStates[2].ValuesOfContainer 'Level: 390 Liters Temperature: 38 De...' := ContainerValue 'Level: 390 Liters Temperature: 38 De...';
```



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## Integrated Visualization Editor

- **Deeply integrated**
  - Based on central handling
- **Scalable**
  - From small scale controllers to IPCs
- **No client installation**
  - Modern web browser
- **Technology-neutral**
  - Screens are stored in neutral format
- **Lightweight**
  - Low resource demands on PLC



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## Integrated Visualization Editor

- Definition of single line expressions
  - IntelliSense completions
  - Semantic analysis
- Integrated online mode
  - Everything in one environment

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## Integrated Visualization Editor

- Navigation Editor
  - Graphical definition of basic navigation structures (swipe up, right, left, or down)
  - Easy assembly of navigation structures through drag & drop
  - Content of a page is displayed within thumbnails
- Consistent library handling
  - Easy to use symbol editor



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## Integrated Visualization Editor

- User Management
  - Access right configuration of objects
  - Management via IEC 61131-3 function blocks possible
  - Authentication object template

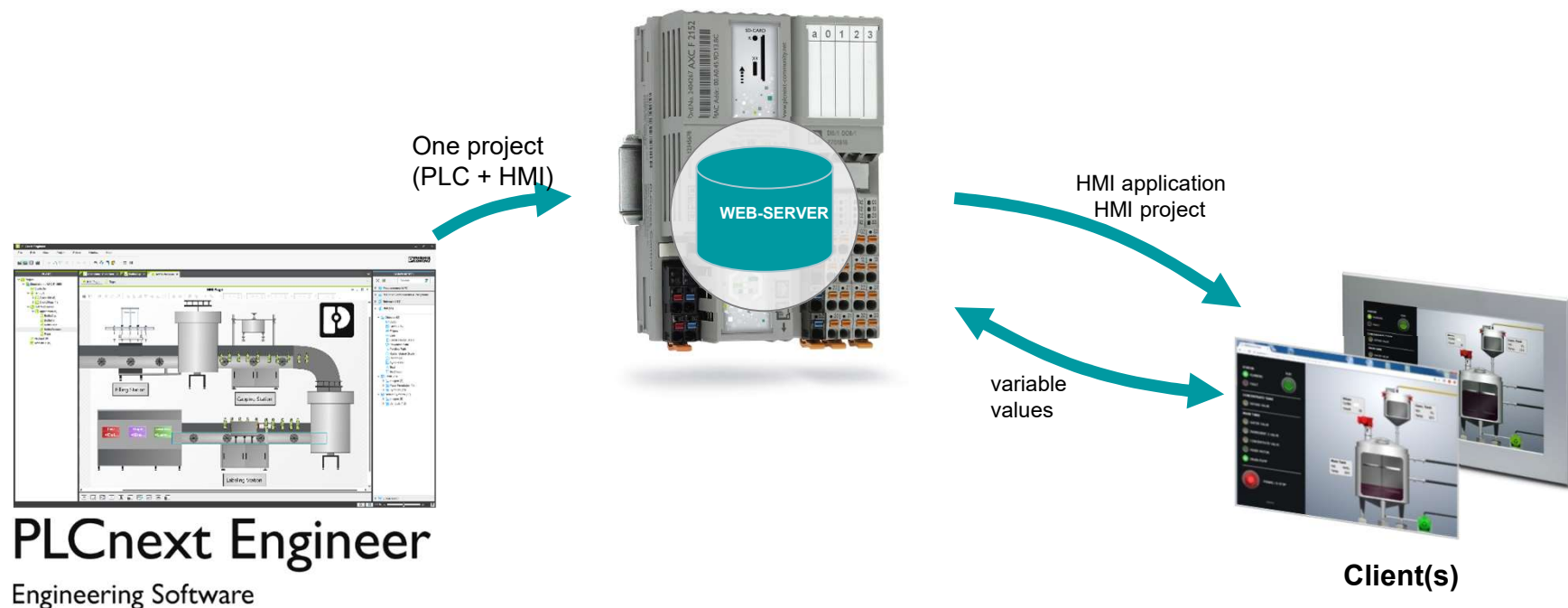
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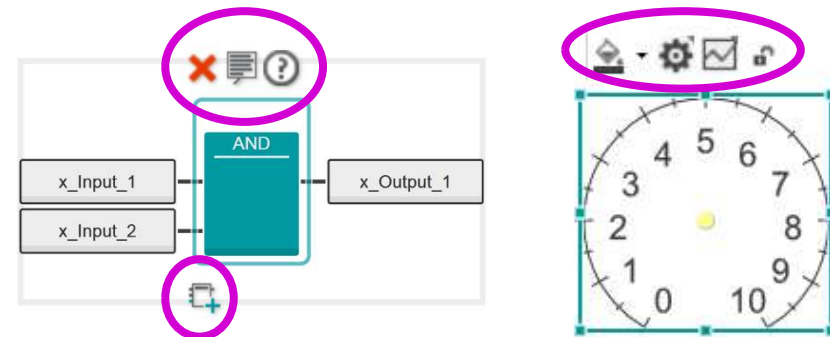
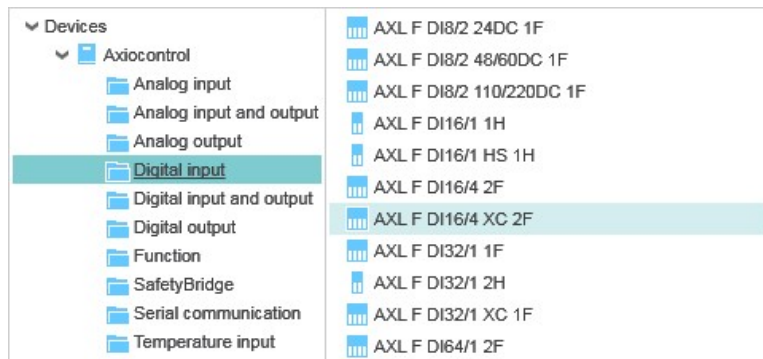
## Visualization Runtime Concept



## Usability Features Examples

### InPlace Actions

- Placed directly beside graphical objects
- Offer the most important functions

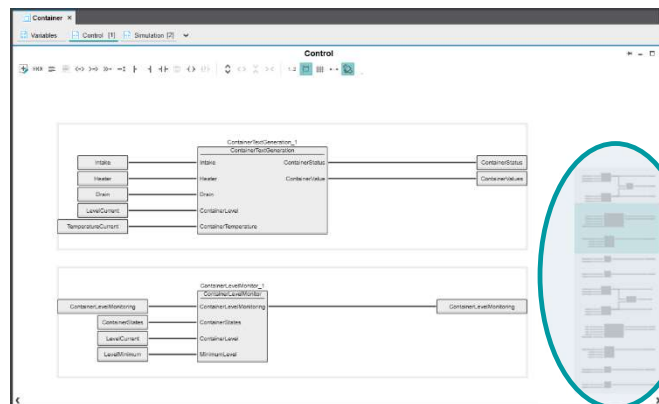


### RolePicker

- Offers only usable objects
  - Smart filter mechanism
  - Pre-selection in categorized folders
- Shown in hardware selection
  - Shown in process data assignment, ...

## Fast Navigation through Graphical Code

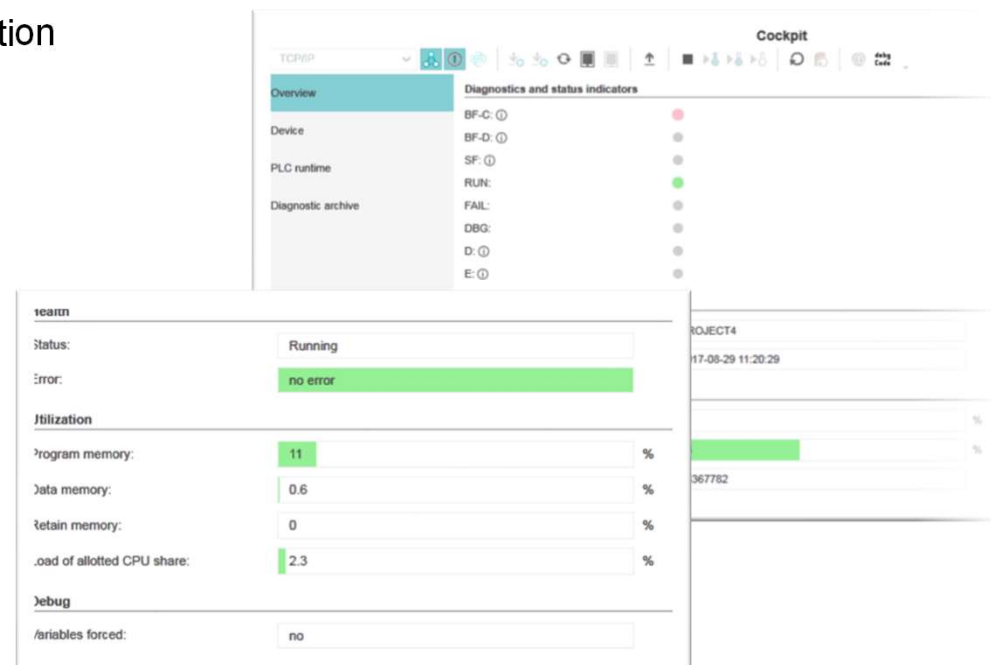
- Overview windows for graphical code editors
  - Switch off and on by button
  - Zoom in and out in overview window






## Commissioning and Troubleshooting

- Central Cockpit with application information
  - Send and control the application
  - Get controller status
  - Get application status
  - Diagnostic archive
- Logic analyzer
- Watch windows
- Breakpoints / single step
- Online debugging in libraries
- Instance / Function debugging
- Execution value









## Network Configuration

- Local bus configuration of controller
  - Configuration with RolePicker
  - Read in connected devices
- Profinet IO configuration
  - Complete device catalogue
  - Import devices via GSDML standard
  - Discover and connect online devices
  - Read in online devices

LAN-Verbindung 3 Realtek RTL8168D/8111D-Famil... 

