Welcome

PC WORX

Tipos de software, equipos y ejemplos

Antonio Gordillo IMA 24 / JUN / 2021

PHOENIX CONTACT
INSPIRING INNOVATIONS

Webinar Software y Tecnologías

Agenda

- PC WORX
- Tipos de Software
- Equipos
- Ejemplos

PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX

PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX

Worldwide consistent programming – IEC 61131

Integrated software-tools

Fast and flexible programming

- Additional standard libraries

Extensible

- User functions
- Function blocks or libraries

Easy handling

- Intuitive user interface
- Clear structures

One software for every engineering step

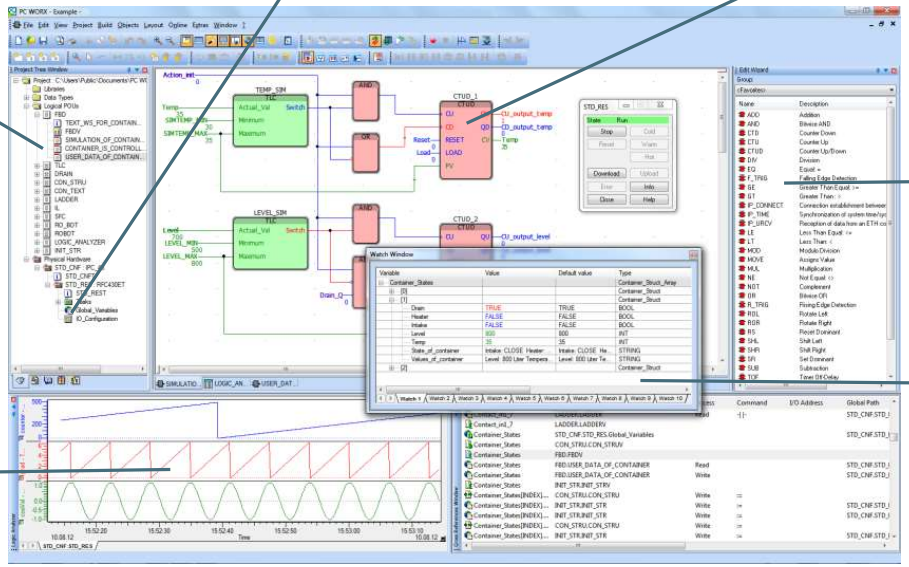
PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – IEC 61131

All programming languages

PLC networks

Free grafical editor



Editor-assistent

Watch windows

Cycle consistent logic analyzer

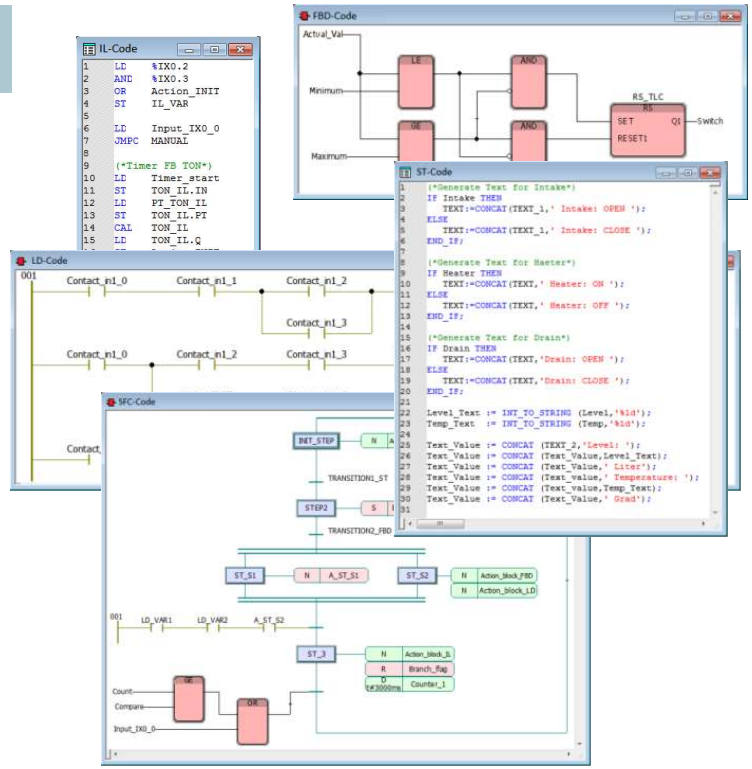
One programming system for all controllers

PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – IEC 61131

Fast start with project templates

- Ladder logic (LD)
- Fixed format ladder logic (FFLD)
- Function block diagram (FBD)
- Instruction list (IL)
- Structured text (ST)
- Sequential function chart (SFC)



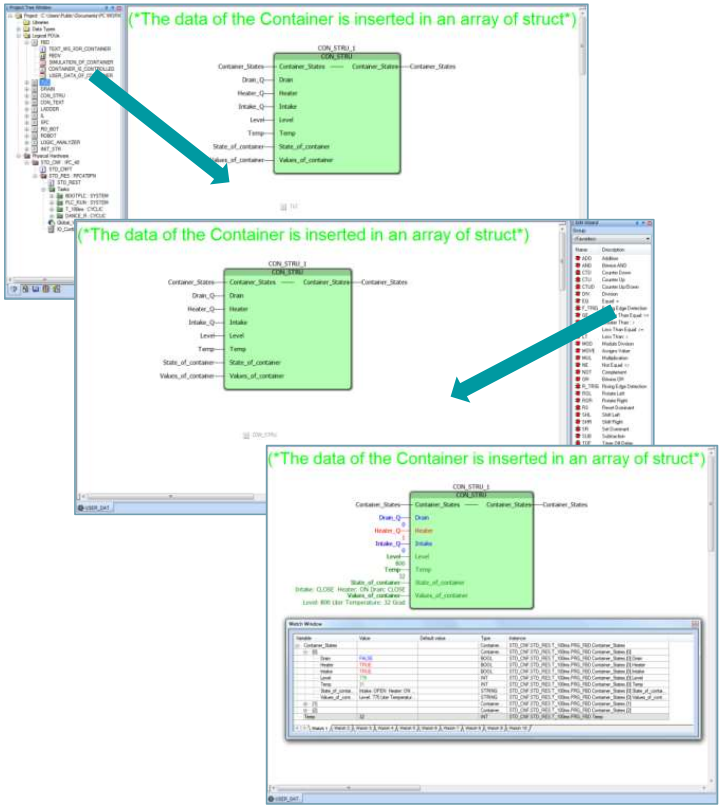
Easy handling

PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – IEC 61131

Consistent Drag & Drop

- Project tree
- Editor assistant
- Variable editor
- Watch windows
- Logic analyzer

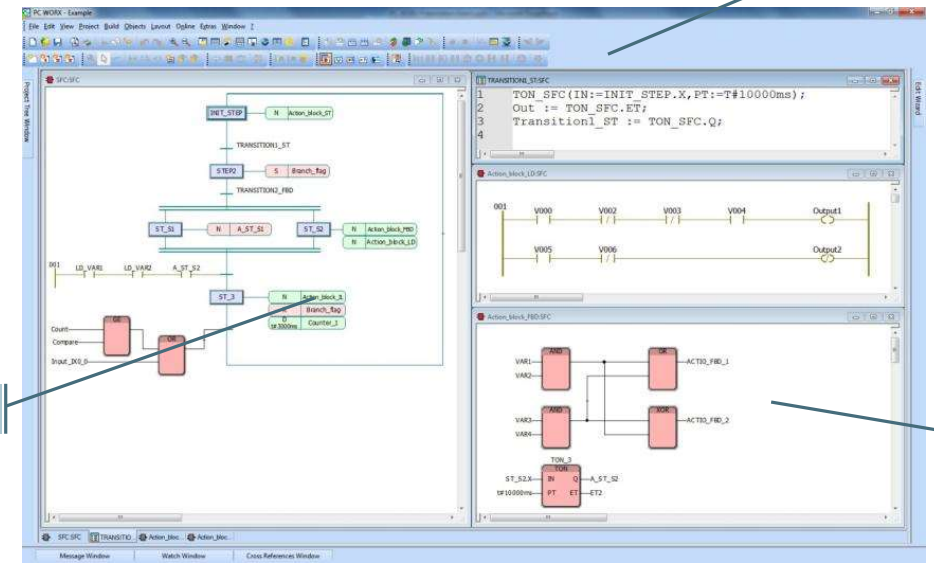


Easy programming

PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – IEC 61131 editors

IntelliSense



Auto-Routing

Implicit addressing

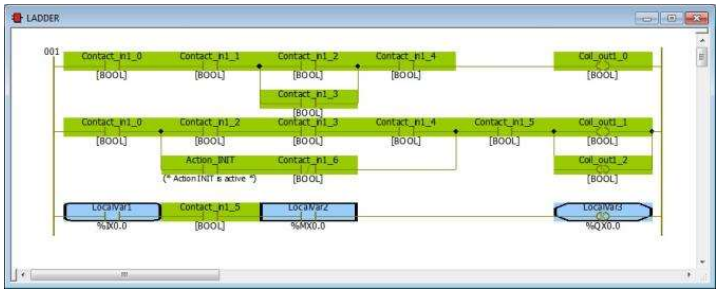
Free graphical or network based programming

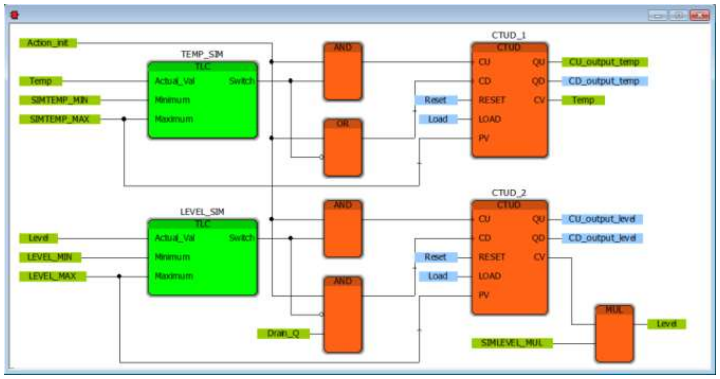
PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – Graphical programming

LD and FFLD

- Free graphical or network based programming
- ST-statements possible (IF, THEN, ELSE)
- LD and FFLD objects mixable
- Auto-Routing
- Easy keyboard handling – programming without mouse



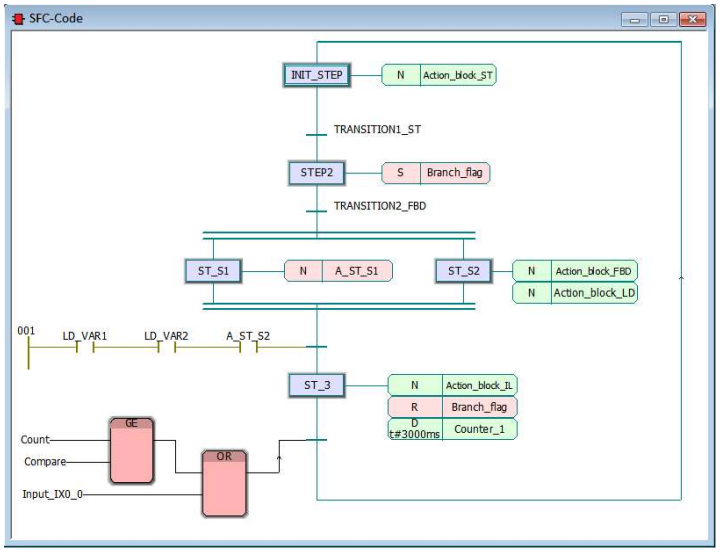


PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – Graphical programming

SFC

- Automatic insert and placing of objects
- Actions and transitions in all base IEC 61131-3 languages
- Auto routing
- Easy keyboard handling – programming without mouse

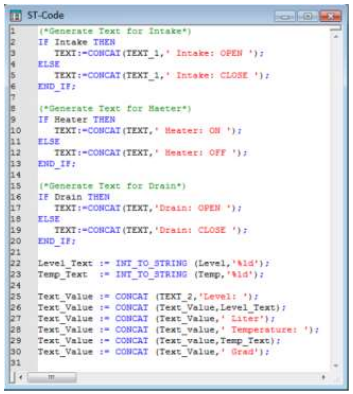


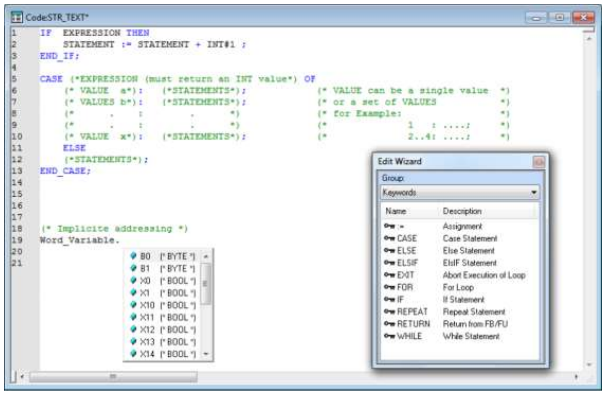
PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – Network based programming