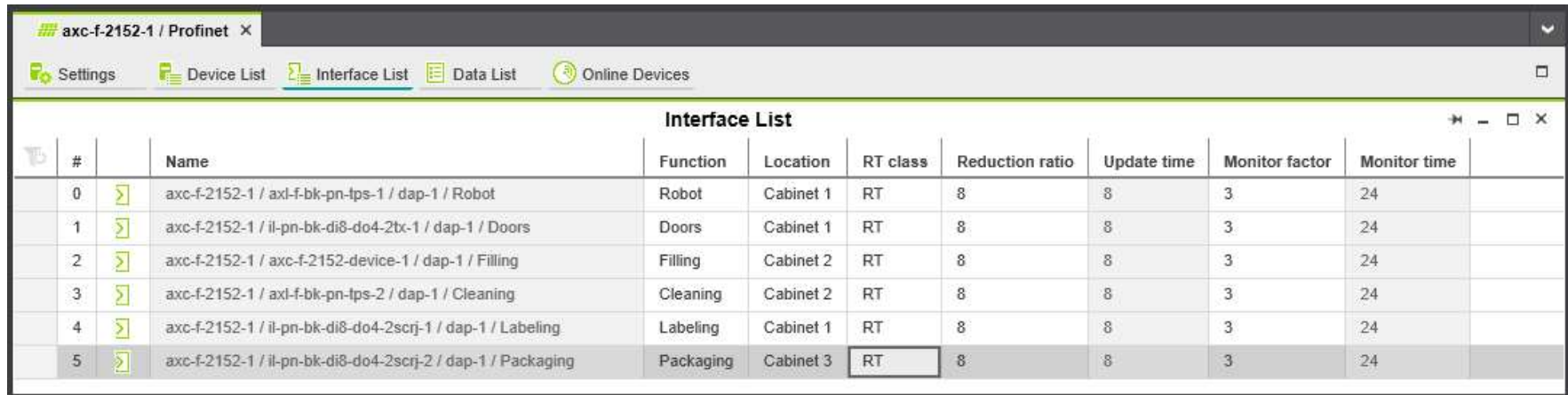
Online Devices

6 entries

Name of station (Project) >	Status	Name of station (Online) <	Function	Location
il-pn-bk-di8-do4-2bx-1		Select online device here		
il-pn-bk-di8-do4-2scrj-1		Select online device here		
axl-f-bk-pn-xc-1		Select online device here		
axl-f-bk-pn-tps-1		Select online device here		
axl-f-bk-pn-scrj-1		Select online device here		
axl-f-bk-pn-1		axl-f-bk-pn-1		

# Profinet Configuration

Most important settings are now available in one table and will be improved for further settings

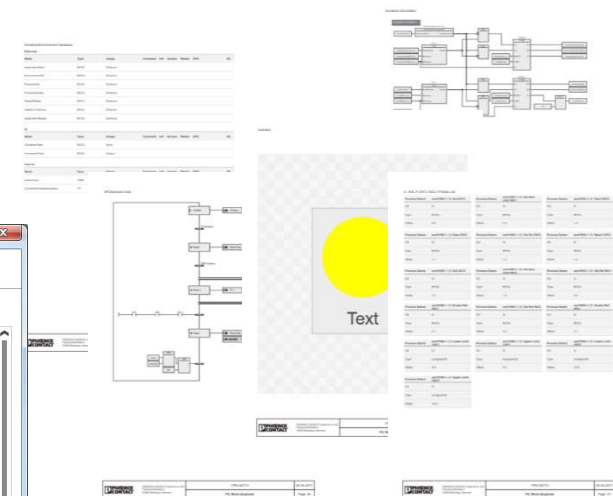
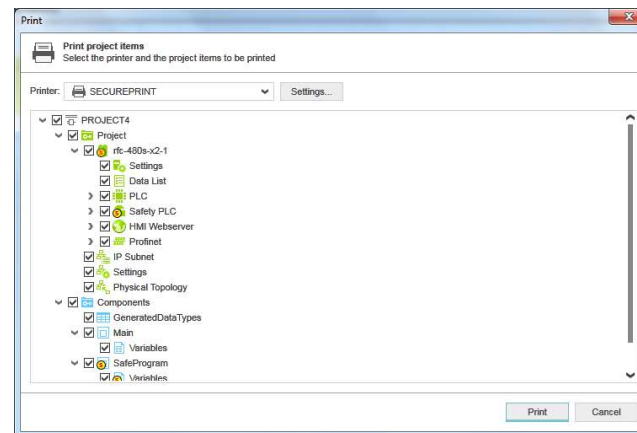


The screenshot shows the 'Interface List' window in the PLCnext Engineer software. The window has a title bar 'axc-f-2152-1 / Profinet' and a menu bar with 'Settings', 'Device List', 'Interface List', 'Data List', and 'Online Devices'. The 'Interface List' table contains the following data:

#	Name	Function	Location	RT class	Reduction ratio	Update time	Monitor factor	Monitor time
0	axc-f-2152-1 / axi-f-bk-pn-lps-1 / dap-1 / Robot	Robot	Cabinet 1	RT	8	8	3	24
1	axc-f-2152-1 / il-pn-bk-di8-do4-2bx-1 / dap-1 / Doors	Doors	Cabinet 1	RT	8	8	3	24
2	axc-f-2152-1 / axc-f-2152-device-1 / dap-1 / Filling	Filling	Cabinet 2	RT	8	8	3	24
3	axc-f-2152-1 / axi-f-bk-pn-lps-2 / dap-1 / Cleaning	Cleaning	Cabinet 2	RT	8	8	3	24
4	axc-f-2152-1 / il-pn-bk-di8-do4-2scrj-1 / dap-1 / Labeling	Labeling	Cabinet 1	RT	8	8	3	24
5	axc-f-2152-1 / il-pn-bk-di8-do4-2scrj-2 / dap-1 / Packaging	Packaging	Cabinet 3	RT	8	8	3	24

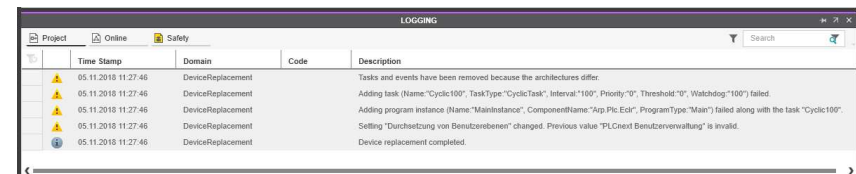
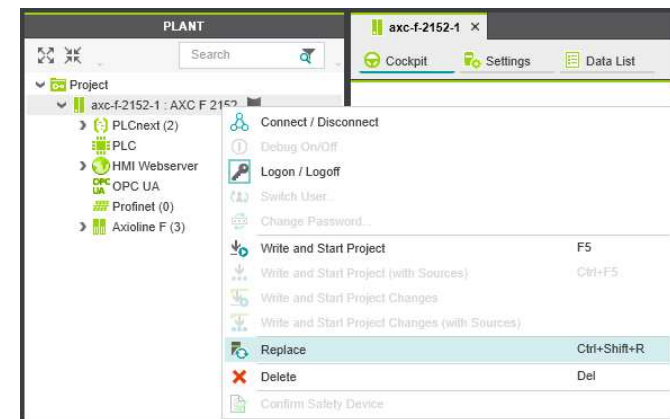
## Project Documentation

- Function / location / reference instead of BMK
- Printout project:
  - Code
  - Data Lists
  - HMI screens and objects
  - Safety application



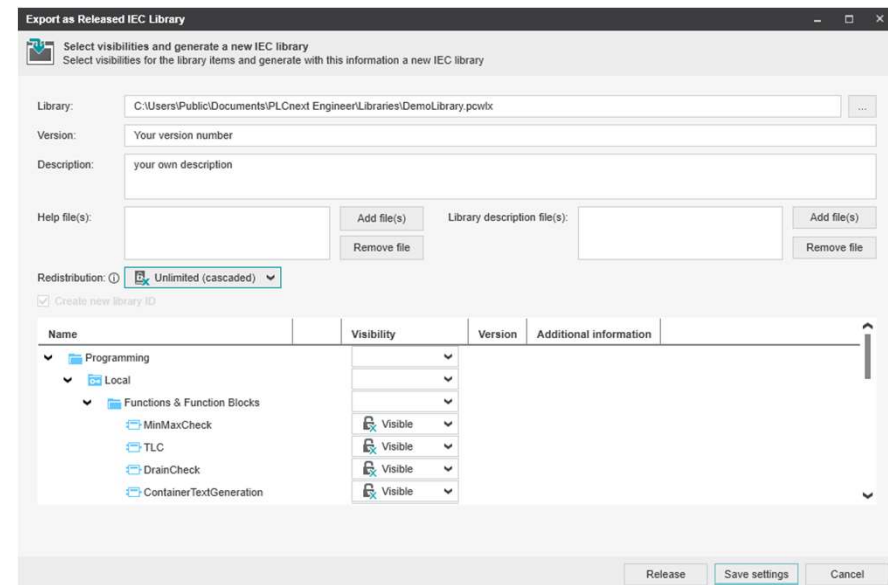
## Device Replacement

- Replace device type at any level
  - Controller
  - Profinet device, module, submodule
  - AxioLine F device,
  - IB Inline device
- Keep data of existing object
  - Subsystem
  - Process data connections,
  - Function & Location,
  - Parameters, Settings, Programs, ESM, HMI, ...



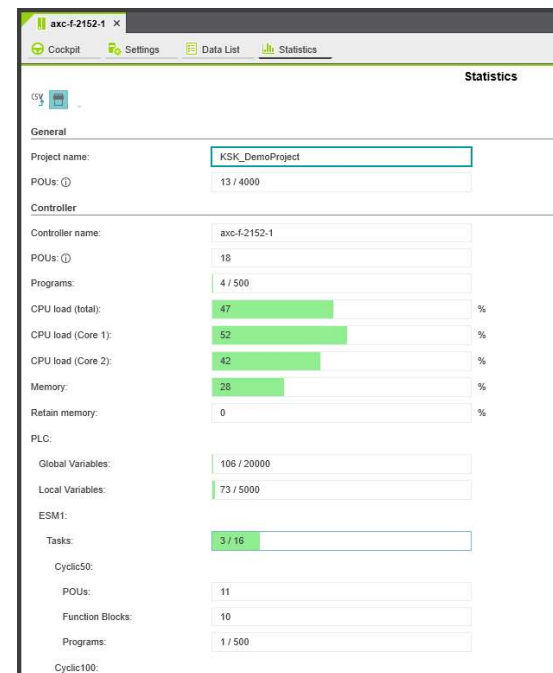
## User Library Management

- One standard library release function for:
  - Standard IEC 61131-3 Code
  - Safety code
  - HMI symbols
  - Devices
- Additional features
  - \*.chm Help integration for user POU's
  - Localized help
  - Library description via tooltip
  - PLCnext component libraries for MultiTargets



## Project Statistics Page

- First stage of a project statistic:
  - Project limits overview
  - POU usage in detail
  - Check of limits beforehand

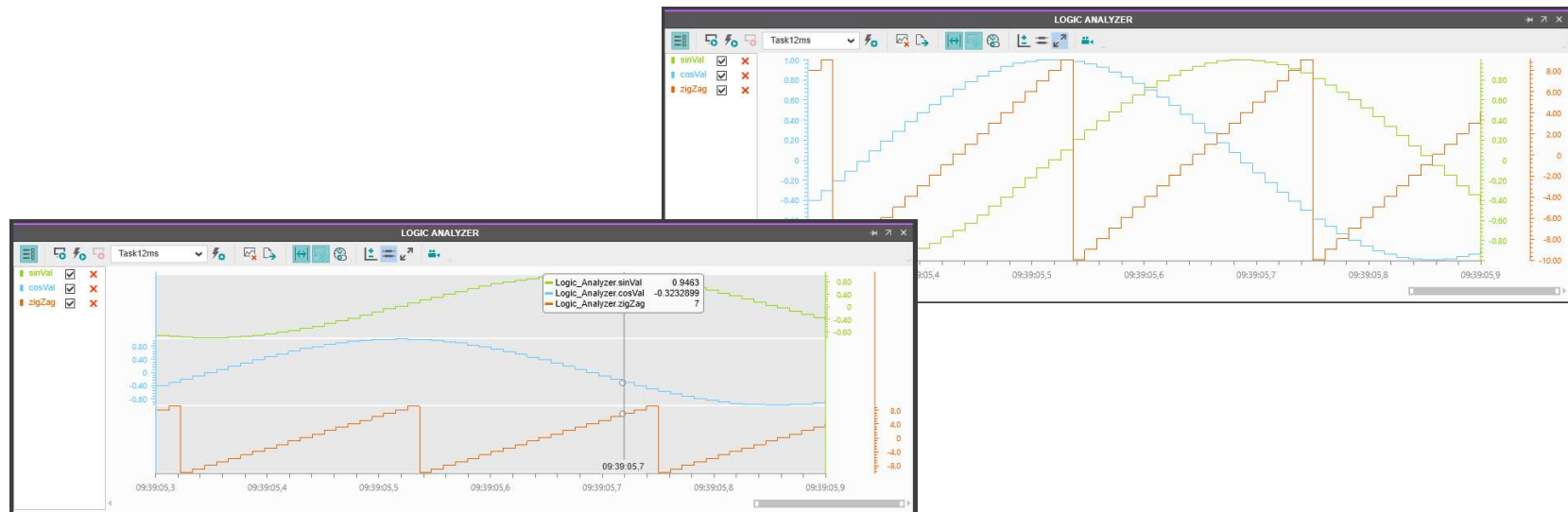




PLCnext Engineer

## Logic Analyzer

The **Logic Analyzer** function of PLCnext Engineer can now also be used with PLCnext Controls.

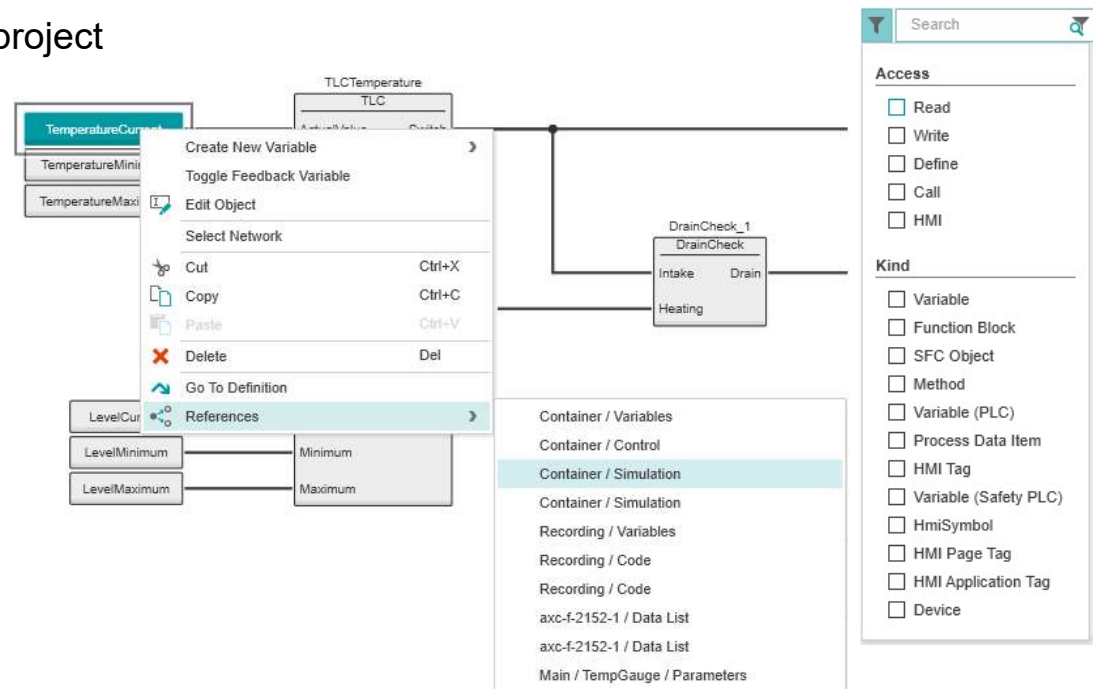


## Extended Qualifiers in IEC 61131-3 Variable Names

- Option to switch on
  - Open the 'Compiler > IEC Compiler Settings' section in the Options dialog, activate the 'Allows extended identifiers' checkbox confirm.
- Rules for using
  - at least contain one alphabetical character.
  - not start with multiple underscores.
  - not start like a constant with <literal\_prefix># or keywords.
  - / \* - + < > are **regular operators** in textual programming languages, separated them by whitespaces.

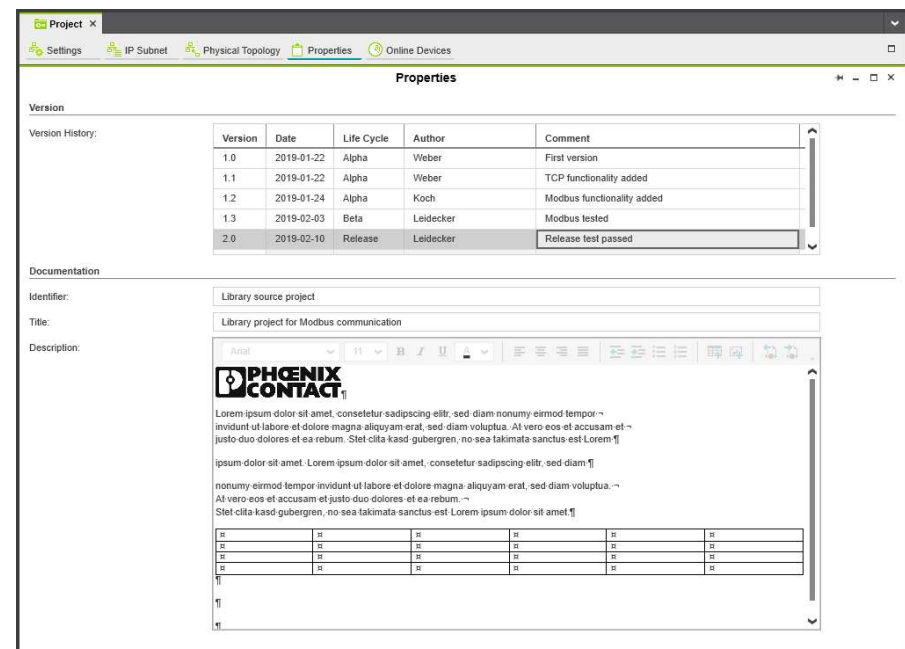
## Find Variable Access faster

- X-Reference windows for the whole project
  - Additional „kind“ attribute
    - Symbol instances
    - Tags
  - Extended filter
- Local X-References at each variable in context menu

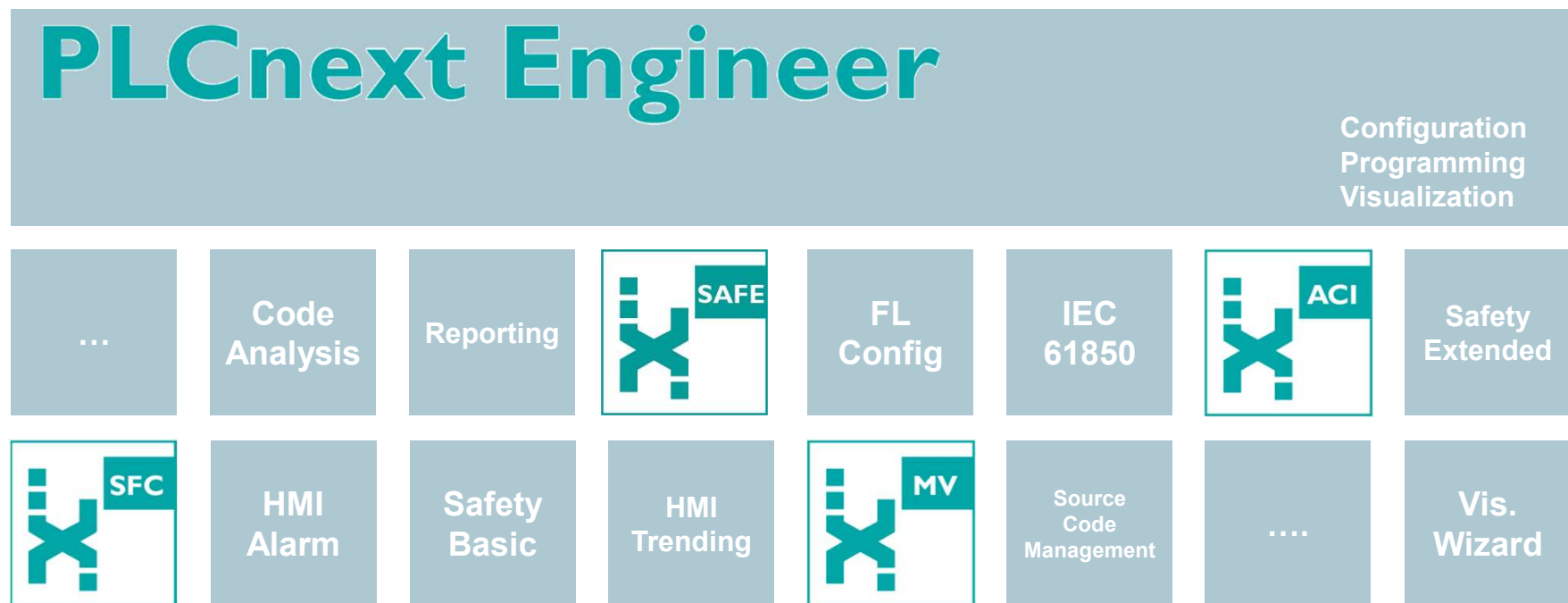


## Documentation

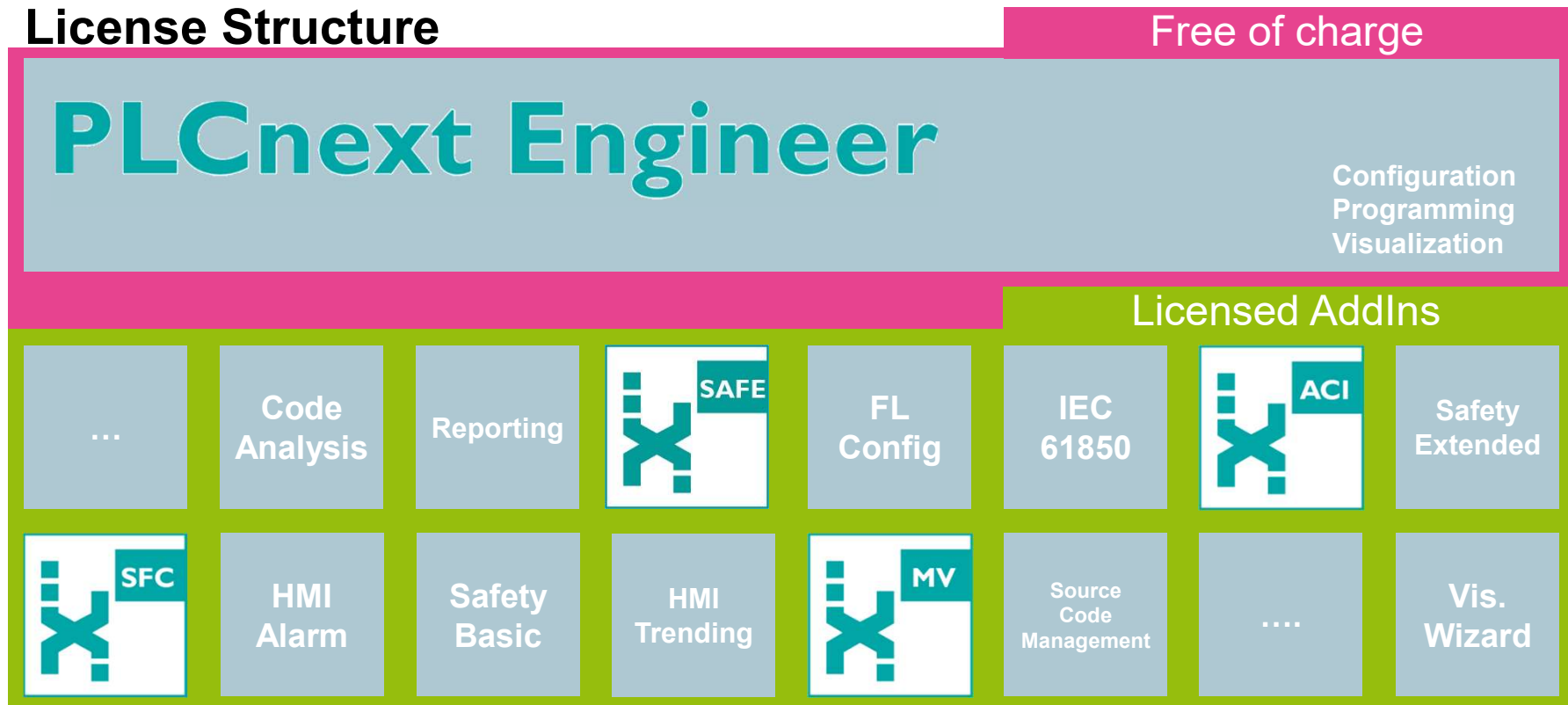
- Property editor for project and HMI symbols
  - Import/Export as HTML
  - Version table
  - Enhanced text properties
  - Insert tables
  - Insert pictures



## License Structure



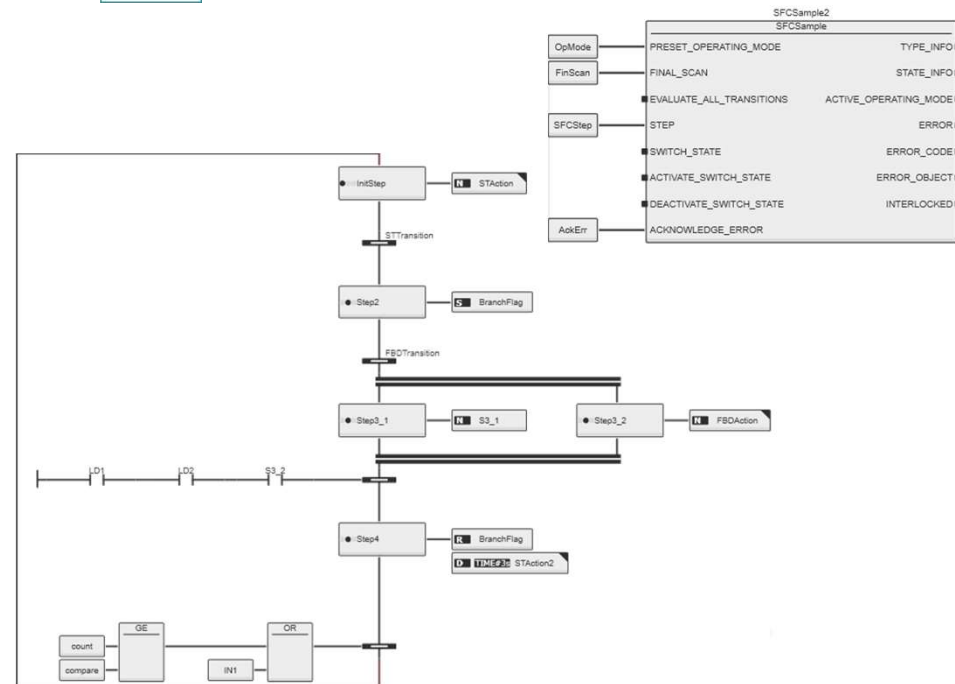
## License Structure



# Sequential Function Chart – SFC



- Represented as a function block
- Automatic generated TypeInfo and StateInfo structure
- Error handling
- Directly connected transitions
- Transitions in separate worksheets (FBD, ST, LD)
- Operation modes:  
Automatic, Manual Step, Halted

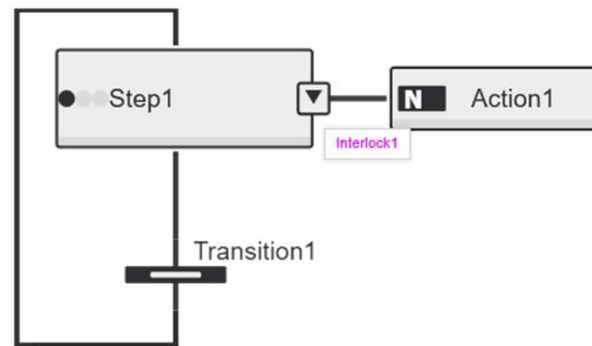
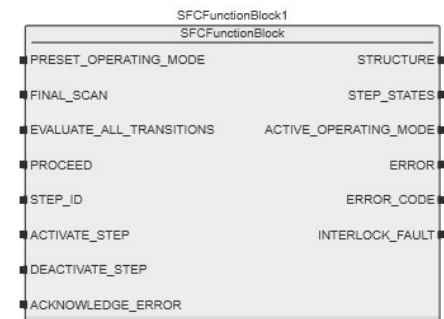
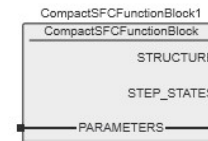




# Sequential Function Chart – SFC



- Compact SFC
- STEP Interlock  
can be used to control the execution of actions associated to a step
- Pre-Execute worksheet
- Post-Execute worksheet



PLCnext Engineer

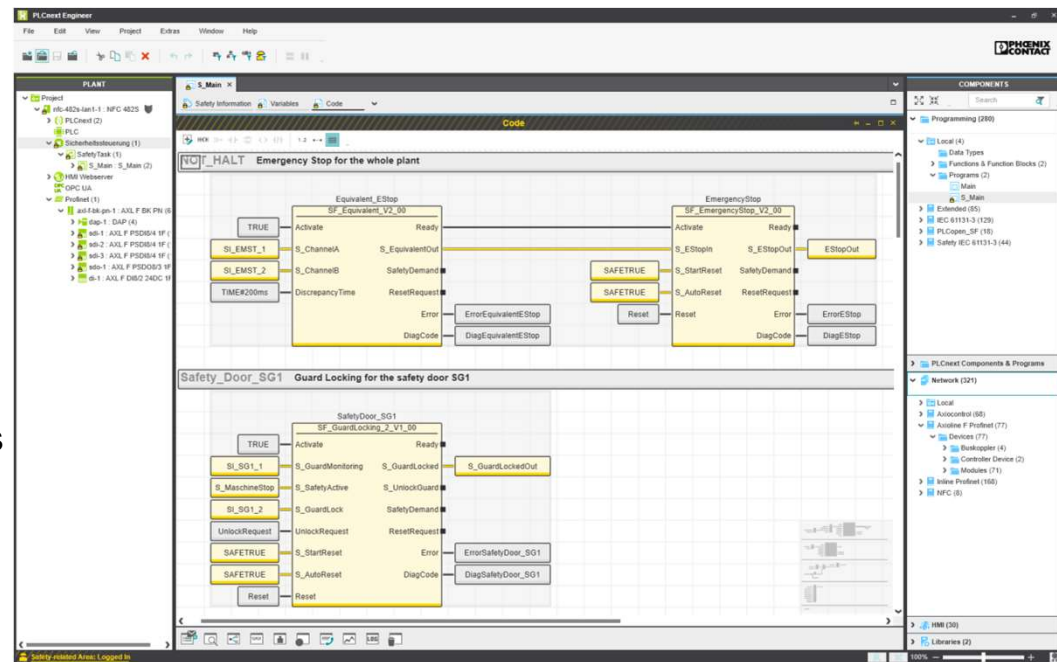
# Functional Safety Programming



PLCnext Technology   
Designed by PHOENIX CONTACT