IL and ST

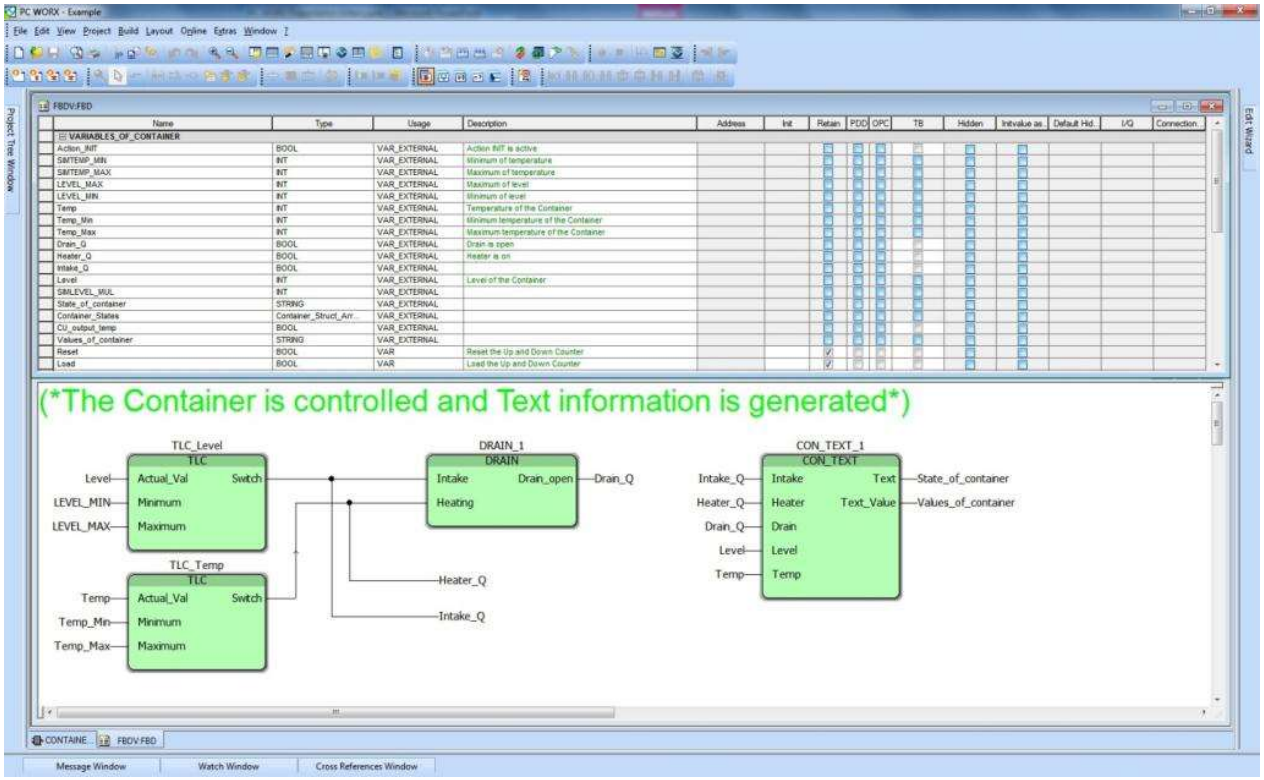
- Syntax highlighting
- Editor assistant for keywords, functions and function blocks
- Context sensitive menus





PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – Variable management



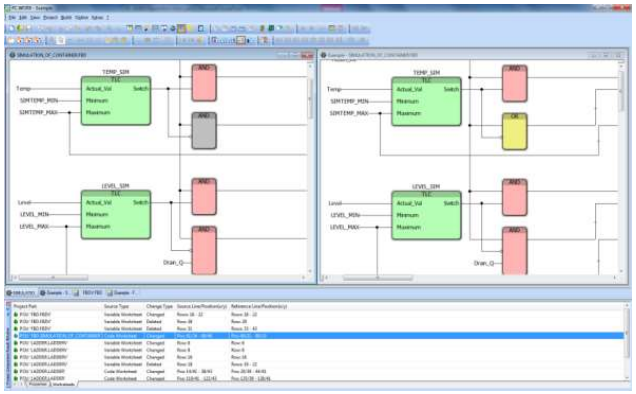
Assistants monitor every step | errors are displayed visually

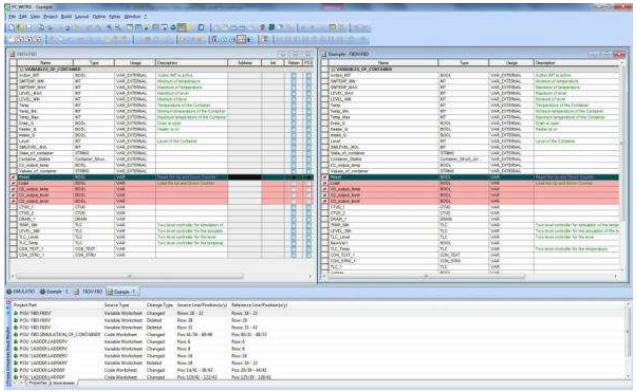
PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – Features

Online und Offline

- Own workspace for program comparison
- Differences will be shown vise versa and highlighted
- Differences in configuration settings will be listed
- Print of differences possible



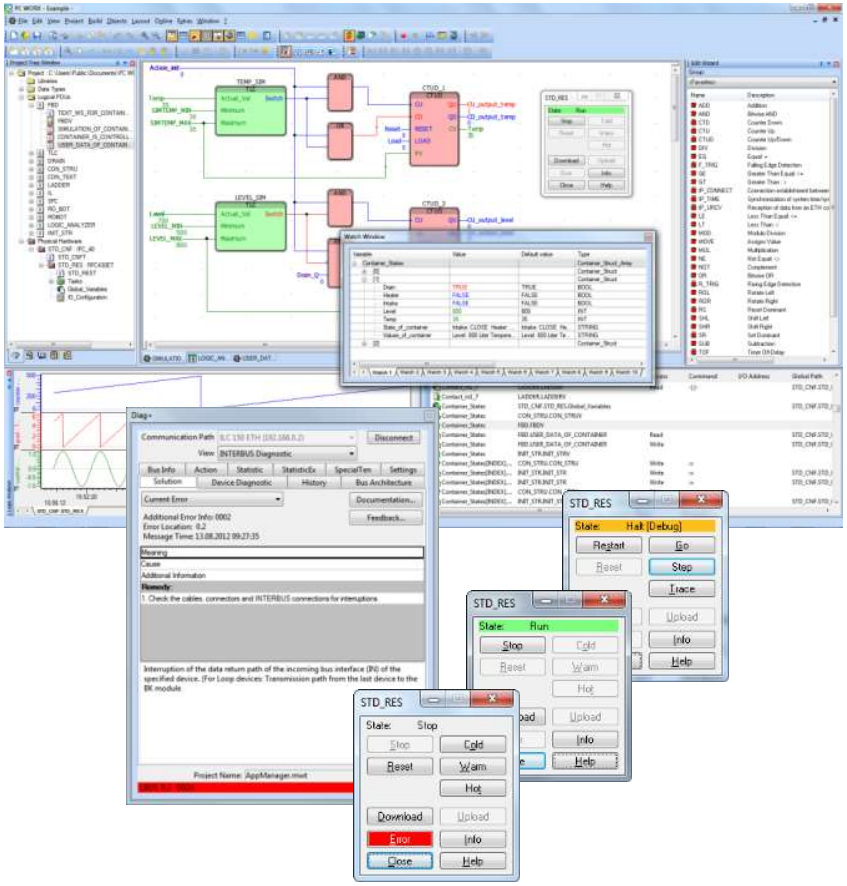


PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – Features

Program und network

- Logic analyzer
- Breakpoints / Single step
- Online debug in libraries
- Instance debug
- Watch windows / recipe management
- Force list
- Plain text messages of PLC errors
- Network- and field bus diagnostic



Easy commissioning and troubleshooting

PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – Features

Network- and bus configuration

Configuration, parametrization and diagnostic:

- INTERBUS
- PROFINET
- MODBUS
- PROFIBUS
- Ethernet

FDT/DTM Technology

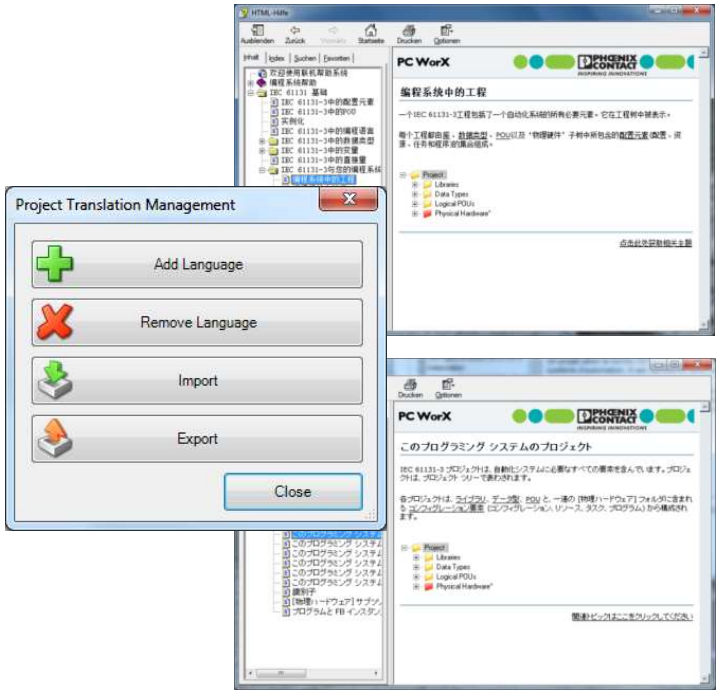
Open and uniform

PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – Features

Usable worldwide

- English
- German
- Spanish
- French
- Italy
- Chinese



Easy project translation management

PHOENIX CONTACT
INSPIRING INNOVATIONS

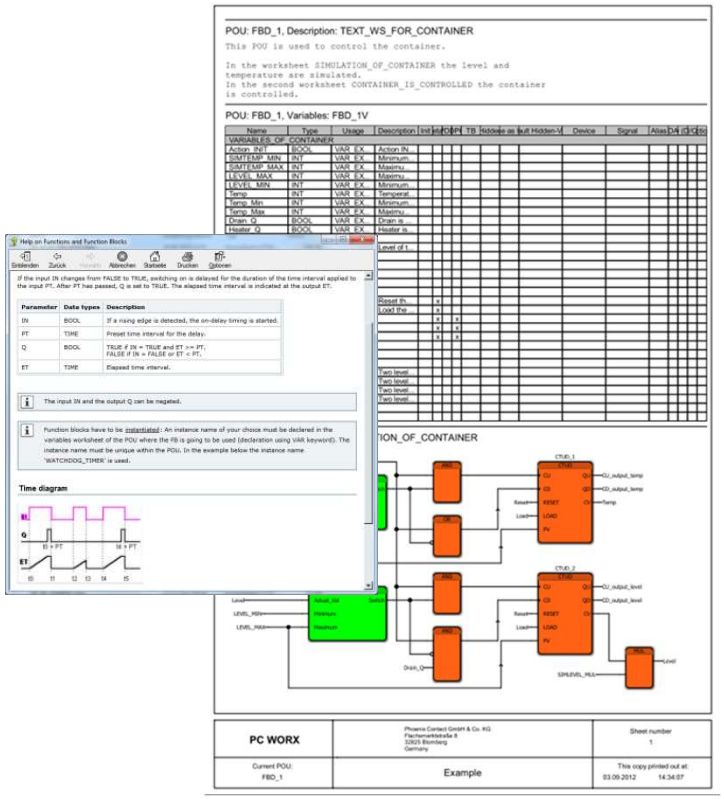
PC WORX – Features

Projekt documentation

Print layout configurable with comfortable page layout editor

User defined documentation for:

- Projects
- Libraries
- Function block functions

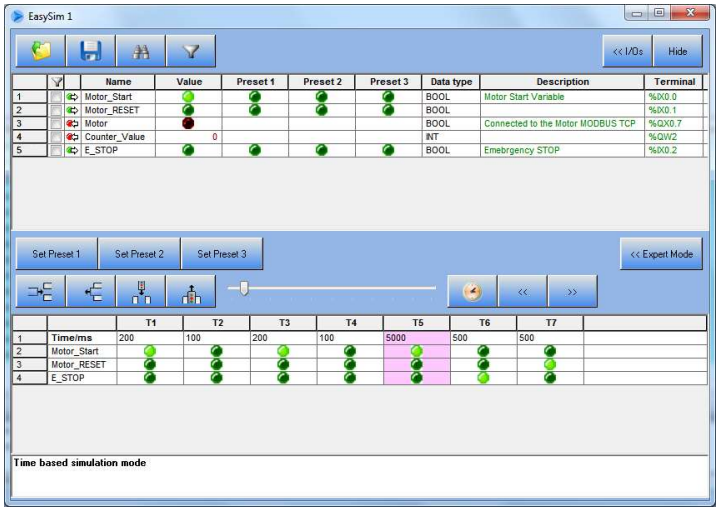


PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – Features

Simulation

- Read and write IO Variables
- Time based simulation of your process
- Comment every simulation step
- Store and reopen the configuration of your simulation



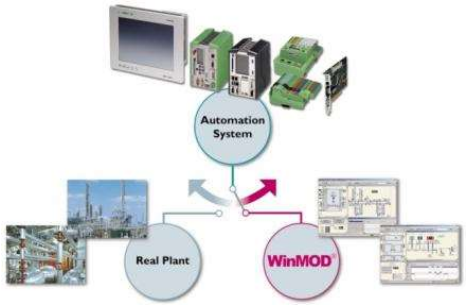
EasySim

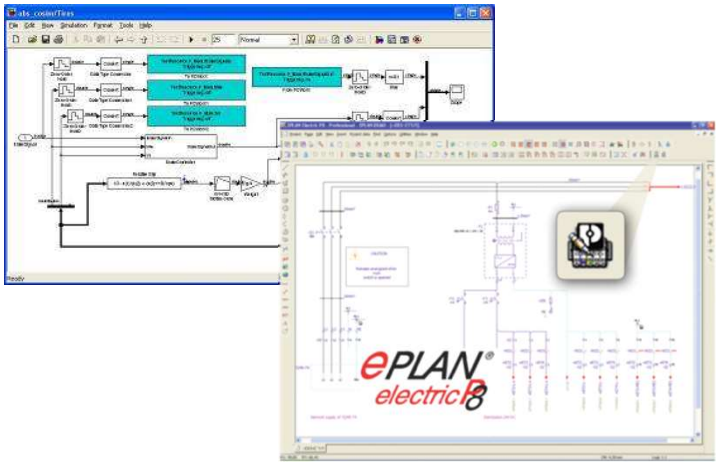
PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – features

Interfaces

- Simulation with WinMOD
- Code generation with Matlab/Simulink® and Stateflow
- PLCopen XML import and export
- EPLAN interface
- Project+ interface
- FDT/DTM





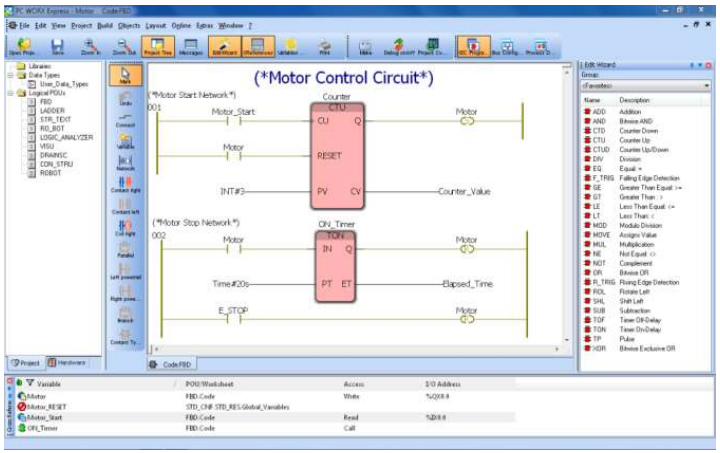
Consistency

PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – features

Easy Automation - EXPRESS

- Free IEC 61131-3 engineering tool
- For all PLC's of the 1xx class
- Inclusiv configuration and diagnostic



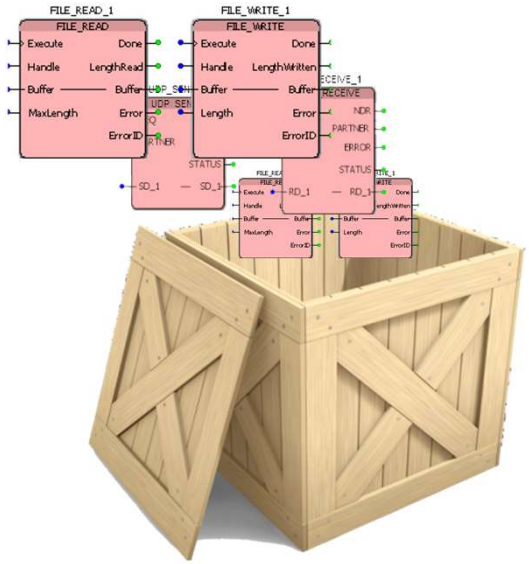
Free download: www.phoenixcontact.com

PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – features

Prefabricated libraries

- Analog signal processing
- Control engineering
- IT libraries
- SMTP, SNMP, SQL, FTP Function block libraries
- Building automation
- MODBUS RTU
- Positioning
- CAN open
- And much more…



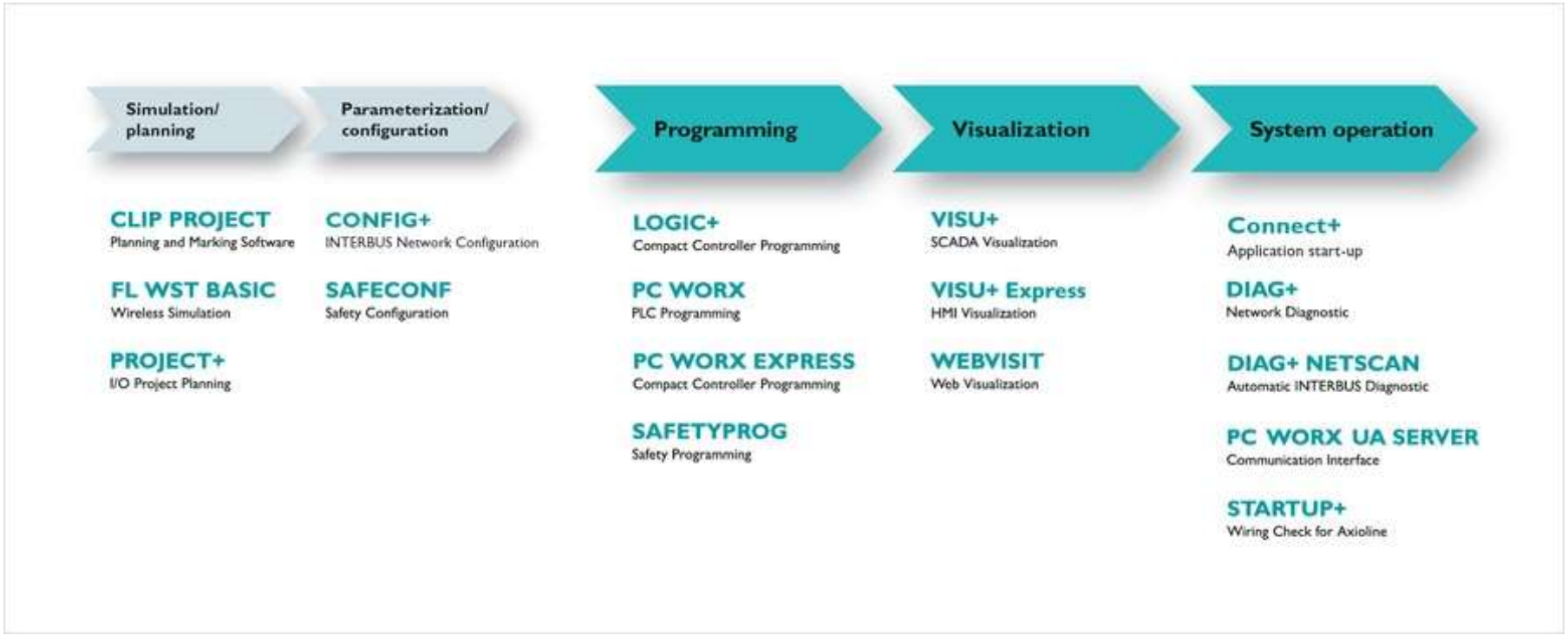
INSPIRING INNOVATIONS

Tipos de Software

PHOENIX CONTACT
INSPIRING INNOVATIONS

Software

AUTOMATIONWORX



PHOENIX CONTACT
INSPIRING INNOVATIONS

Softwares de Automatización

AUTOMATIONWORX Software

PHOENIX CONTACT
INSPIRING INNOVATIONS

Software

AX SW SUITE

The AUTOMATIONWORX Software Suite is a comprehensive collection of optimally coordinated software tools for the Automation Worx automation system consisting of

PC WORX
PC WORX EXPRESS
DIAG+
DIAG+ NETSCAN
CONFIG+
VISU+
VISU+ EXPRESS
WEBVISIT
AX OPC SERVER

2985660 AX SW SUITE DEMO

PHOENIX CONTACT
INSPIRING INNOVATIONS

Softwares

PC WORX

PC WORX EXPRESS

PC WORX

PLC programming

PC WORX DEMO	Order No. 2985725
PC WORX BASIC LIC	Order No. 2985275
PC WORX PRO LIC	Order No. 2985385

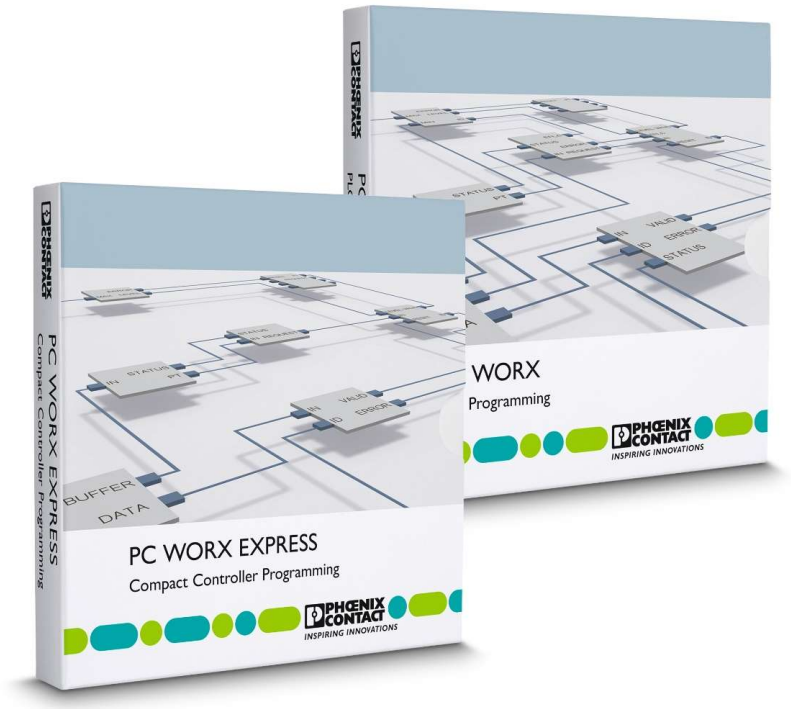
- Programming of Phoenix Contact controllers
- Network configuration and diagnostics
- Numerous programming languages supported: IL, FBD, LD, ST, SFC, FFLD

PC WORX EXPRESS

Programming small-scale controllers

PC WORX EXPRESS Order No. 2988670

- Programming for class 100 and AXC 1050 modular small-scale controllers
- Automation system configuration
- INTERBUS module parameterization
- Programming languages supported: FBD, LD, ST
- 128 kB input/output data (mix)
- Can be downloaded free of charge



PHOENIX CONTACT
INSPIRING INNOVATIONS

Licencias

PC WORX

2985660	AX SW SUITE DEMO

2985275	PC WORX BASIC LIC
2985262	PC WORX BASIC UPD
2985259	PC WORX BASIC-PRO LIC

2985385	PC WORX PRO LIC
2985372	PC WORX PRO UPD
2400419	PC WORX PRO LIC TL180
2985534	PC WORX PRO OEM LIC
2988560	PC WORX PRO LIC CPY

2400041	PC WORX TARGET FOR SIMULINK
2402684	PC WORX UA SERVER-PLC 10
2402685	PC WORX UA SERVER-PLC 40
2402686	PC WORX UA SERVER-PLC 80

Note:

2985725 PC WORX DEMO not available
2988670 PC WORX EXPRESS not available

PHOENIX CONTACT
INSPIRING INNOVATIONS

AX SW SUITE DEMO

Software - AX SW SUITE DEMO - 2985660

The AUTOMATIONWORX Software Suite is a comprehensive collection of optimally coordinated software tools for the Automation Worx automation system consisting of PC WORX, PC WORX EXPRESS, DIAG+, DIAG+ NETSCAN, CONFIG+, VISU+, WEBVISIT, AX OPC SERVER. The demo version is available free of charge and does not require a license key. It can be downloaded under "Downloads".

Generate product PDF

Delivery time on request

Software

	Description	Language	Revision
☐	[zip, 958 MB] **Software** AUTOMATIONWORX Software Suite 1.88 programming, configuration, parameterization, diagnostics. The AUTOMATIONWORX Software Suite is a comprehensive collection of coordinated software tools consisting of: PC Worx, PC WORX EXPRESS, DIAG+, DIAG+ NetScan, CONFIG+, WEBVISIT, and AX OPC SERVER. SHA256 Checksum: d884750471d5062e7f2b8886eddcdd745d390fdaac15cc3e5d30e06b3bae297a AX_SW_Suite_2021_188.zip	International	1.88

PHOENIX CONTACT
INSPIRING INNOVATIONS

AUTOMATIONWORX

2868059	CONFIG+
2700779	CONFIG+ OEM
2868062	CONFIG+ CPY

2730307	DIAG+
2985521	DIAG+ OEM
2730404	DIAG+ CPY
2868075	DIAG+ NETSCAN
2868088	DIAG+ NETSCAN CPY

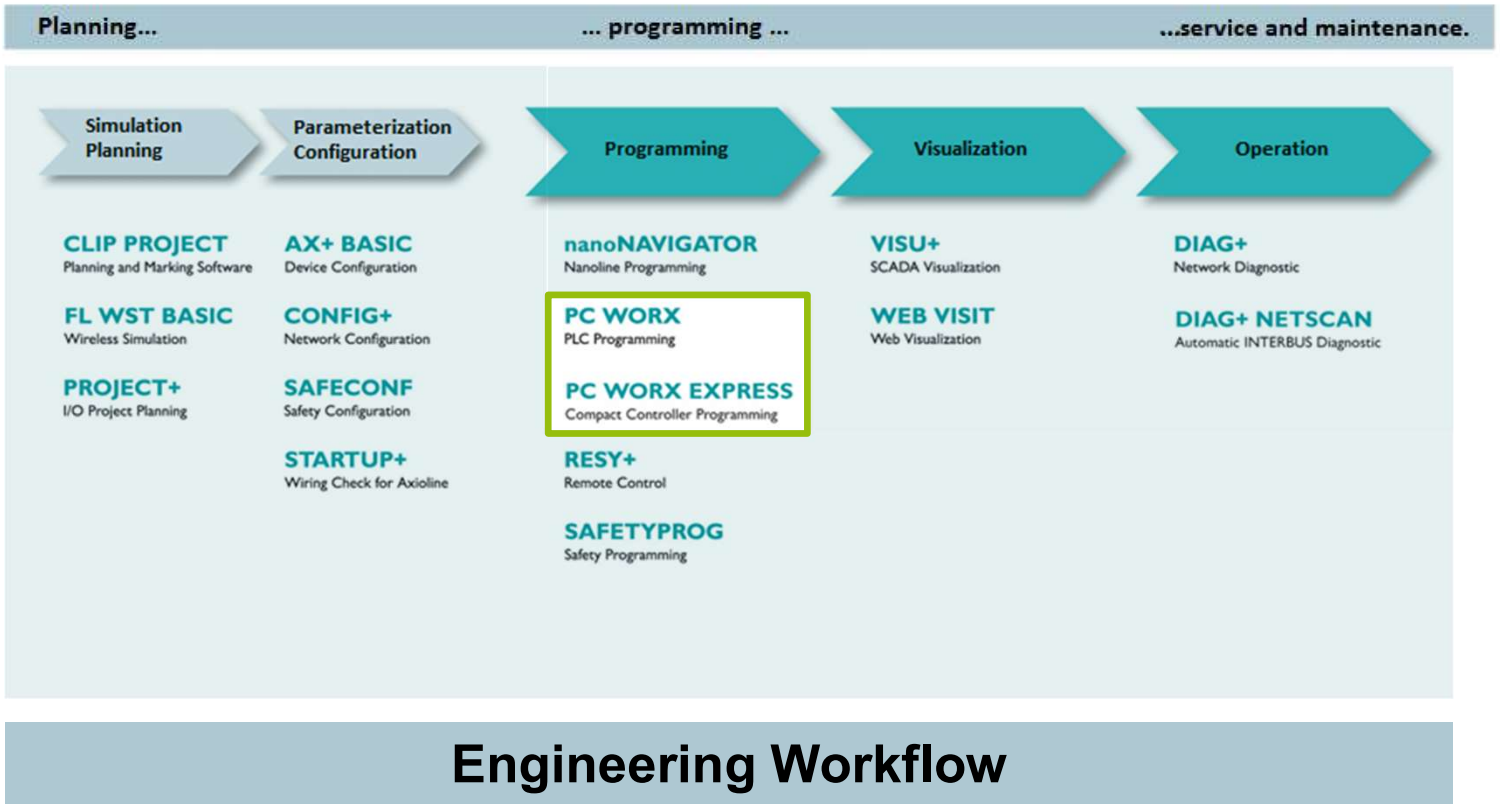
2985945	AX OPC SERVER
2985547	AX OPC SERVER OEM
2988463	AX OPC SERVER CPY

2721439	IBS CMD SWT G4
2721442	IBS CMD SWT G4 E
2721455	IBS CMD SWT G4 SP
2721468	IBS CMD SWT G4 P
2721471	IBS CMD SWT G4 F
2721507	IBS CMD SWT G4 CPY
2722247	IBS CMD SWT G4 UM
2730776	IBS CMD SWT G4 4.6 F
2730789	IBS CMD SWT G4 4.6 SP