## Fully integrated Safety Programming

- TÜV Rheinland certified according to IEC 61508
- Editor with common behavior as known from standard FBD or LD editor
- Low Variability Language support
- Network granular CRC checksums
- PROFIsafe Support

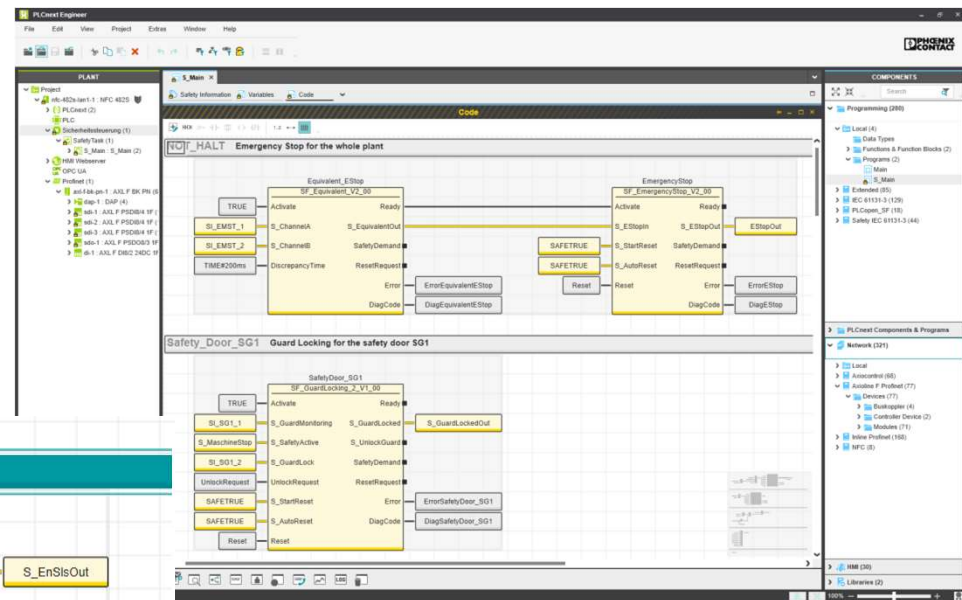
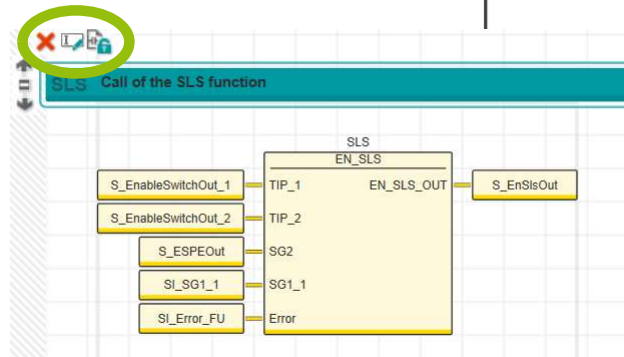


# Functional Safety Programming



## Fully integrated Safety Programming

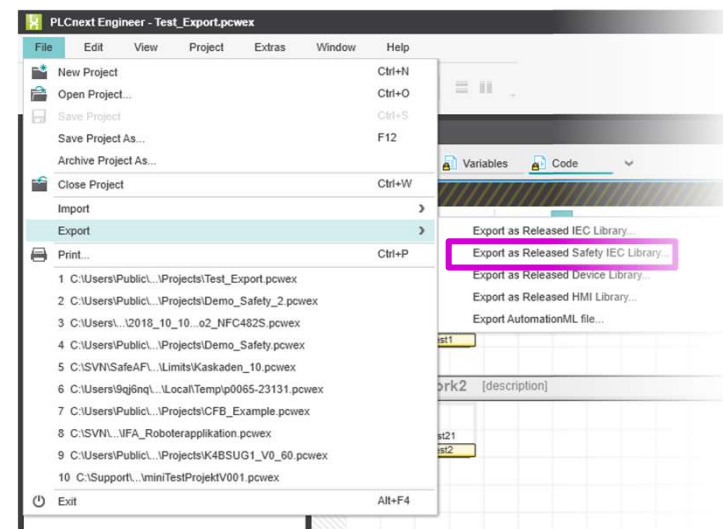
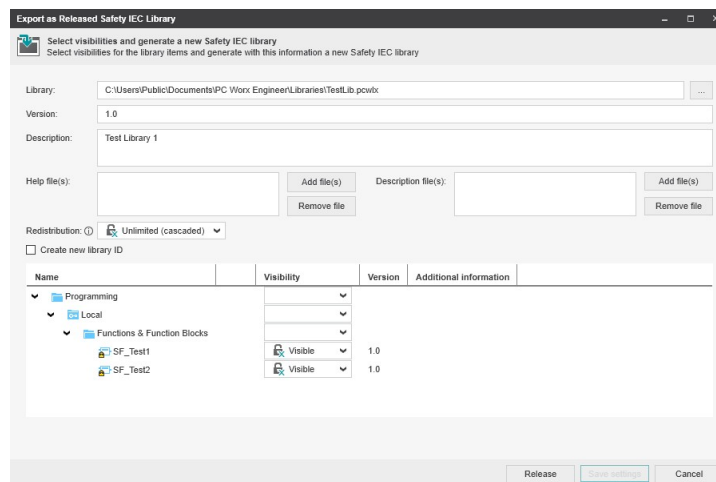
- Individual safety functions can be protected by a verification function
- Background signal path analysis
- Background safe semantic analysis
- Diversely-redundant code generator



# Functional Safety User Libraries



- Export of safety-related function blocks as new user library



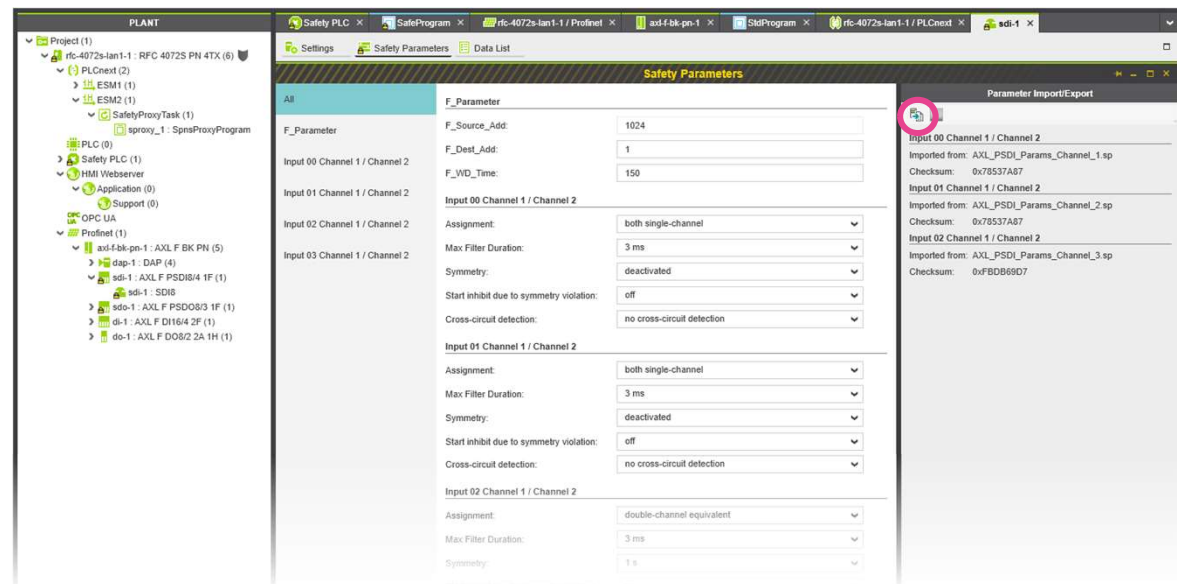
PLCnext Engineer

## Safety Parameterization



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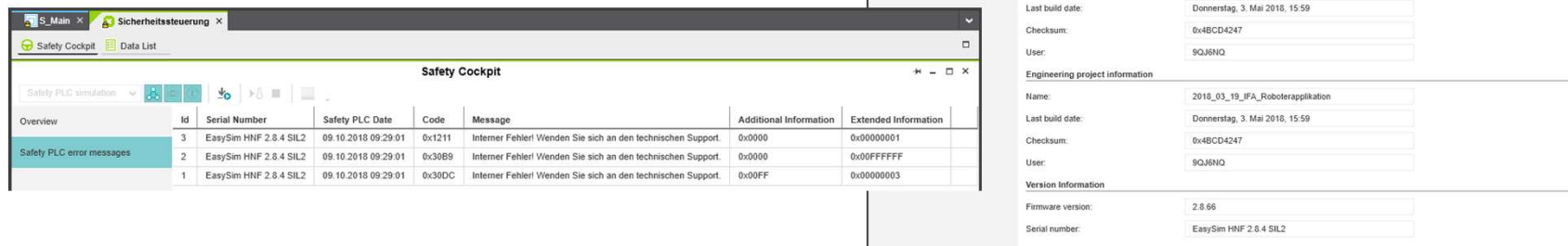
- Parameterization for PROFIsafe devices
- Export / Import
  - Parameter sets of the whole device
  - Parameter sets of a single group



## Safety Cockpit



- Display the status information from the safety-related PLC
- Display the error messages from the safety-related PLC



The screenshot displays the 'Safety Cockpit' interface, which is divided into two main sections: 'Overview' and 'Diagnostics'.