2700443	SAFETYPROG BASIC
2700441	SAFETYPROG ADVANCED
2700442	SAFETYPROG PROFESSIONAL
2700514	SAFETYPROG PROFESSIONAL OEM

PHOENIX CONTACT
INSPIRING INNOVATIONS

AUTOMATIONWORX Software Overview

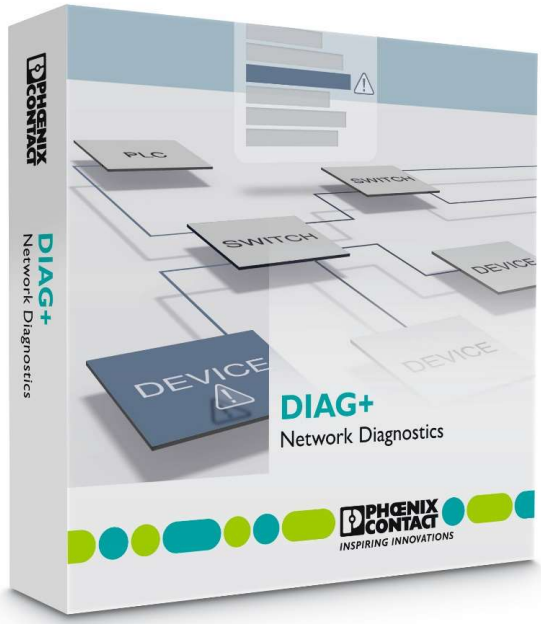


Engineering Workflow

PHOENIX CONTACT
INSPIRING INNOVATIONS

Software de Diagnóstico y Configuración para Sistemas de Control

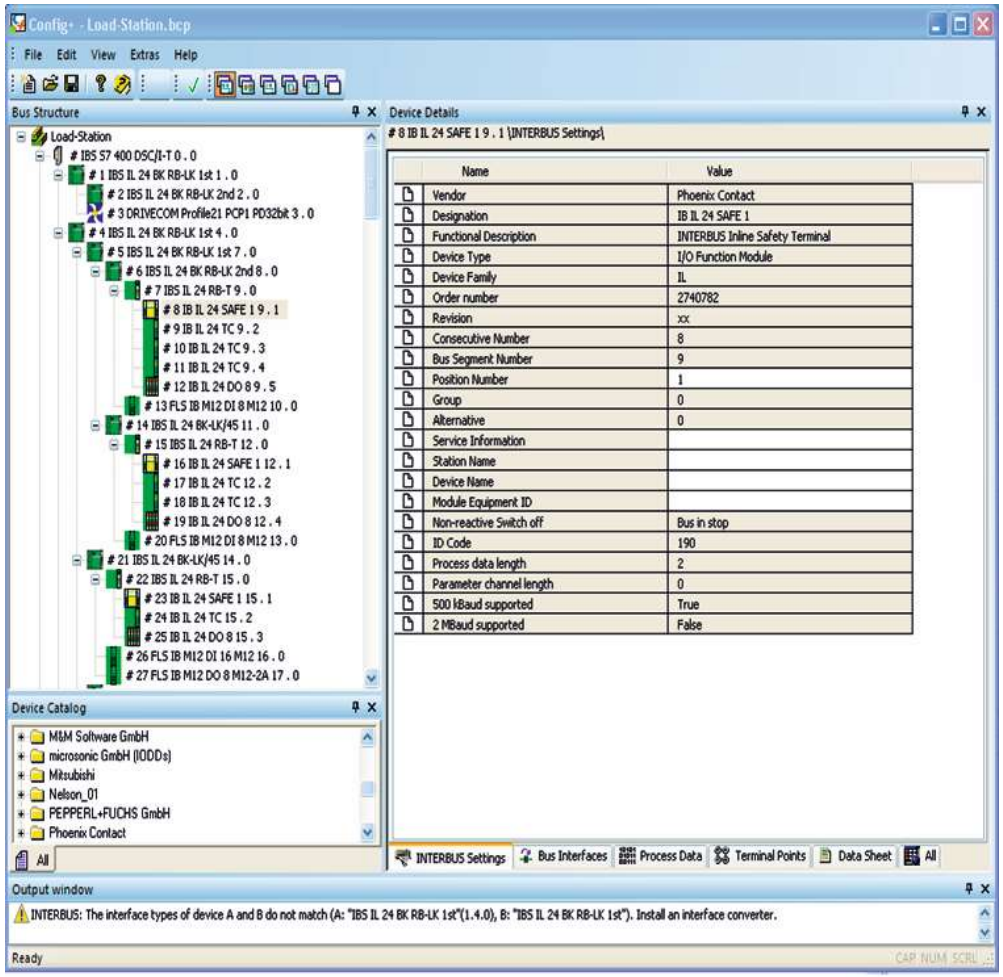
CONFIG+ DIAG+ DIAG+ NETSCAN



PHOENIX CONTACT
INSPIRING INNOVATIONS

Software de Diagnóstico y Configuración para Sistemas de Control

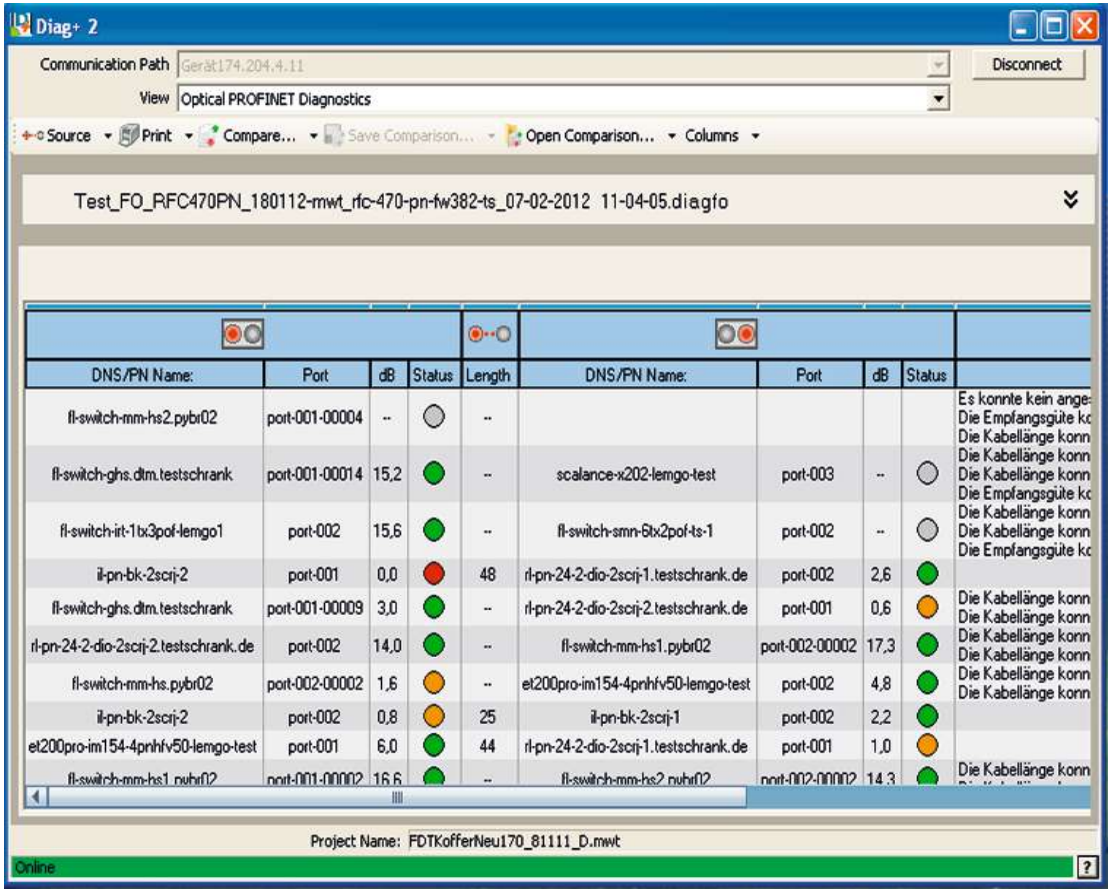
CONFIG+



PHOENIX CONTACT
INSPIRING INNOVATIONS

Software de Diagnóstico y Configuración para Sistemas de Control

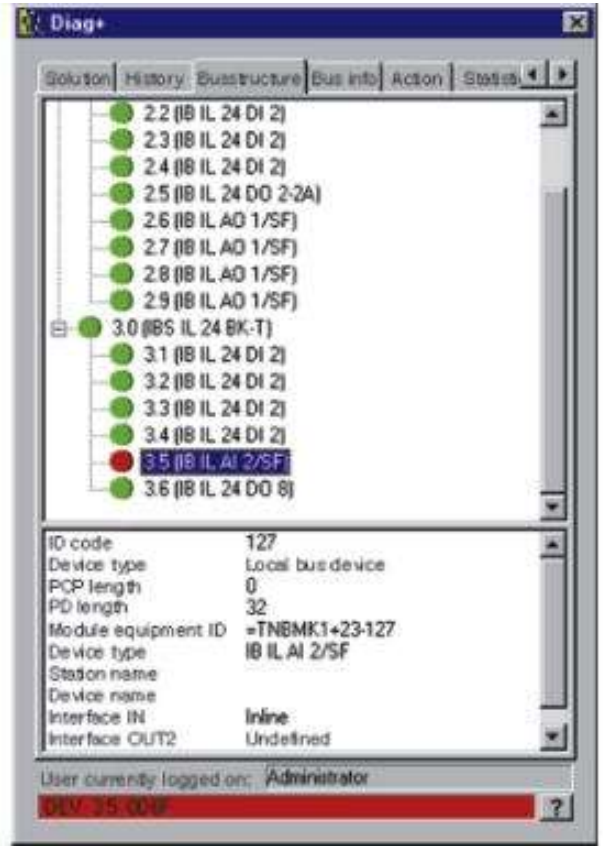
DIAG+



PHOENIX CONTACT
INSPIRING INNOVATIONS

Software de Diagnóstico y Configuración para Sistemas de Control

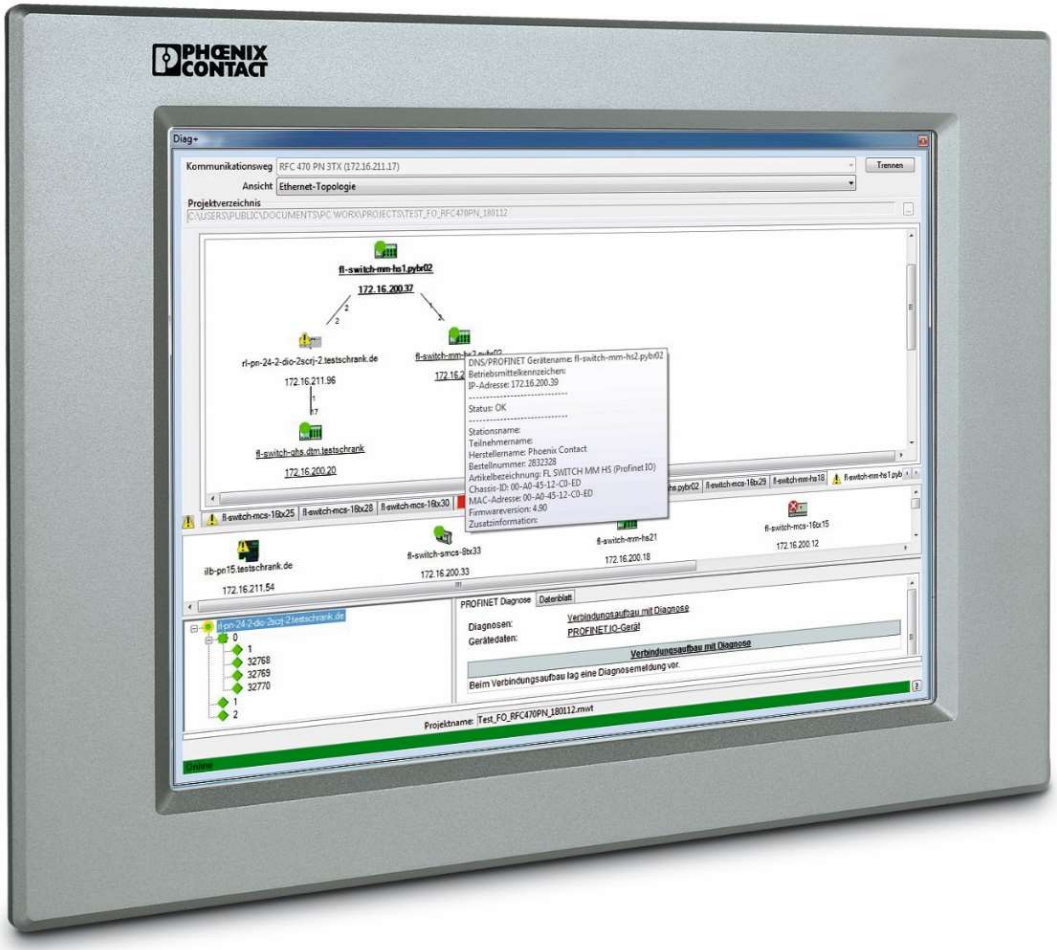
DIAG+ NETSCAN



PHOENIX CONTACT
INSPIRING INNOVATIONS

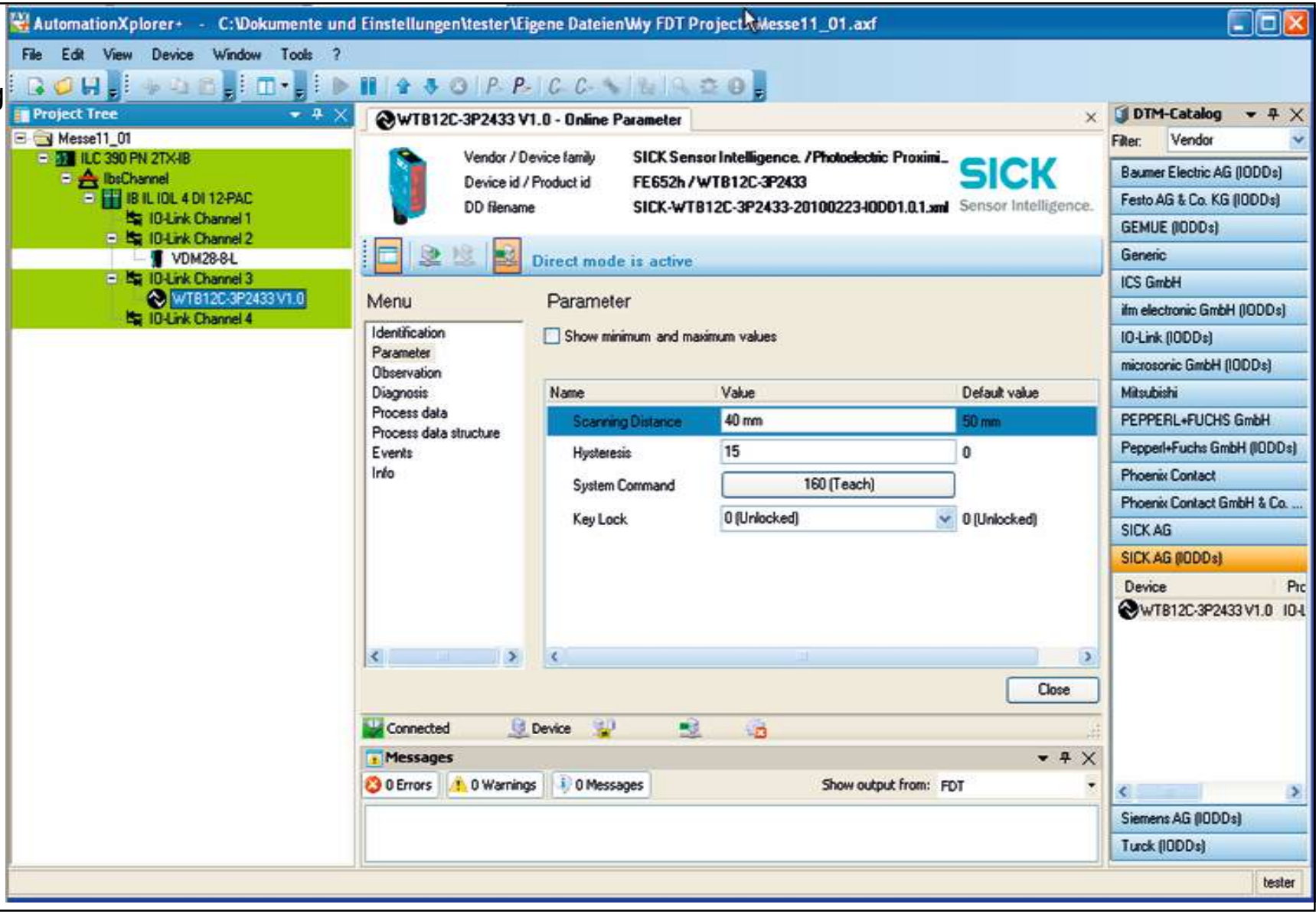
Software de Diagnóstico y ción para

DIAG+ NETSCAN



Software de Diag

DIAG+

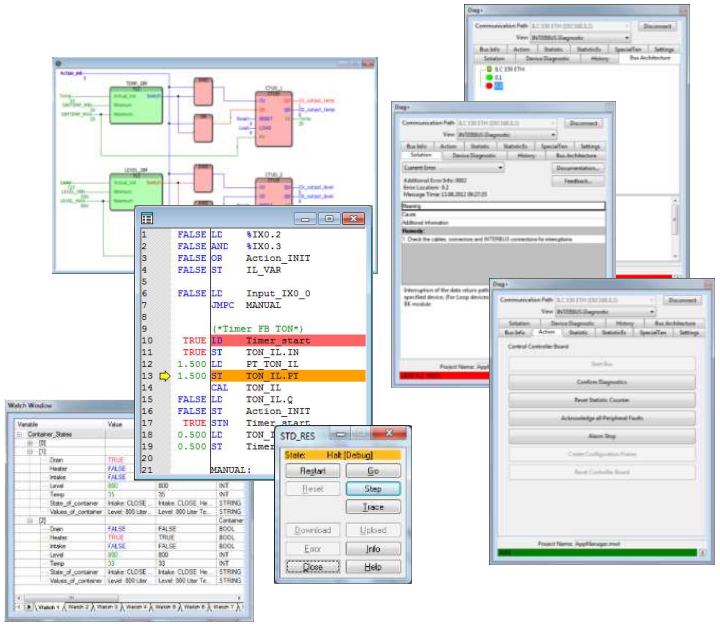


DIAG+ Network Diagnostics

Support in Error Avoiding

Fieldbus Diagnostic with comfortable PLC functions

- Breakpoints
- Individual steps
- Debugging in libraries
- Instance debugging
- Observing values from different program parts in a watch window
- Force list
- Quick bus startup
- Quick error localization thanks to plain-text error messages



Quick error localization and error-free startup thanks to extensive debugging functions.

PHOENIX CONTACT
INSPIRING INNOVATIONS

Software configurators for OPC

OPC Configurators

PHOENIX CONTACT
INSPIRING INNOVATIONS

Software OPC Visualización

AX OPC SERVER

When all variables of PLC are declared OPC…

Then….

OPC Variables can be used inmediatly on

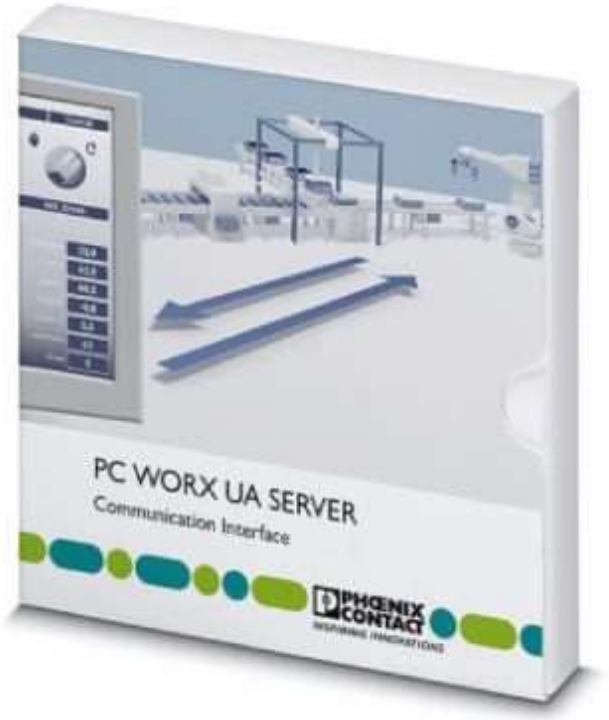
Visualization Software as VISU+

This tool enable communication between PLC and HMI Software

PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX OPC UA SERVER

The PC WORX UA SERVER from Phoenix Contact enables you to access all variables of PC Worx programmable controllers via the OPC UA (Unified Architecture) standardized communication protocol.



PHOENIX CONTACT
INSPIRING INNOVATIONS

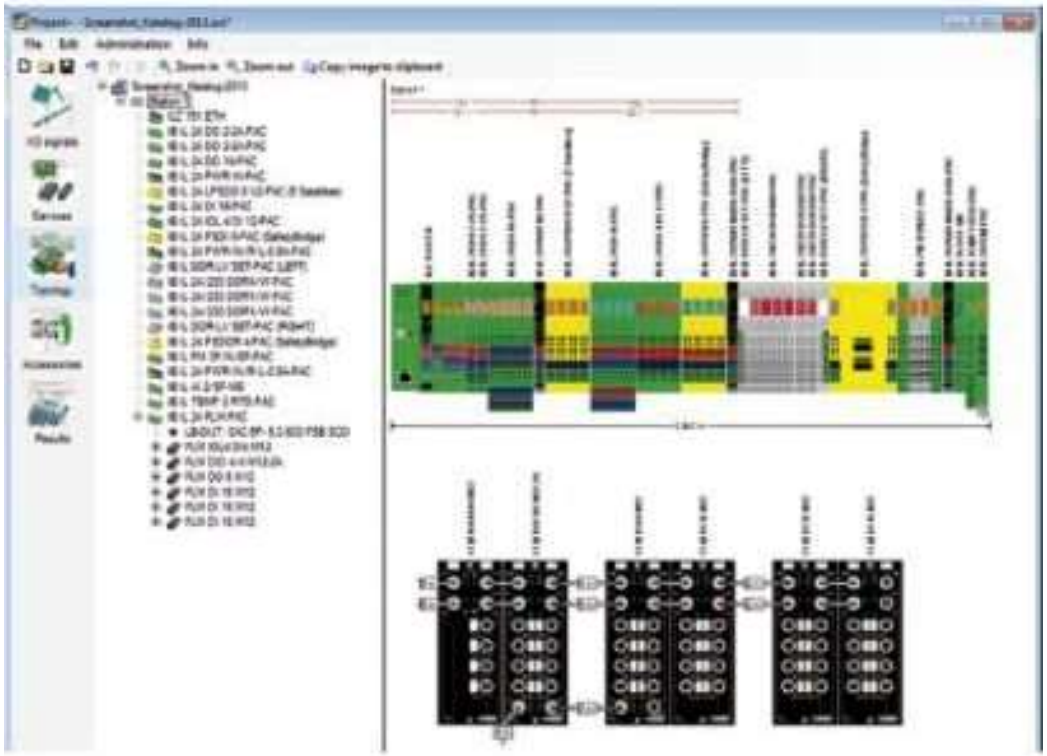
Software and Technologies

PROJECT+ 2.8

PROJECT+ 2.8

Inline Controllers & Buskopples
I/O

Fieldline Modular



PHOENIX CONTACT
INSPIRING INNOVATIONS

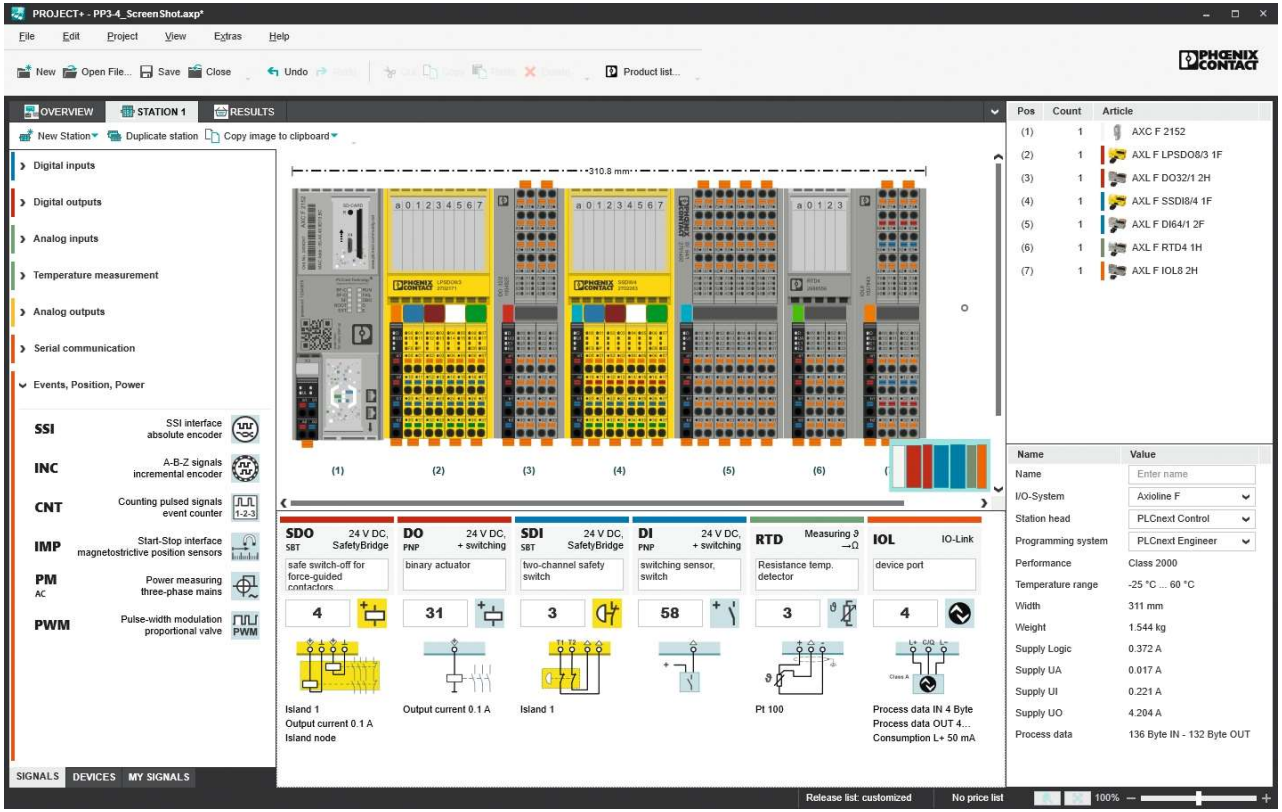
Software and Technologies

PROJECT+

Project+

is a configuration tool that supports you when creating an I/O station as part of the automation of a system, machine or property.