**Overview Section:**

Id	Serial Number	Safety PLC Date	Code	Message	Additional Information	Extended Information
3	EasySim HNF 2.8.4 SIL2	09.10.2018 09:29:01	0x1211	Interner Fehler! Wenden Sie sich an den technischen Support.	0x0000	0x00000001
2	EasySim HNF 2.8.4 SIL2	09.10.2018 09:29:01	0x30B9	Interner Fehler! Wenden Sie sich an den technischen Support.	0x0000	0x00FFFFFF
1	EasySim HNF 2.8.4 SIL2	09.10.2018 09:29:01	0x30DC	Interner Fehler! Wenden Sie sich an den technischen Support.	0x00FF	0x00000003

**Diagnostics Section:**

**Diagnostics and status indicators**

Status: Safe Run

Fault: ☐

Signals forced: ☐

Safety PLC cycle time: 2124 µs

Program execution time: 2 µs

**Utilization**

Program memory: 1 %

Data memory: 1 %

**Safety PLC project information**

Name: 2018\_03\_19\_IFA\_Roboterapplikatio

Last build date: Donnerstag, 3. Mai 2018, 15:59

Checksum: 0x4BCD4247

User: 9QJ8NQ

**Engineering project information**

Name: 2018\_03\_19\_IFA\_Roboterapplikatio

Last build date: Donnerstag, 3. Mai 2018, 15:59

Checksum: 0x4BCD4247

User: 9QJ8NQ

**Version Information**

Firmware version: 2.8.66

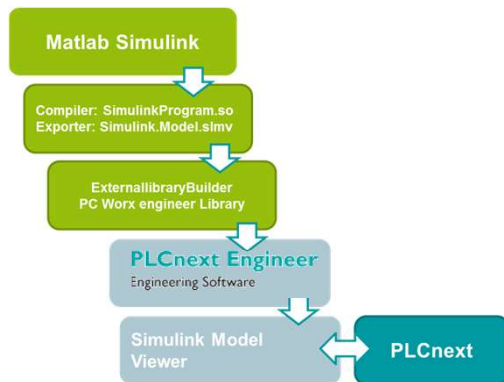
Serial number: EasySim HNF 2.8.4 SIL2

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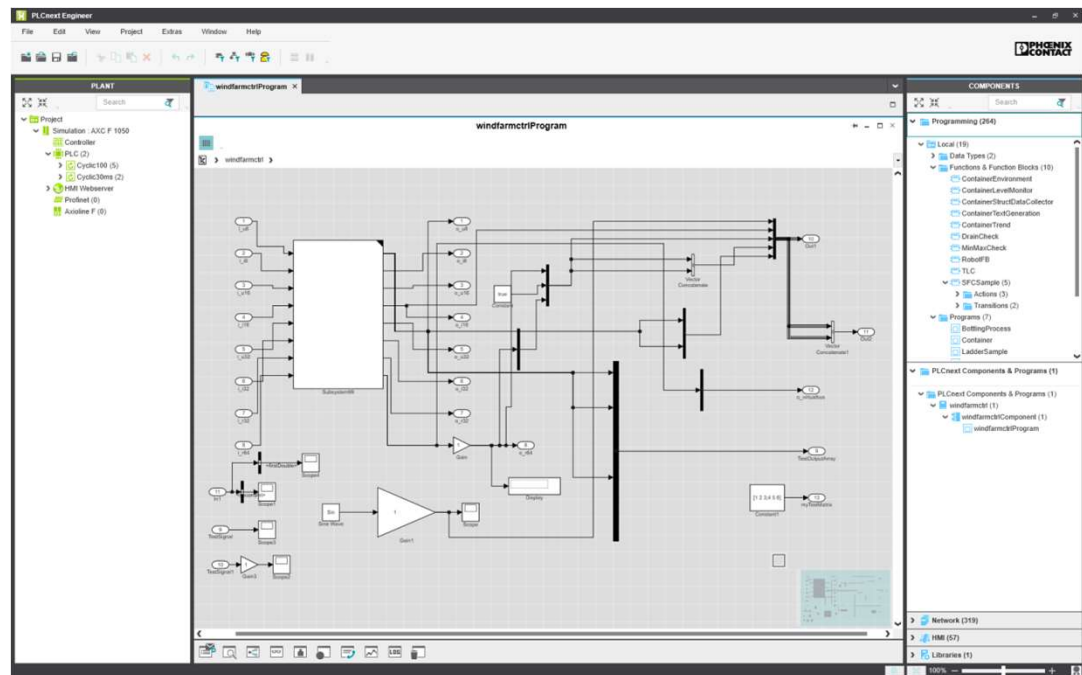
## Viewer for Simulink



- Model export as part of a PLCnext library
- Drill-down into sub-models
- Online-values for In- and Out-Ports



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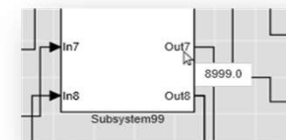
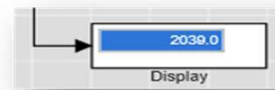
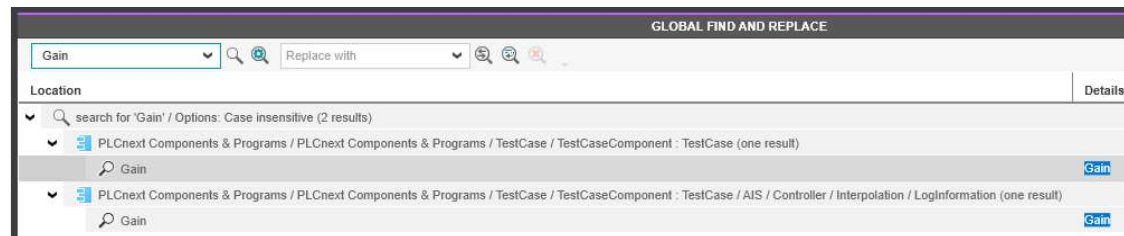
PLCnext Engineer 2019.0

## Viewer for Simulink



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Designed by PHOENIX CONTACT

- Global / Local Search
  - Jumpable objects selected
- Display block with online values
- Overwrite of GDS ports
- Jump to Type Model from Instance
- Online Indication on lines for boolean in /out ports

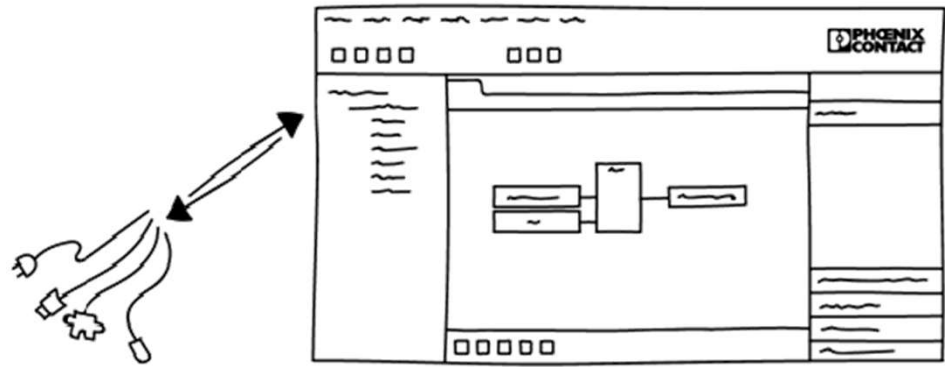


## Application Control Interface (ACI)

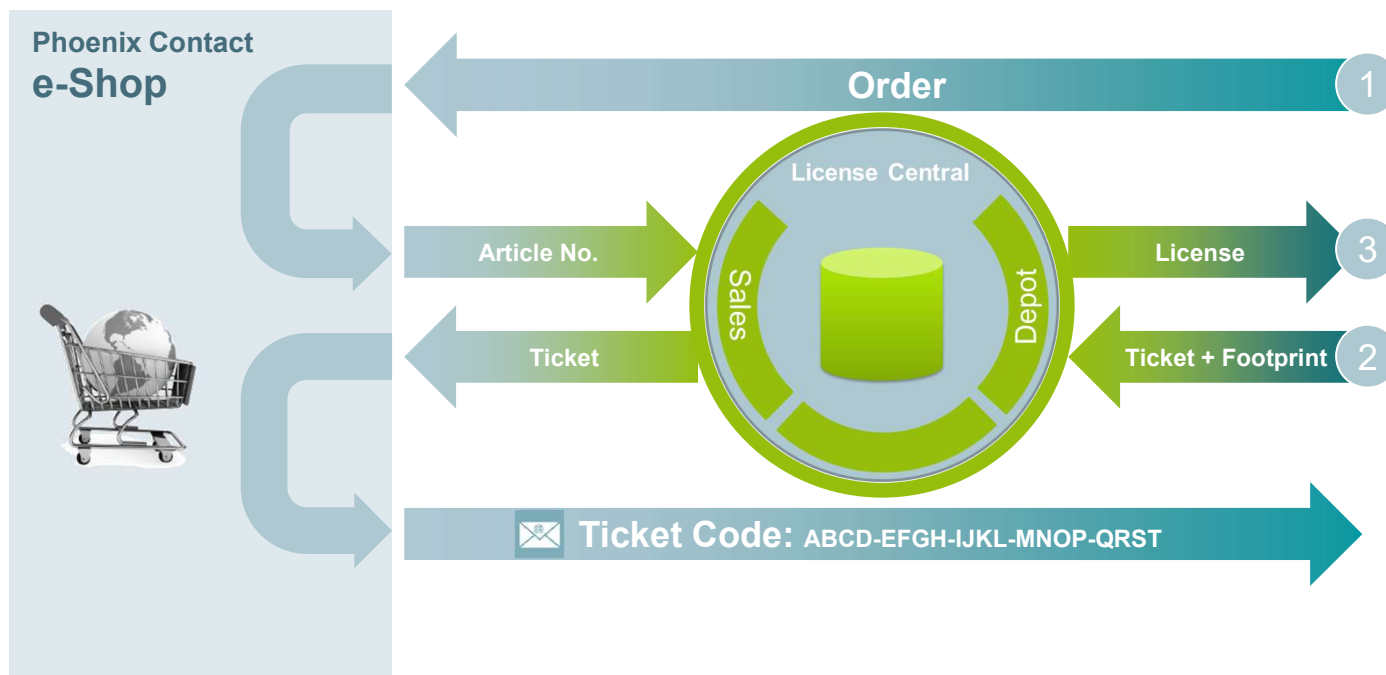


### Remote Control of the software:

- ✓ Application.BuildPath (property)
- ✓ Application.OpenProject (method)
- ✓ Application.ProjectOpened (event)
- ✓ Project.Close (method)
- ✓ Project.Save (method)
- ✓ Project.SaveAs (method)
- ✓ Project.Closed (event)
- ✓ .....

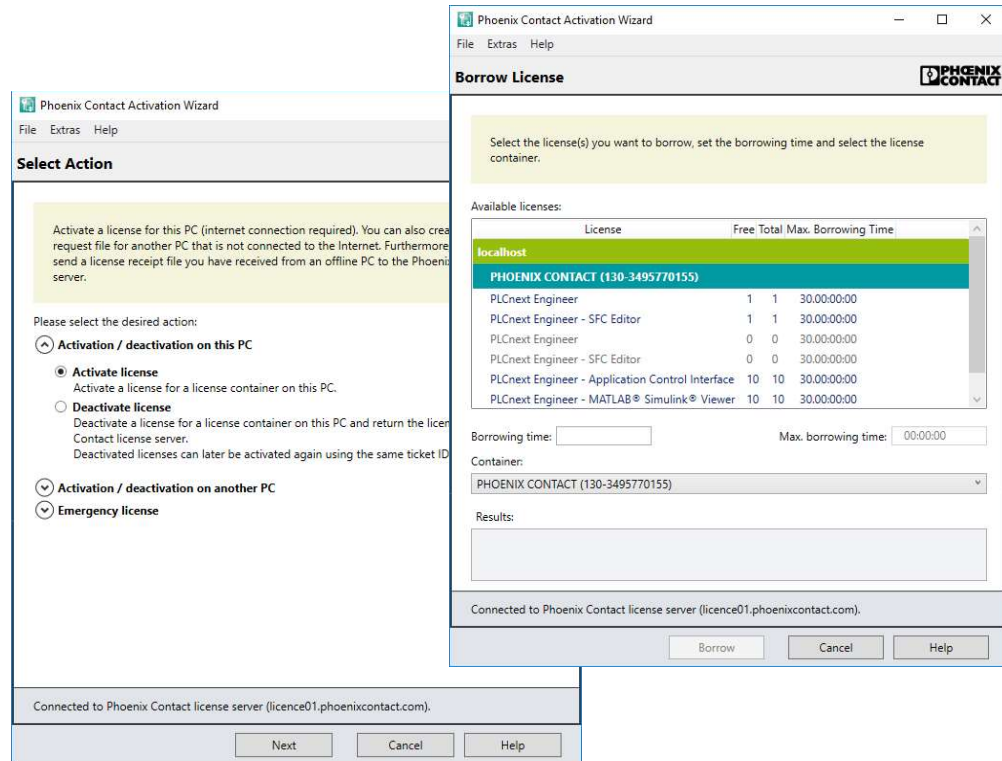


## Software License Distribution



# Activation Wizard

- Version 1.1 HMI 2018
  - Deactivating / Moving licenses
- Version 1.2 SPS 2018
  - Network server for licenses
  - Server list; authentication
  - Borrowing of licenses (can be returned to pool)




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## Electronic Software License on USB A

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Software dongle - ESL STICK USB A - 1080084



CmDongle for saving licenses for various software products

[Generate product PDF](#)

[current article](#)

[Add to product comparison](#) [Add to part list](#) [Add to shopping cart](#)

**Overview** | Technical data | Downloads

### Product Description

Up to 2000 licenses with different license models for various software tools can be stored on the license dongle. Licenses can be used flexibly by moving the dongle from one computer to another.

Use of a license dongle is recommended when using virtual machines. This means that licenses can still be used after virtual machines are copied or even if settings are changed on the virtual machine.

Using the "Activation Wizard" software tool, activate and deactivate licenses on the license dongle. Or use the "Activation Wizard" to migrate licenses from a PC hard drive to a license dongle (or vice versa), for example.

No additional drivers are required to operate the dongle. After it is connected to a computer, it can immediately be used without administrator rights.