Project + 3: Planning for Axioline F and Inline I/O stations



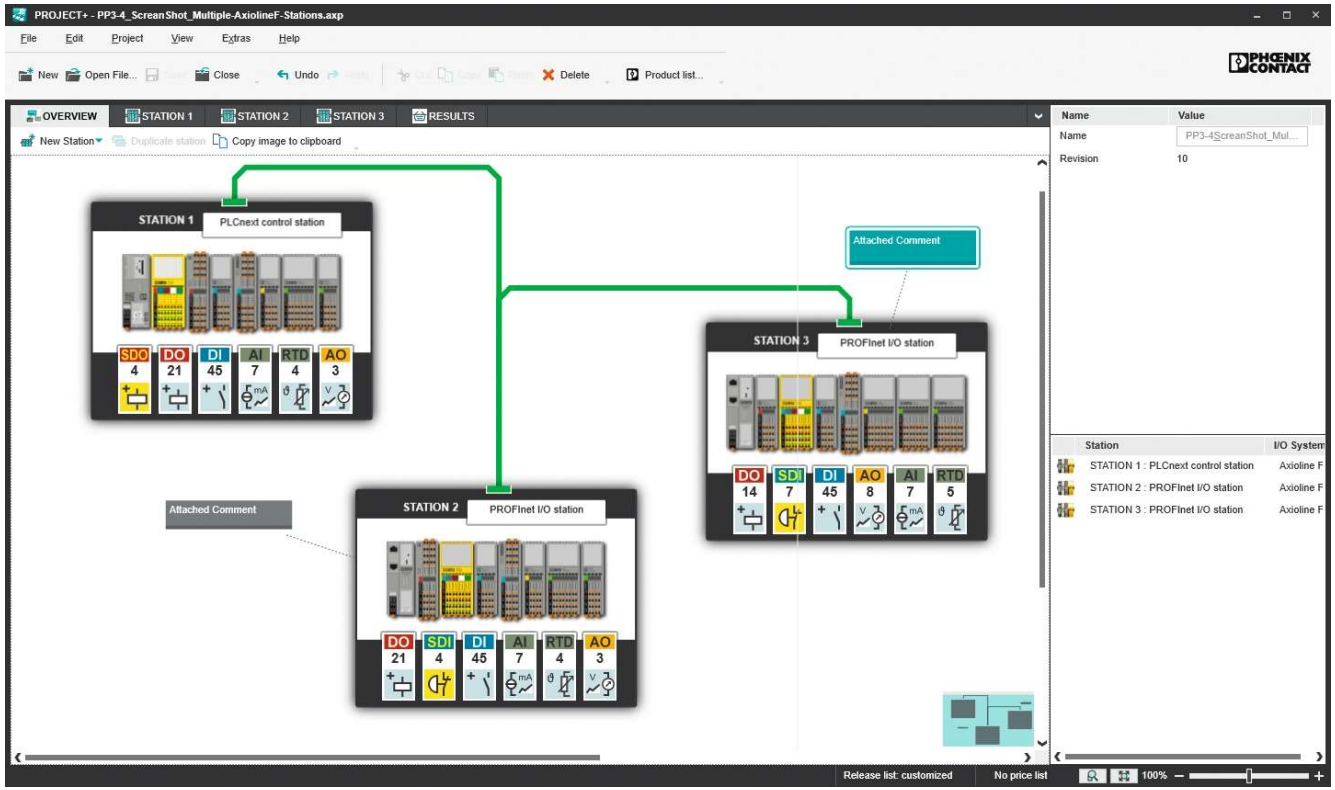
INSPIRING INNOVATIONS

Software and Technologies

PROJECT+

PROJECT+3

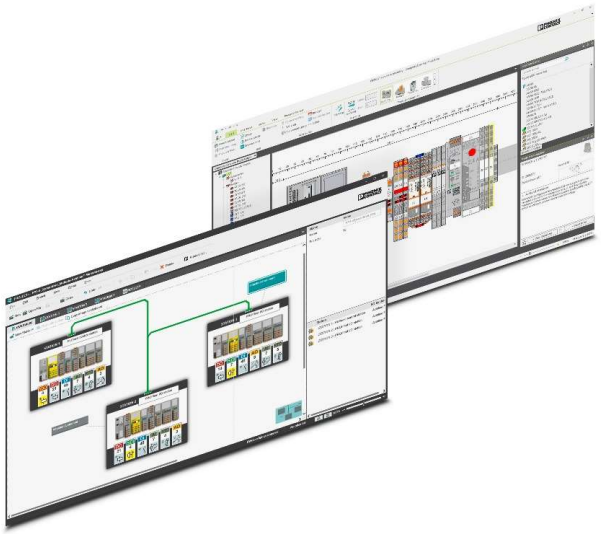
I/O Project Planning

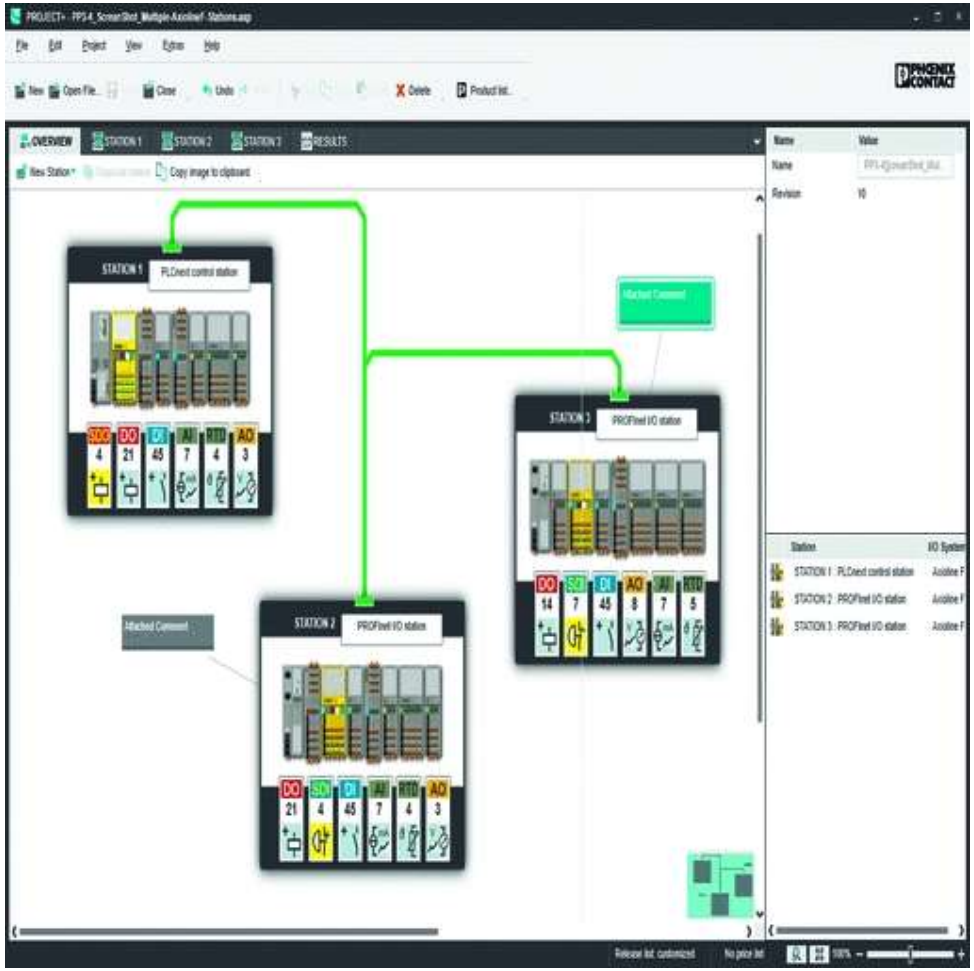


PHOENIX CONTACT
INSPIRING INNOVATIONS

Software

PROJECT+





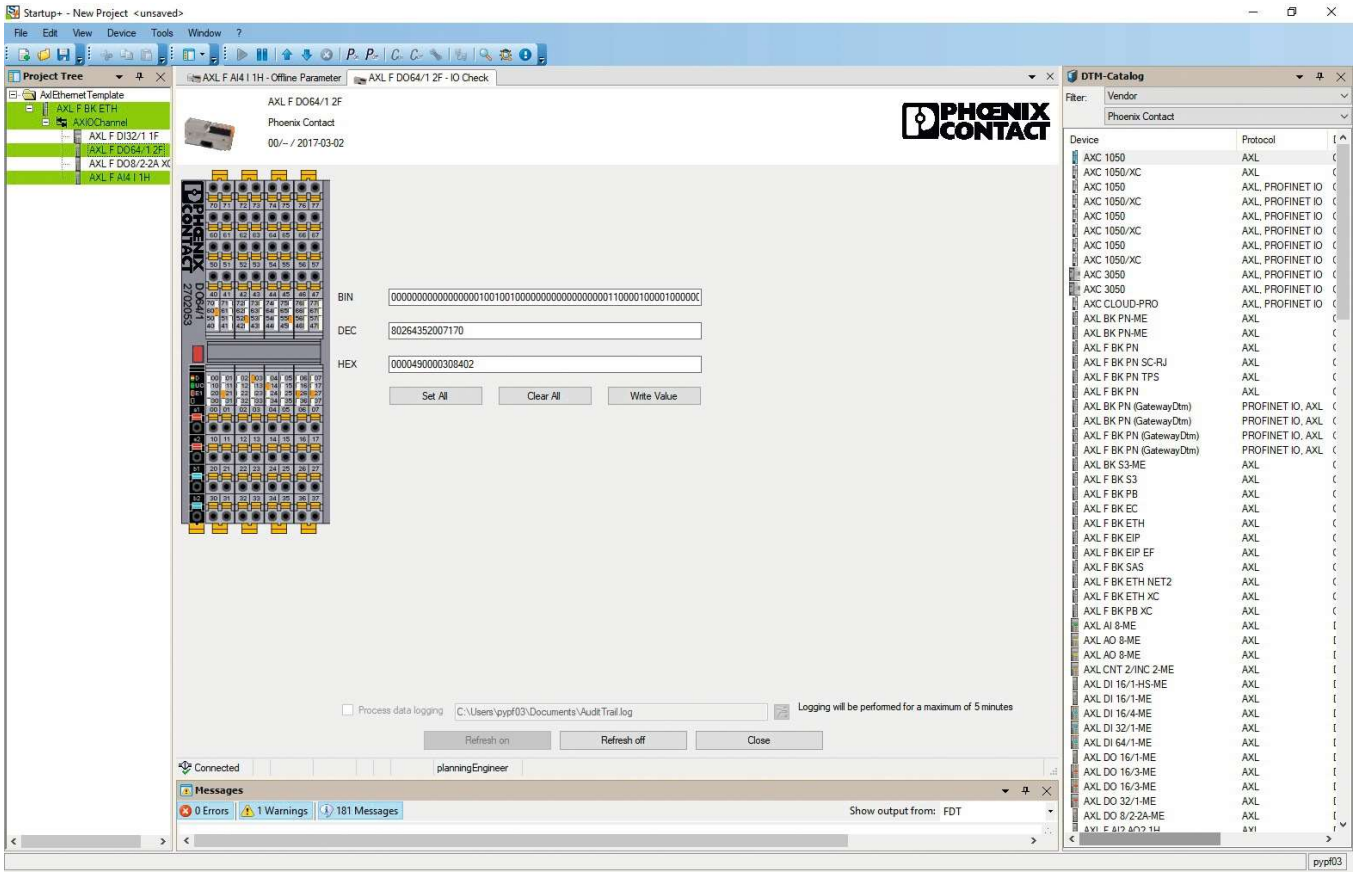
PHOENIX CONTACT
INSPIRING INNOVATIONS

Software for setting Axioline

STARTUP +

Startup+

enables you to quickly and easily establish a connection to an Axioline F station, to configure the connected modules, and to check their wiring (I/O check).



PHOENIX CONTACT
INSPIRING INNOVATIONS

Software

CONNECT+

The Connect+ software can be used to easily start up and maintain automation projects from Phoenix Contact. Connect+ can be extended with various plug-ins that can be tailored to devices and automation solutions from Phoenix Contact.

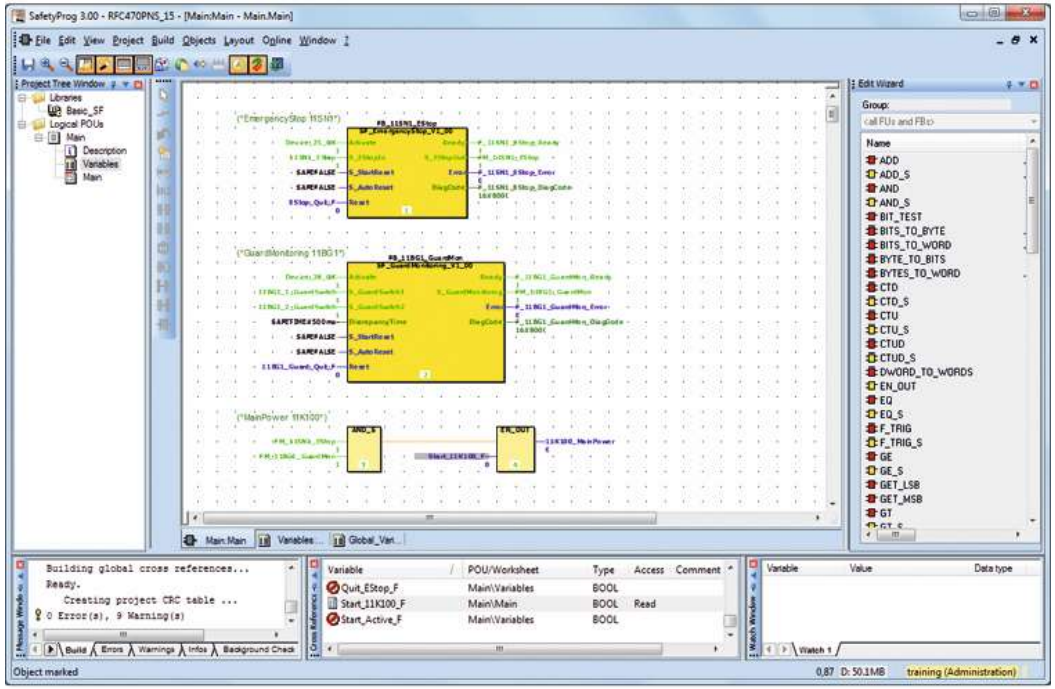
Benefit from the advantages of the free software tool:

- Easy initial configuration of controllers from Phoenix Contact
- Simple startup and parameterization of automation projects