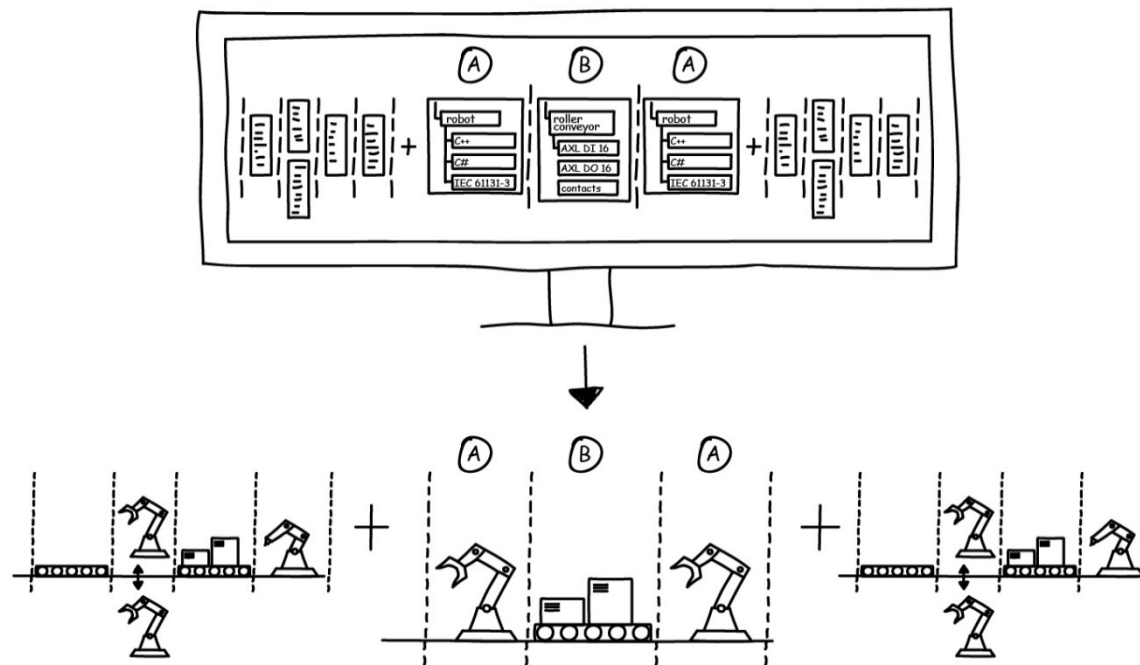
**RoHS**



IF Design Award 2019

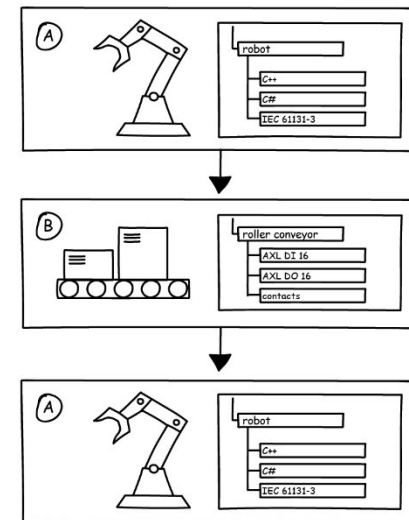
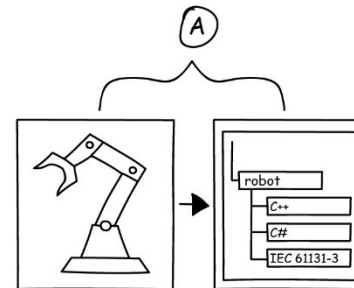


## Automation Modules



## Automation Modules

- **Reusability across all trades**
  - Can contain all items from the application
    - IEC 61131-3 Code
    - Visualization pages
    - Data connections
    - Hardware configuration
    - High language programs
    - Safety function



**Orchestrate instead of programming!**

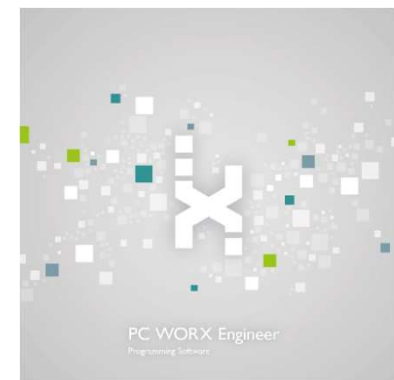
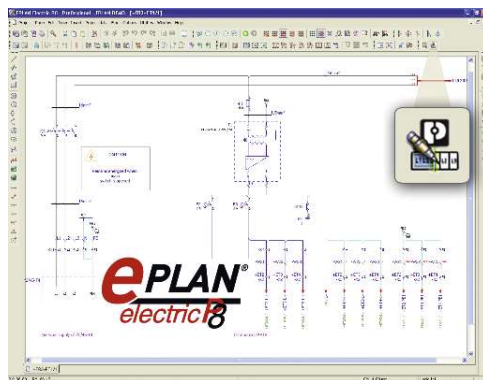
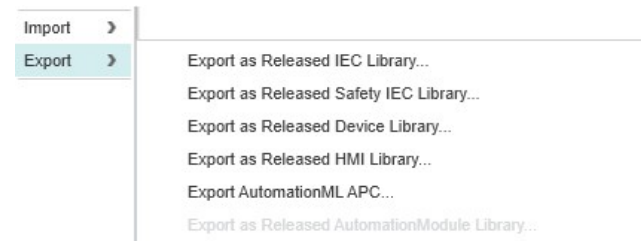
PLCnext Engineer 2019.3

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## AutomationML APC Interface

### Automation Project Configuration

- Reuse identifier (devices, terminal points)
- Create prewired variables
- Import / Export / Synchronization

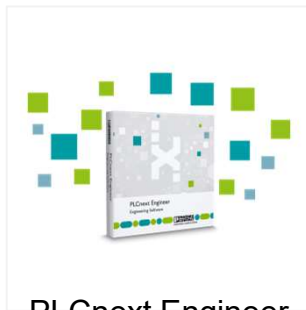




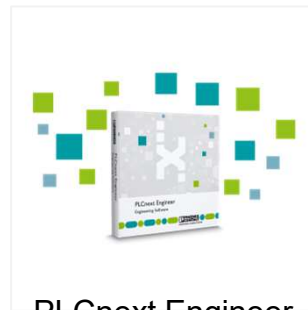
PLCnext Engineer

## Versioning

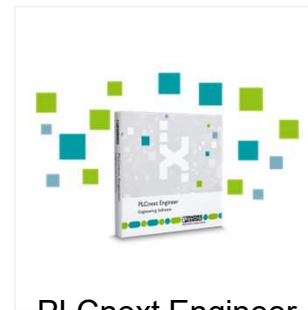
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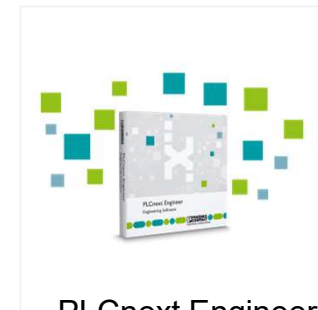
PLCnext Engineer  
2020.0 LTS



PLCnext Engineer  
2020.3



PLCnext Engineer  
2020.6



PLCnext Engineer  
2020.9

January  
2020

March  
2020

June  
2020

September  
2020

PLCnext Engineer

## LTS Version

Wikipedia:

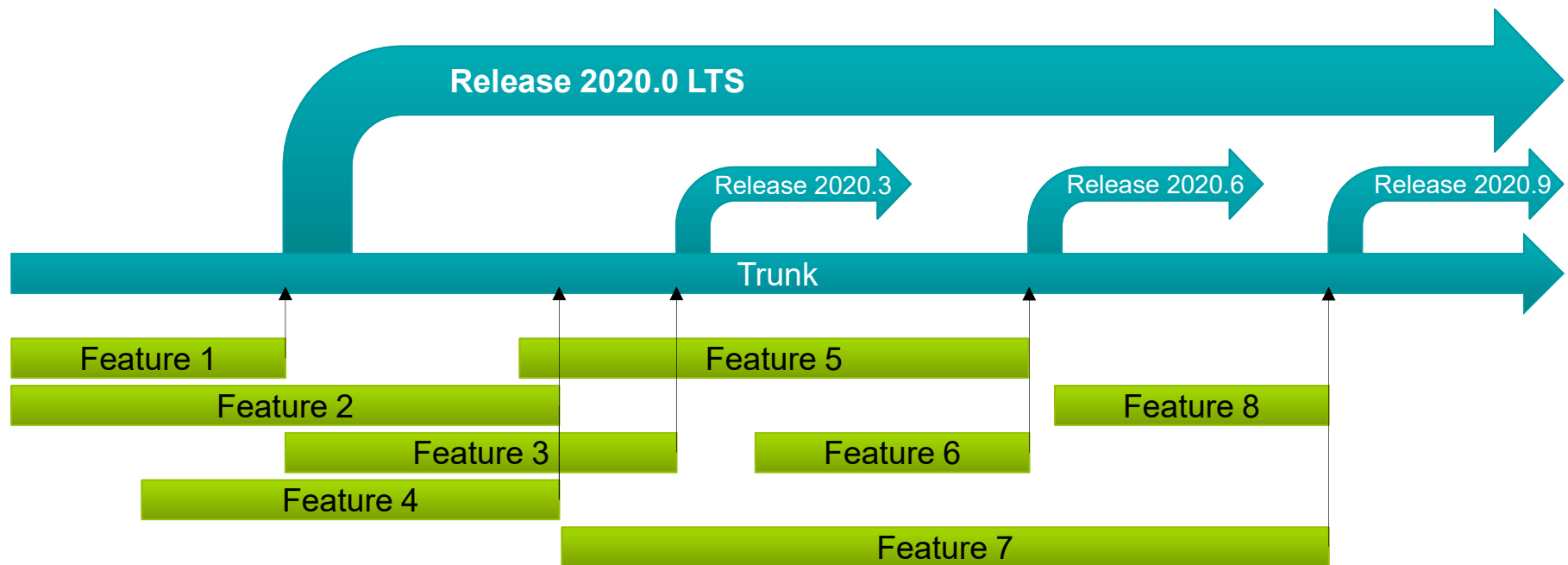
### Long-term support (LTS) ...

... is a product lifecycle management policy in which a stable release of computer software is maintained for a longer period of time than the standard edition. The term is typically reserved for open-source software, where it describes a software edition that is supported for months or years longer than the software's standard edition.

Source 2019/01: [https://en.wikipedia.org/wiki/Long-term\\_support](https://en.wikipedia.org/wiki/Long-term_support)



## Feature-Driven Development



PLCnext Engineer

How to learn

Ways of learning

## PLCnext Engineer

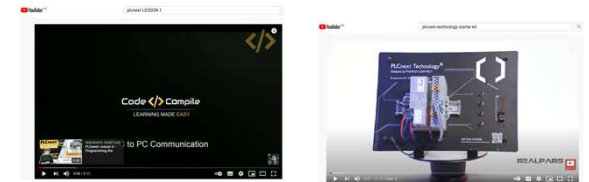
### ■ E-Learning



### ■ Youtube PLCnext Technology



### ■ Learning with Expert Trainers



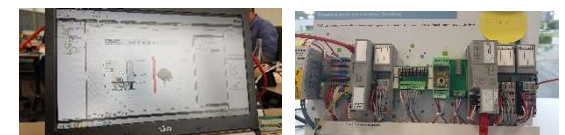
### ■ PXC Webinars



### ■ Local Trainings MEXICO



### ■ PLCnext Trainings in HQ



Different options of learning

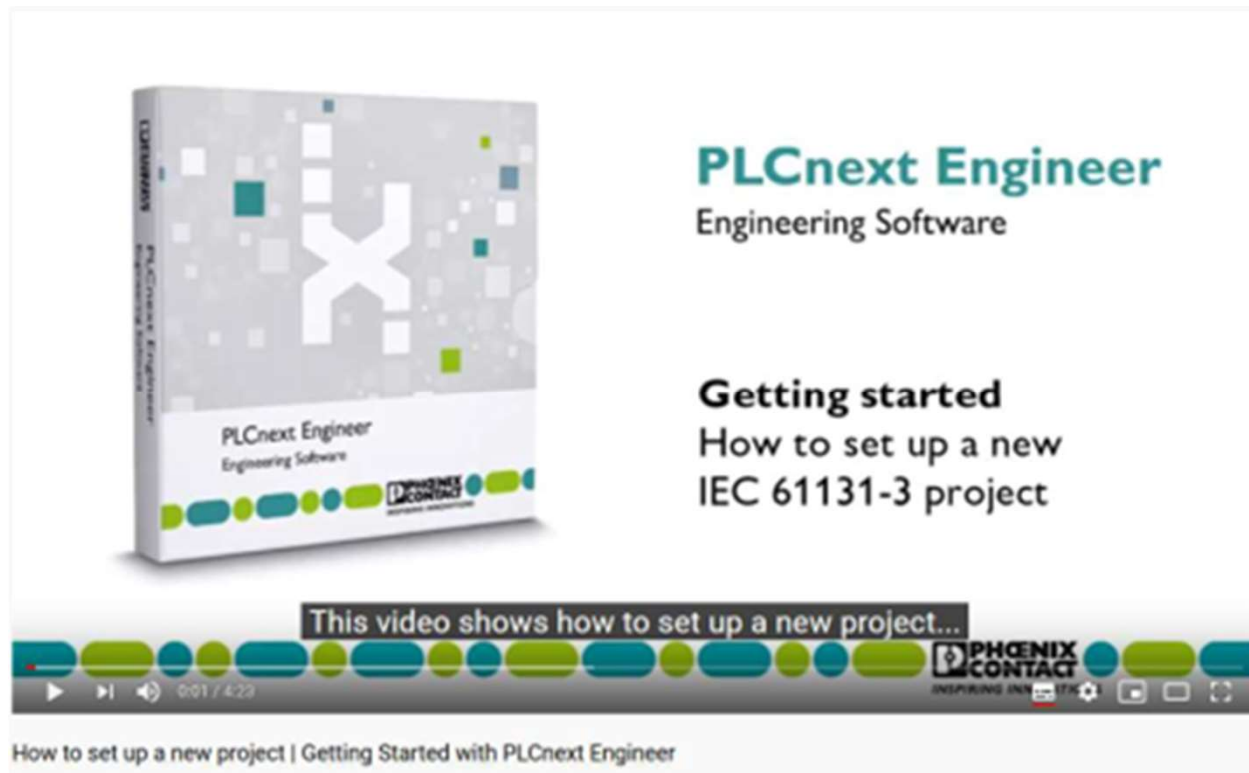


## PLCnext Engineering BASIC

PLCnext Engineer eHMI (EN)



## PLCnext Engineer eHMI

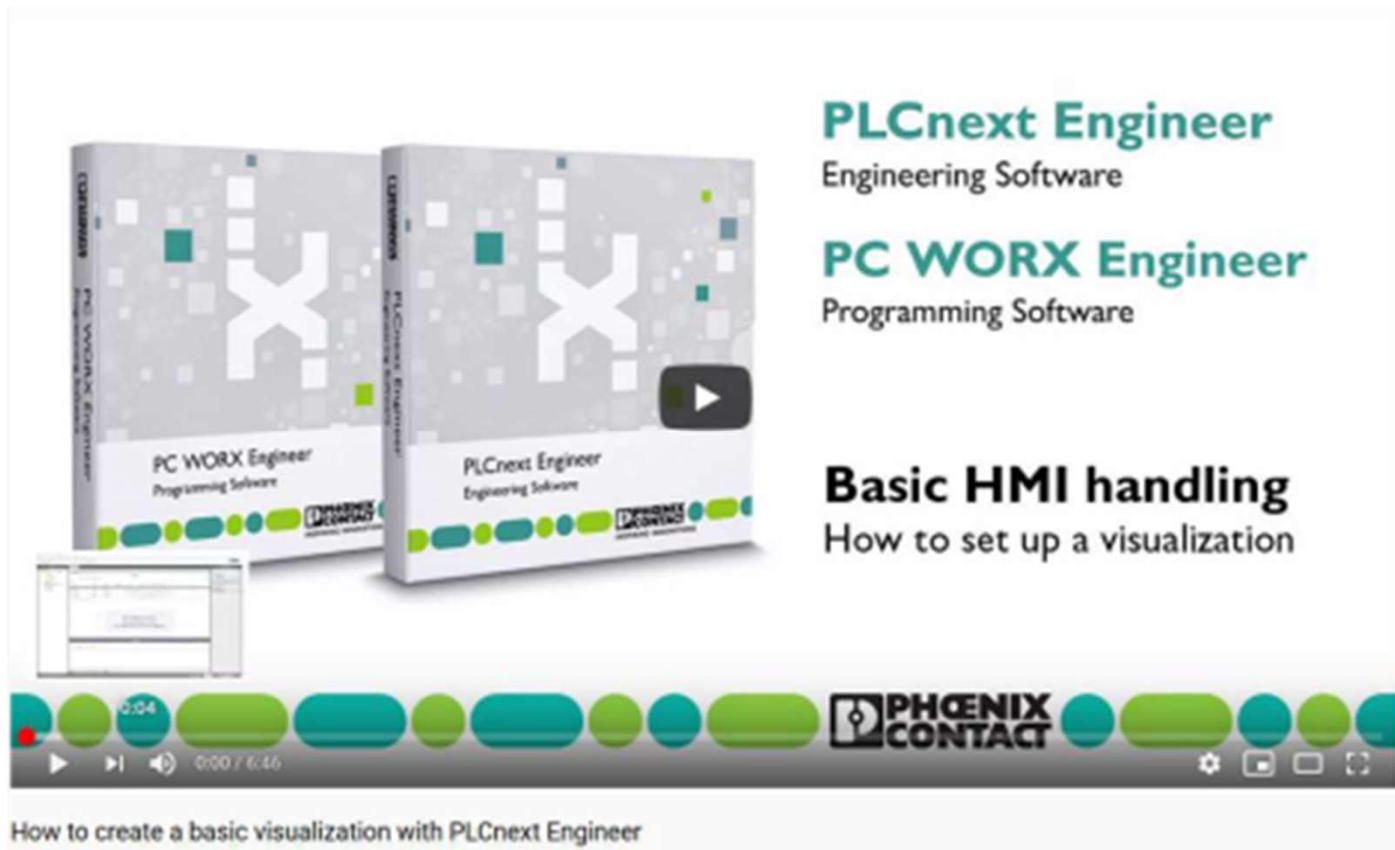


## How to set up a new project | Getting Started with PLCnext Engineer





## How to program with IEC 61131-3 languages| Getting Started with PLCnext Engineer



The image shows a video player interface. On the left, there are two software boxes: 'PC WORX Engineer Programming Software' and 'PLCnext Engineer Engineering Software'. Below the boxes is a small screenshot of a software window. To the right of the boxes, the text reads: 'PLCnext Engineer Engineering Software', 'PC WORX Engineer Programming Software', and 'Basic HMI handling How to set up a visualization'. At the bottom, there is a video player with a progress bar, a play button, and the Phoenix Contact logo. The video title is 'How to create a basic visualization with PLCnext Engineer'.