PHOENIX CONTACT
INSPIRING INNOVATIONS

Software for Safety Controllers

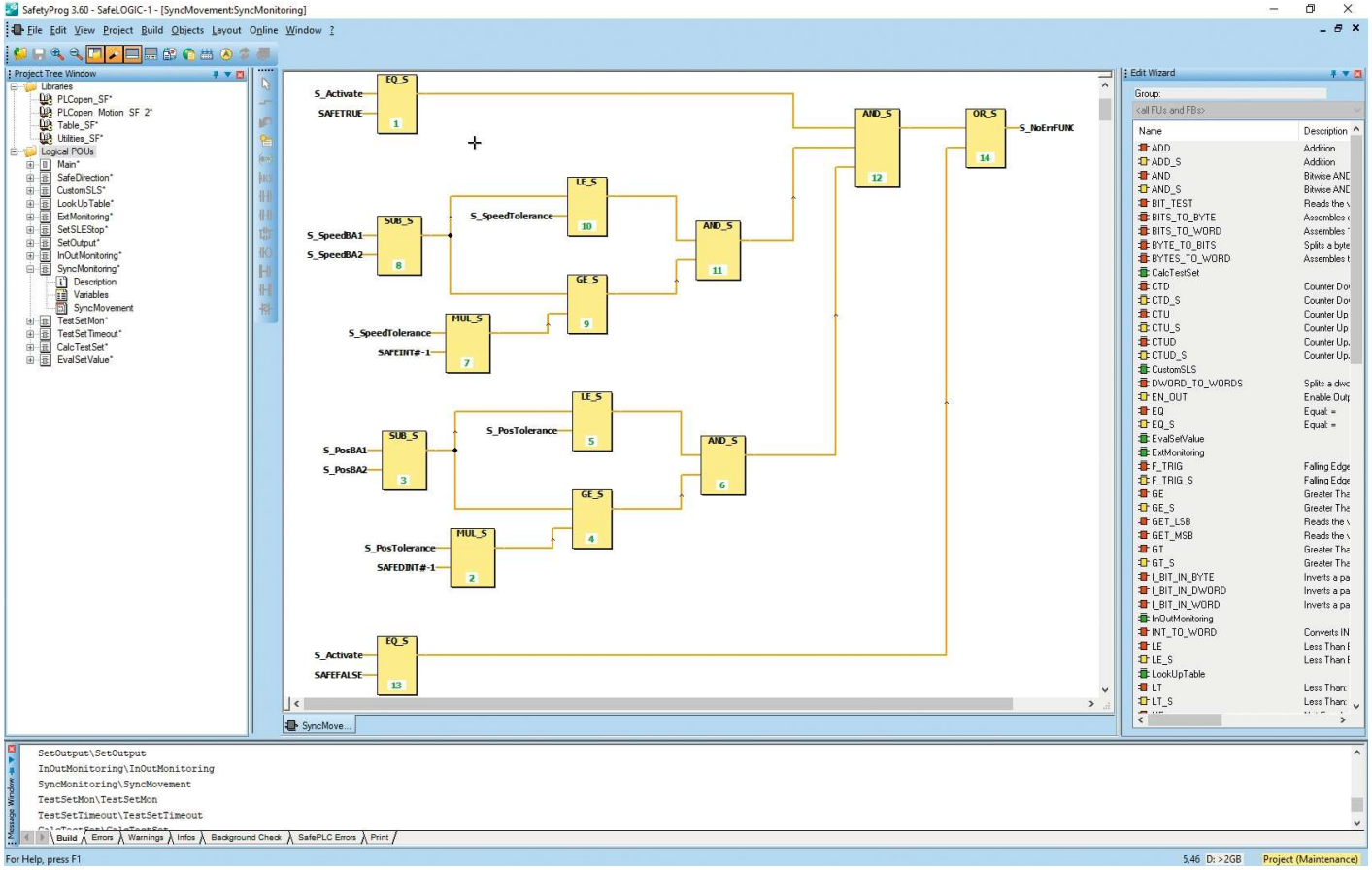
SAFETYPROG



PHOENIX CONTACT
INSPIRING INNOVATIONS

Software for Safety Controllers

SAFETYPROG



PHOENIX CONTACT
INSPIRING INNOVATIONS

Softwares de Visualización

VISU+ EXPRESS

VISU+

PHOENIX CONTACT
INSPIRING INNOVATIONS

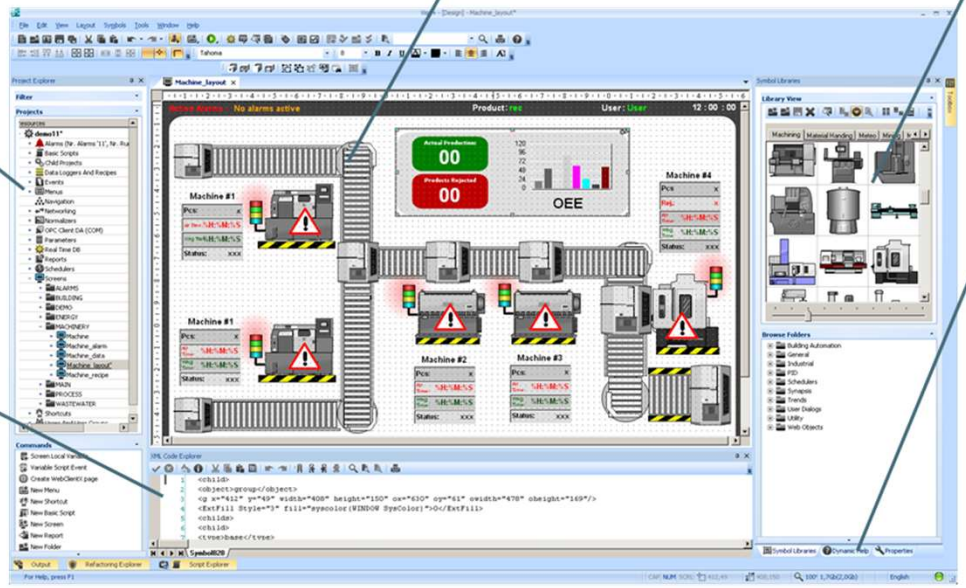
Softwares Visualización

VISU+

Project explorer
Easy access to all project resources

Editor for the visualization pages

Symbol library
Numerous objects for various applications



XML-Editor
Access to the XML object structure

Properties-Explorer
Comprehensive configuration options for objects and resources

Effective engineering in a modern environment

PHOENIX CONTACT
INSPIRING INNOVATIONS

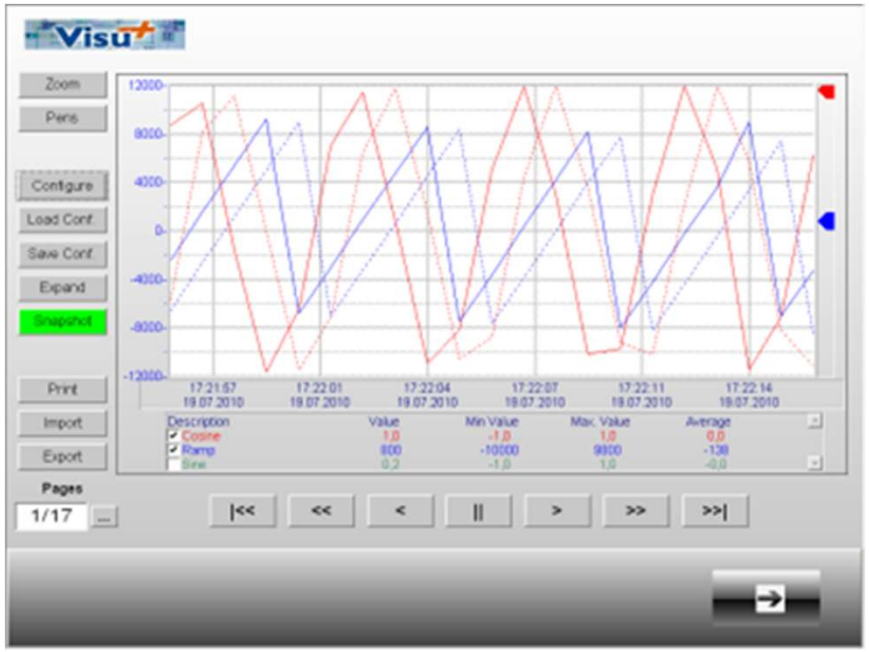
VISU+ / VISU+ Express – communication drivers

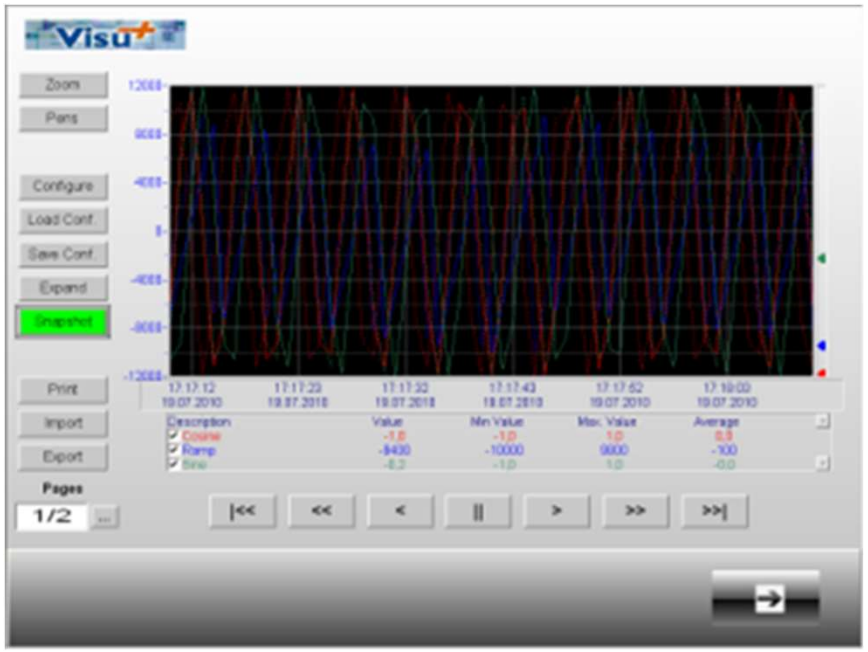
Your connectivity options!

PHOENIX CONTACT
INSPIRING INNOVATIONS

Softwares Visualización

VISU+



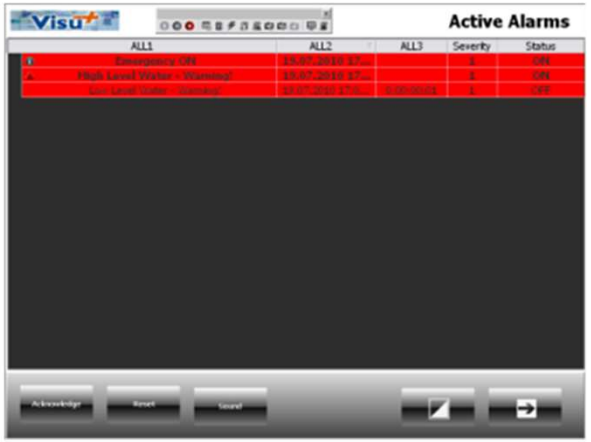


PHOENIX CONTACT
INSPIRING INNOVATIONS

VISU+

Alarm management

- Integrated event and alarm notification management on WinCE HMI devices.
- Up to 1024 alarm priorities
- Various filter options for the alarm representation
- Alarming and event handling are easily customizable with VBA
- Alarm up dimming and acoustic alarming integrated in HMIs



PHOENIX CONTACT
INSPIRING INNOVATIONS

Software Visualization

Webvisit 6

WEBVISIT

Web Visualization

PHOENIX CONTACT
INSPIRING INNOVATIONS

Software Web development

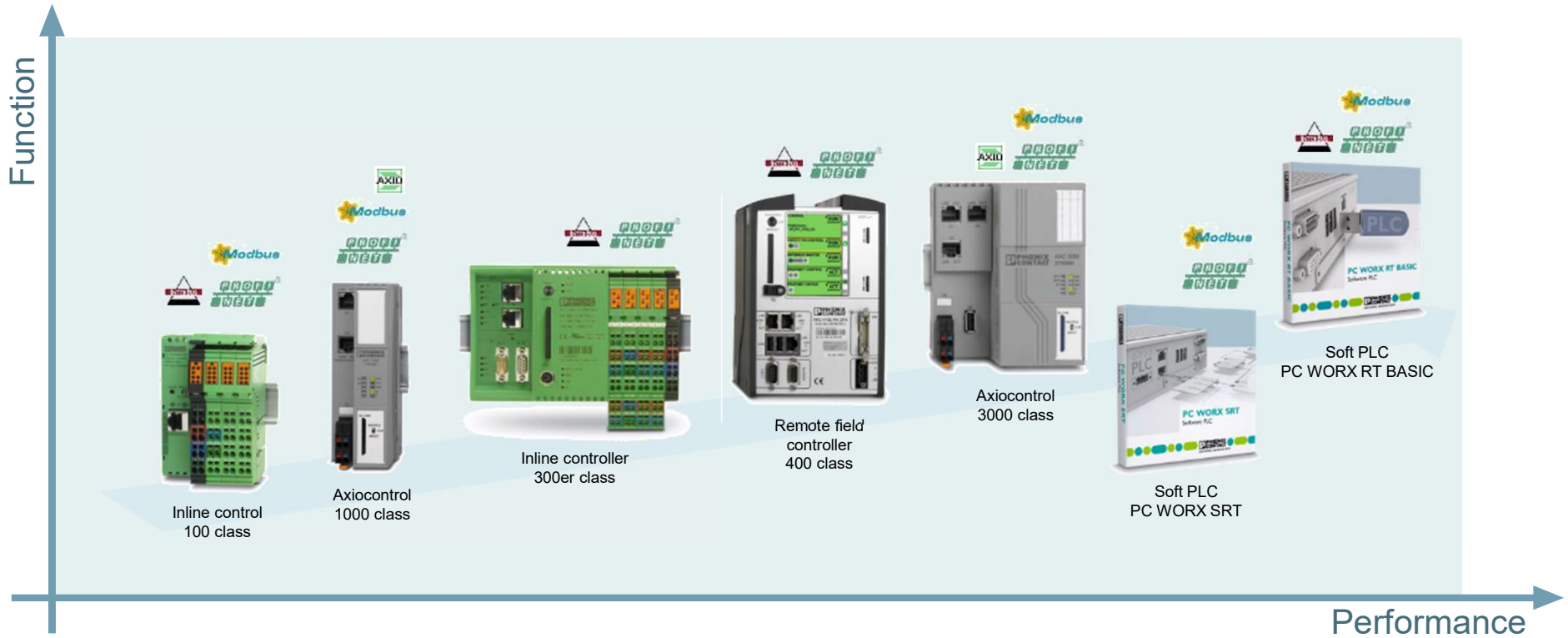
Webvisit – your advantages

- Intuitive
- Can be used via standard browser
- Inexpensive
- Import directly from PC WORX
- For all controllers with an integrated web server

PHOENIX CONTACT
INSPIRING INNOVATIONS

Software development for web server controller

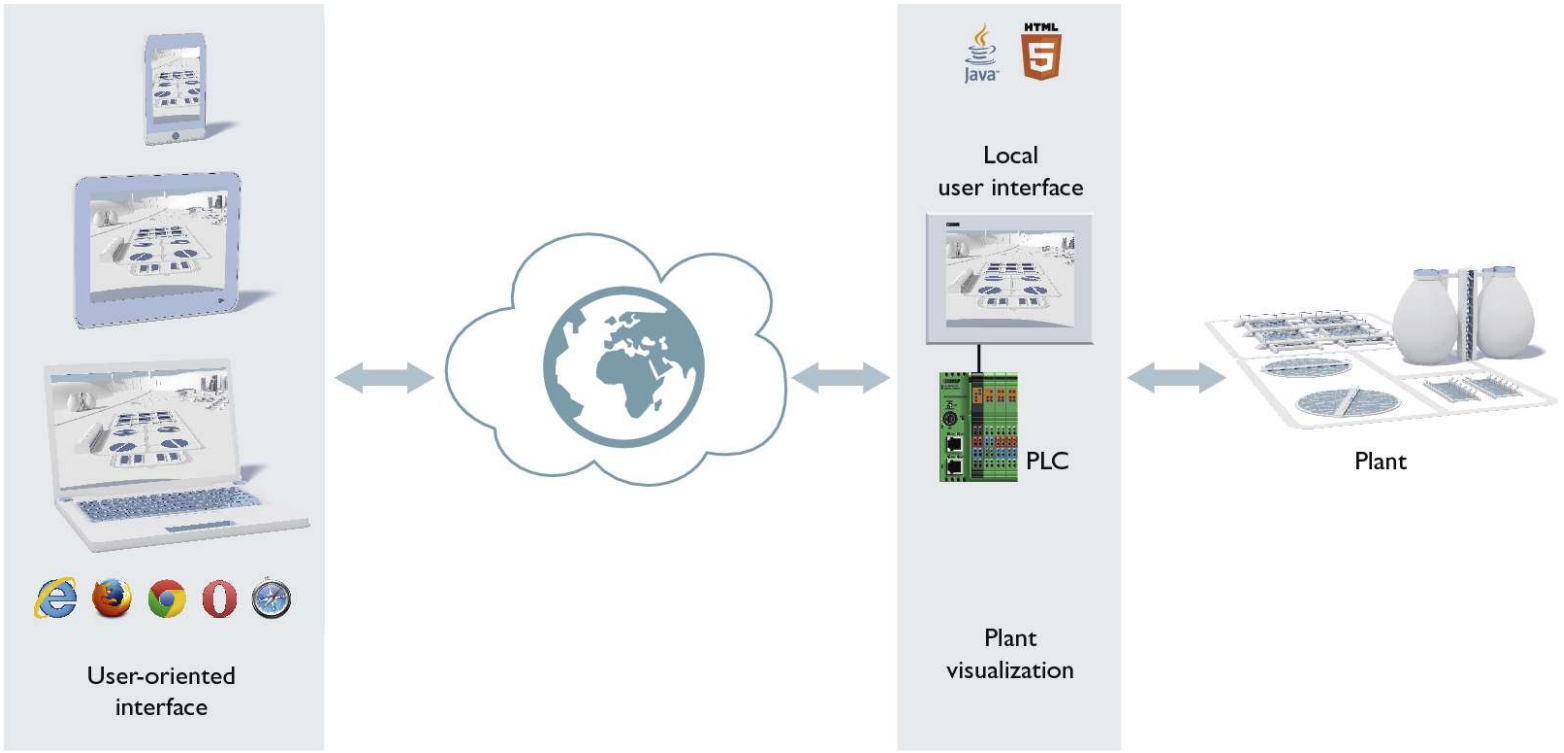
Webvisit - Compatible controller



INSPIRING INNOVATIONS

Software development

Webvisit - Topology



PHOENIX CONTACT
INSPIRING INNOVATIONS

AUTOMATIONWORX Software Suite

A complete application in just a few steps

Creation
- Creating visualization pages using the Webvisit editor

Link
- Importing and linking variables from PC WORX, if required

Download
- Downloading the completed project to the controller

View
- Viewing the application with HMIs (MicroBrowser) or standard/mobile browser

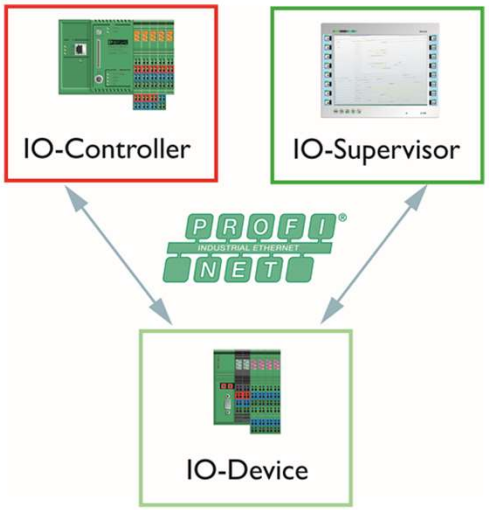
PHOENIX CONTACT
INSPIRING INNOVATIONS

Technology

PROFINET Communication Partners

PROFINET IO-Controller:

- Starts communication and configures field devices
- Cyclic and acyclic data exchange with the IO- Device
- Receives alarms from the IO-Device



PROFINET IO-Supervisor:

- Parallel configuration
- Reading diagnostics

PROFINET IO-Device:

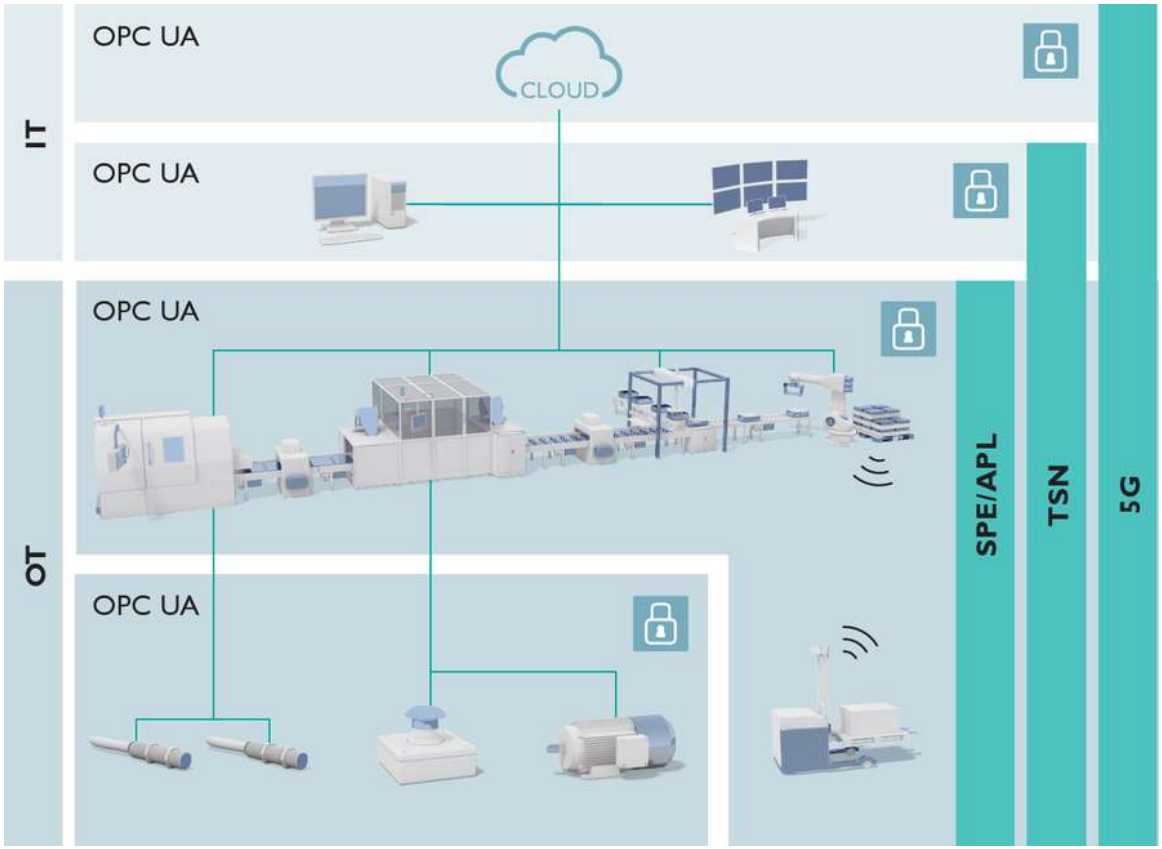
- Cyclic and acyclic data exchange with the IO- Controller
- Sends alarms to the IO-Controller

PHOENIX CONTACT
INSPIRING INNOVATIONS

Software and Technology innitiative

OPC UA

The basic framework for the future of industrial communication technology is currently being developed across a large number of committees and standardization projects. New communication standards such as OPC UA, TSN, SPE, and 5G will be far superior to previous systems in terms of costs, data throughput, latency and determinism.



The new technologies TSN, SPE/APL, 5G, and OPC UA, are not to be considered as being independent of each other – rather, together they will form the communication of the future

PHOENIX CONTACT
INSPIRING INNOVATIONS

Technology

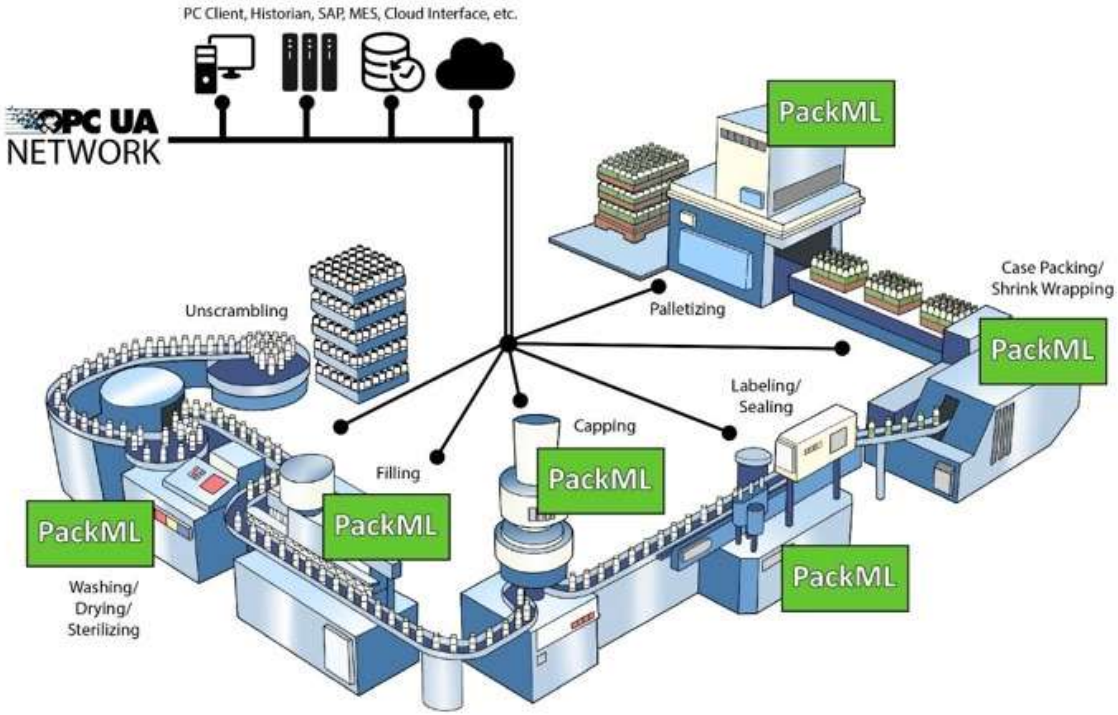
OPC UA

OPC UA is already used as the superordinate communication standard in systems. OPC UA is now being expanded through the addition of standardized application profiles in the field, for example for I/O, safety, and motion.

PHOENIX CONTACT
INSPIRING INNOVATIONS

Technology

OPC UA Arquitecture

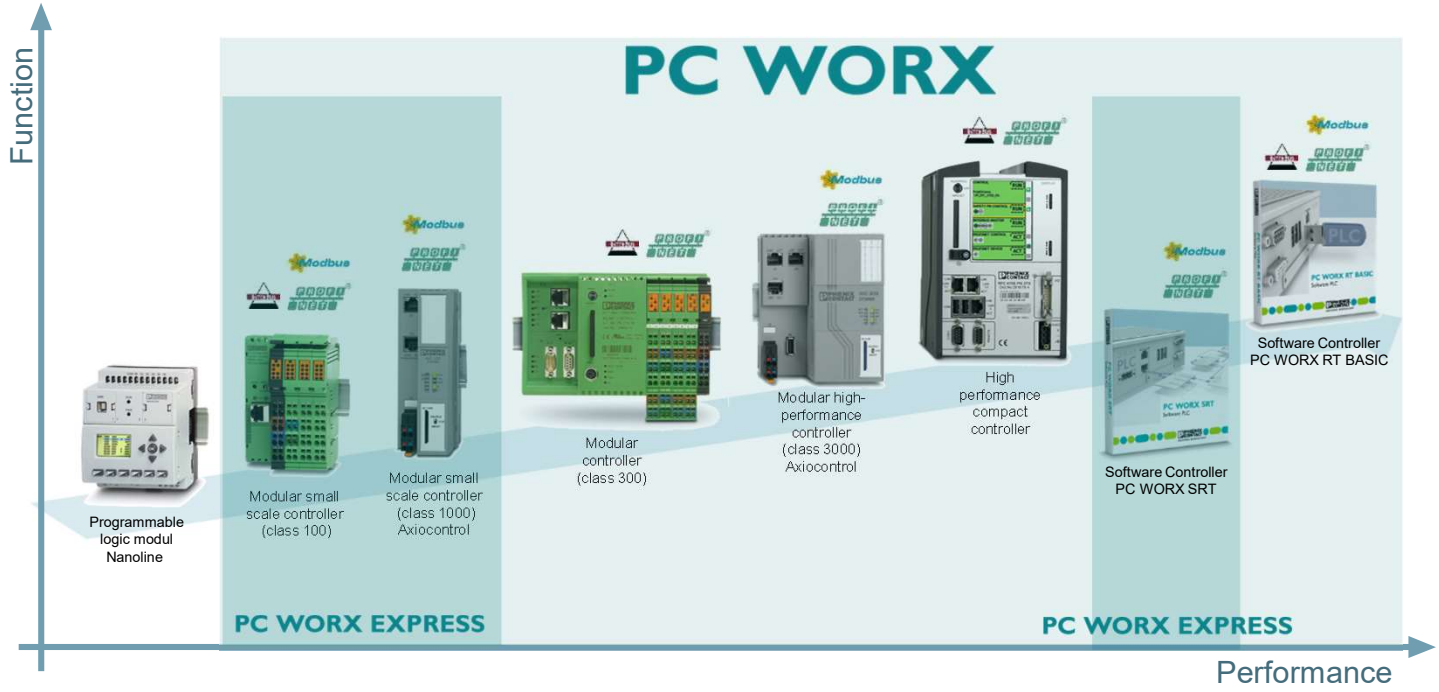


PHOENIX CONTACT
INSPIRING INNOVATIONS

Equipos

PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX – Compatible controller



PHOENIX CONTACT
INSPIRING INNOVATIONS

PC WORX

Worldwide consistent programming – IEC 61131

Integrated software-tools

Fast and flexible programming

- Additional standard libraries

Extensible

- User functions
- Function blocks or libraries

Easy handling

- Intuitive user interface
- Clear structures

One software for every engineering step

PHOENIX CONTACT
INSPIRING INNOVATIONS

Webinar IMA 2020

Mayor información

www.phoenixcontact.com.mx

ventas@phoenixcontact.com.mx

55 1101 1380

Actividades 2020 Folletos Presentaciones Webinars

PHOENIX CONTACT
INSPIRING INNOVATIONS