**PLCnext Engineer**  
Engineering Software

**PC WORX Engineer**  
Programming Software

**Basic HMI handling**  
How to set up a visualization

PHOENIX CONTACT  
INSPIRING INNOVATIONS

How to create a basic visualization with PLCnext Engineer

## Basic HMI Handling

Video Youtube

## PLCnext Engineer Tutorial(s)



Video Youtube

## PLCnext Engineer Tutorial(s)



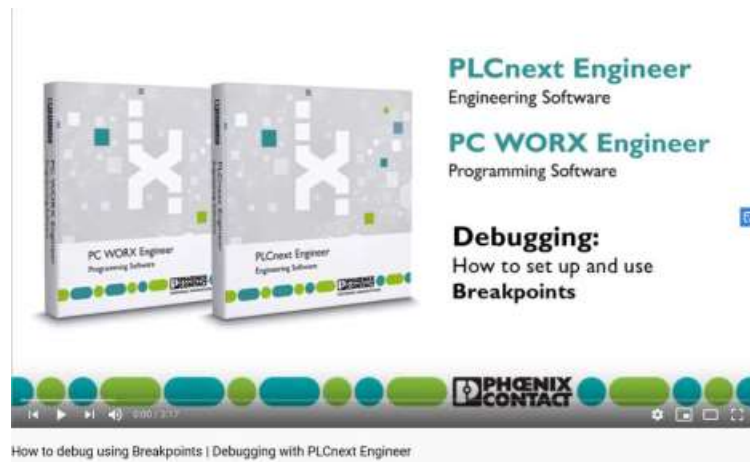
Video Youtube

## PLCnext Engineer Tutorial(s)



Video Youtube

## PLCnext Engineer Tutorial(s)





[1] PLCnext Engineer | Comenzando con PLCNext - Phoenix Contact

Youtube PLCnext Technology



Video Youtube

## PLCnext Engineer Tutorial(s)





Video Youtube

## PLCnext Engineer Tutorial(s)



Video Youtube

## PLCnext Engineer Tutorial(s)



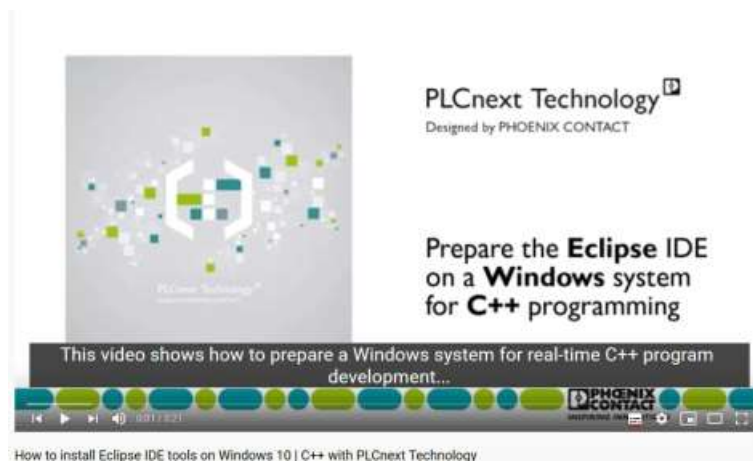
Video Youtube

## PLCnext Engineer Tutorial(s)



Video Youtube

## PLCnext Engineer Tutorial(s)



Video Youtube

## PLCnext Engineer Tutorial(s)



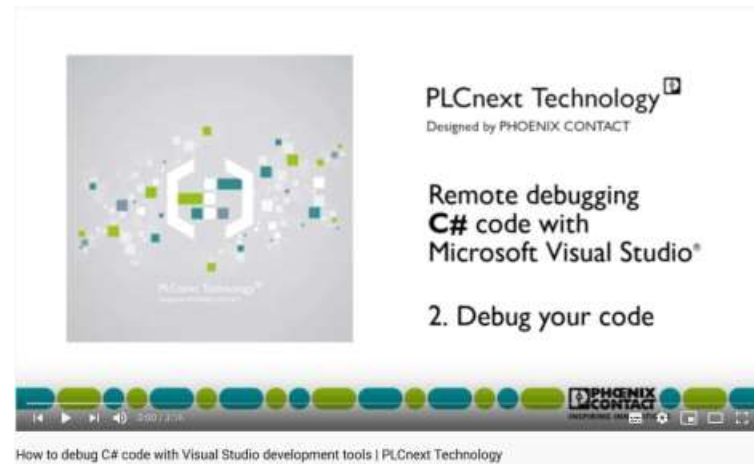
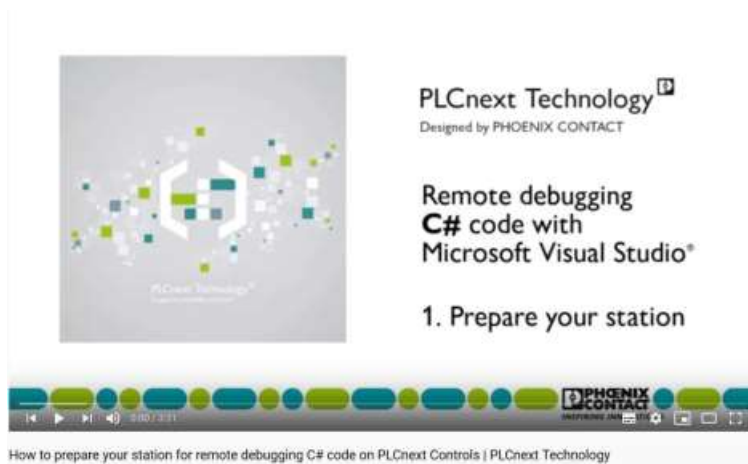
Video Youtube

## PLCnext Engineer Tutorial(s)




Video Youtube

## PLCnext Engineer Tutorial(s)



Video Youtube

## PLCnext Engineer Tutorial(s)



PC WORX  
Target for  
Simulink

PC WORX  
PLC Programming

PHOENIX  
CONTACT

PLCnext Technology<sup>TM</sup>  
Designed by PHOENIX CONTACT

How to prepare  
a **Simulink®** model  
for a specific PLC

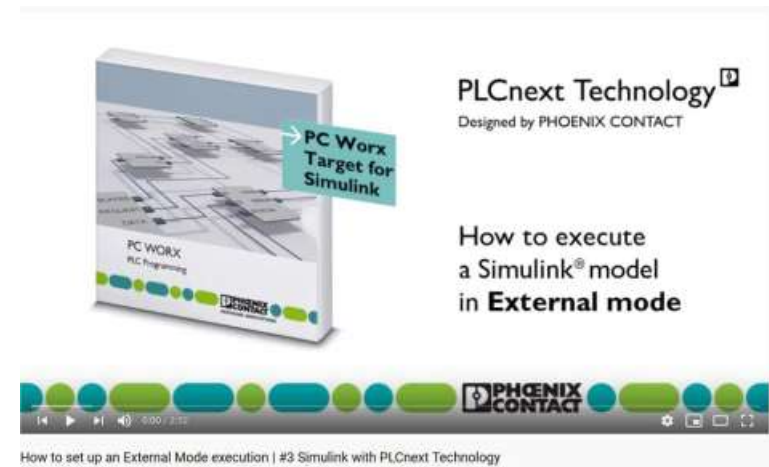
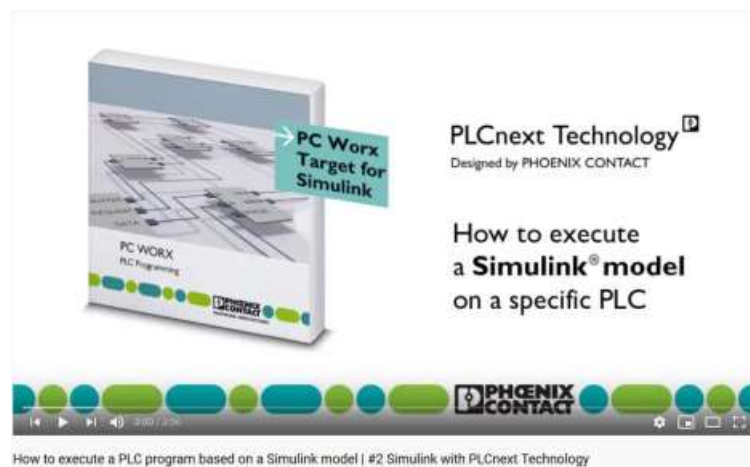
PHOENIX  
CONTACT

How to prepare a Simulink model for PLC programming | #1 Simulink with PLCnext Technology



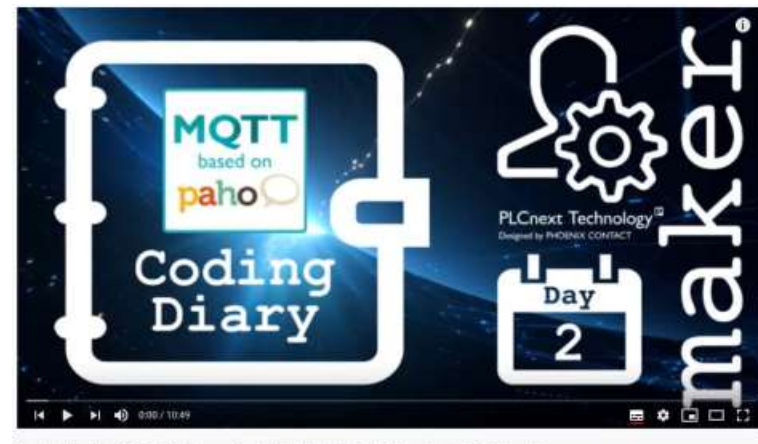
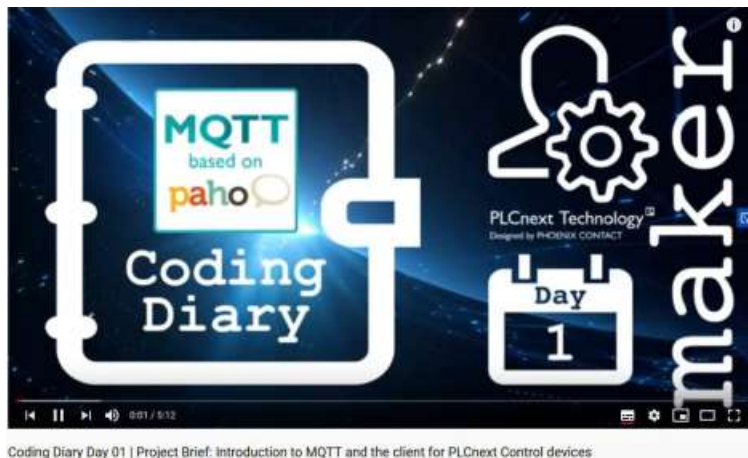
Video Youtube

## PLCnext Engineer Tutorial(s)



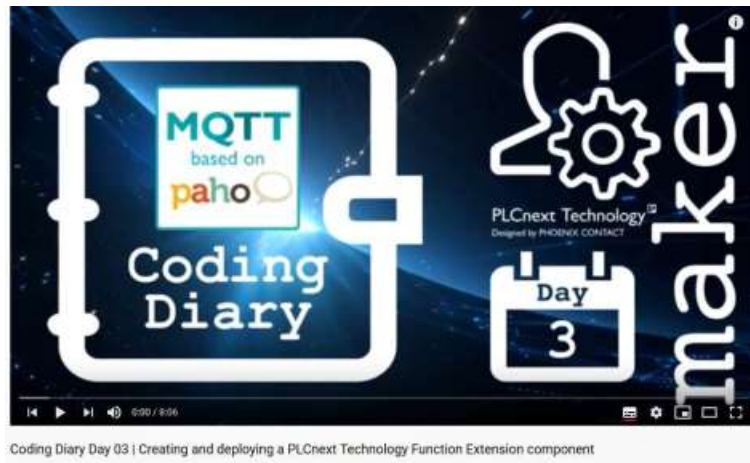
Video Youtube

## PLCnext Engineer Tutorial(s)



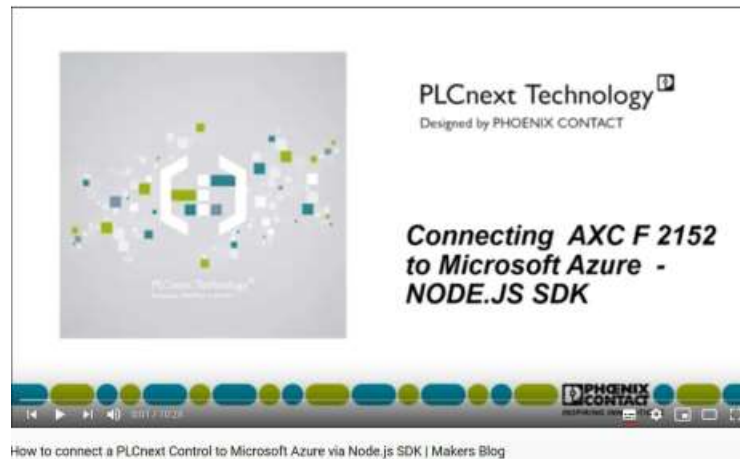
Video Youtube

## PLCnext Engineer Tutorial(s)



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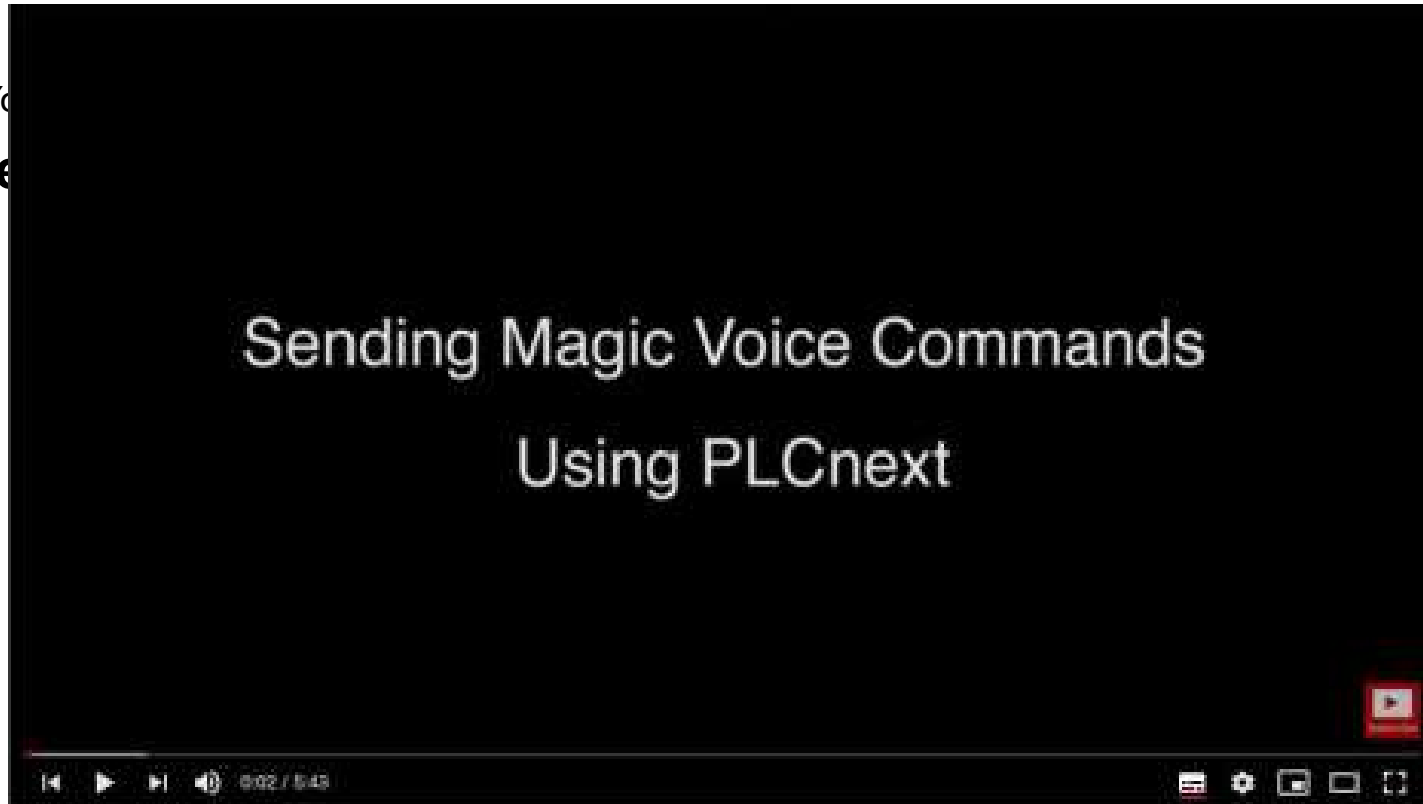
Video Youtube

## PLCnext Engineer Tutorial(s)



Video You

PLCnext



#RealPics #PLCnext #SPSShow2019








Sending Magic Voice Commands Using PLCnext



Ecosystem & PLCnext Store

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## PLCnext Community – Global Exchange & Collaboration

More about PLCnext Technology  <a href="https://plcnextcommunity.com">plcnextcommunity.com</a>	Upload or download apps  <a href="https://plcnextstore.com">plcnextstore.com</a>	Ask a question in the forum  <a href="https://phoe.co/PLCnextForum">phoe.co/PLCnextForum</a>	Watch and learn with tutorials  <a href="https://phoe.co/PLCnextTutorials">phoe.co/PLCnextTutorials</a>
Use or share open source code  <a href="https://github.com/plcnext">github.com/plcnext</a>	Share your experiences on Instagram  <a href="https://www.instagram.com/plcnext">@plcnext</a>	Get in touch on LinkedIn  <a href="https://phoe.co/PLCnextLinkedIn">phoe.co/PLCnextLinkedIn</a>	<a href="#">#PLCnext</a> <a href="#">#IamPLCnext</a>



PLCnext Community

Join and get involved  
[#IamPLCnext](#)

Join and get involved

## PLCnext Community

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More about PLCnext Technology



[plcnextcommunity.com](https://plcnextcommunity.com)

Upload or download apps



[plcnextstore.com](https://plcnextstore.com)

Ask a question in the forum



[phoe.co/PLCnextForum](https://phoe.co/PLCnextForum)

Use or share open source code



[github.com/plcnext](https://github.com/plcnext)

Get in touch on LinkedIn



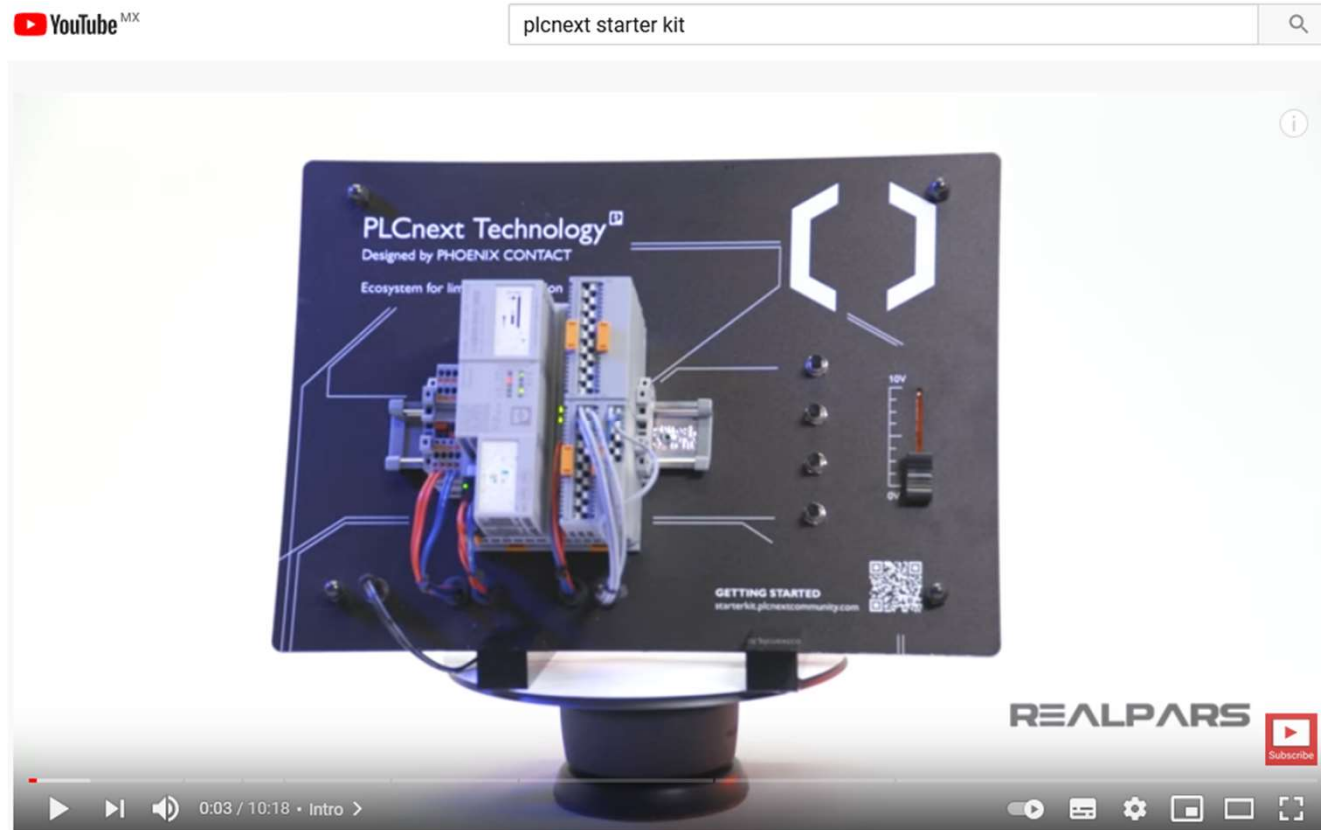
[phoe.co/PLCnextLinkedIn](https://phoe.co/PLCnextLinkedIn)

#PLCnext  
#IamPLCnext



PLCnext Community

Join and get involved  
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## Starterkit Part 1 REALPARS



## Starterkit Part 2 REALPARS



## Starterkit Part 3 REALPARS

PLCnext Engineer

## PLCnext Engineer 2021



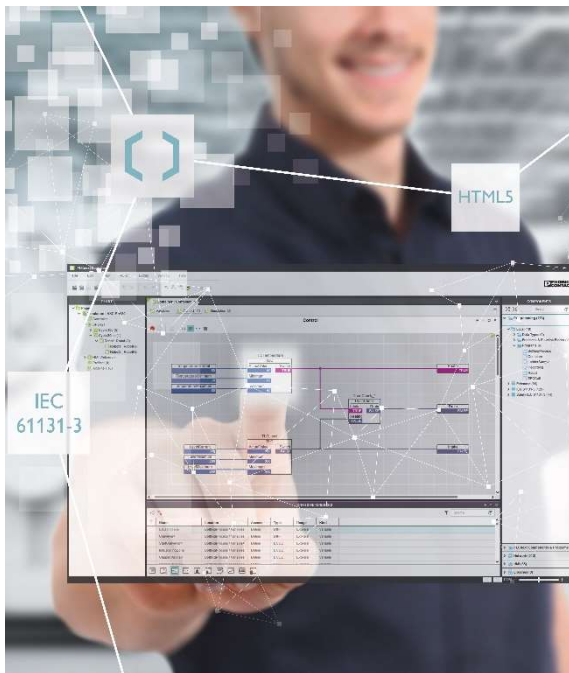
PLCnext Technology   
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# Thank you



Antonio Gordillo / Marketing IMA / [agordillo@phoenixcontact.com.mx](mailto:agordillo@phoenixcontact.com.mx)

## PLCnext Engineer



# Thank you