CODESYS®

The Comprehensive Software Suite for Automation Technology

Roadmap | November 2025

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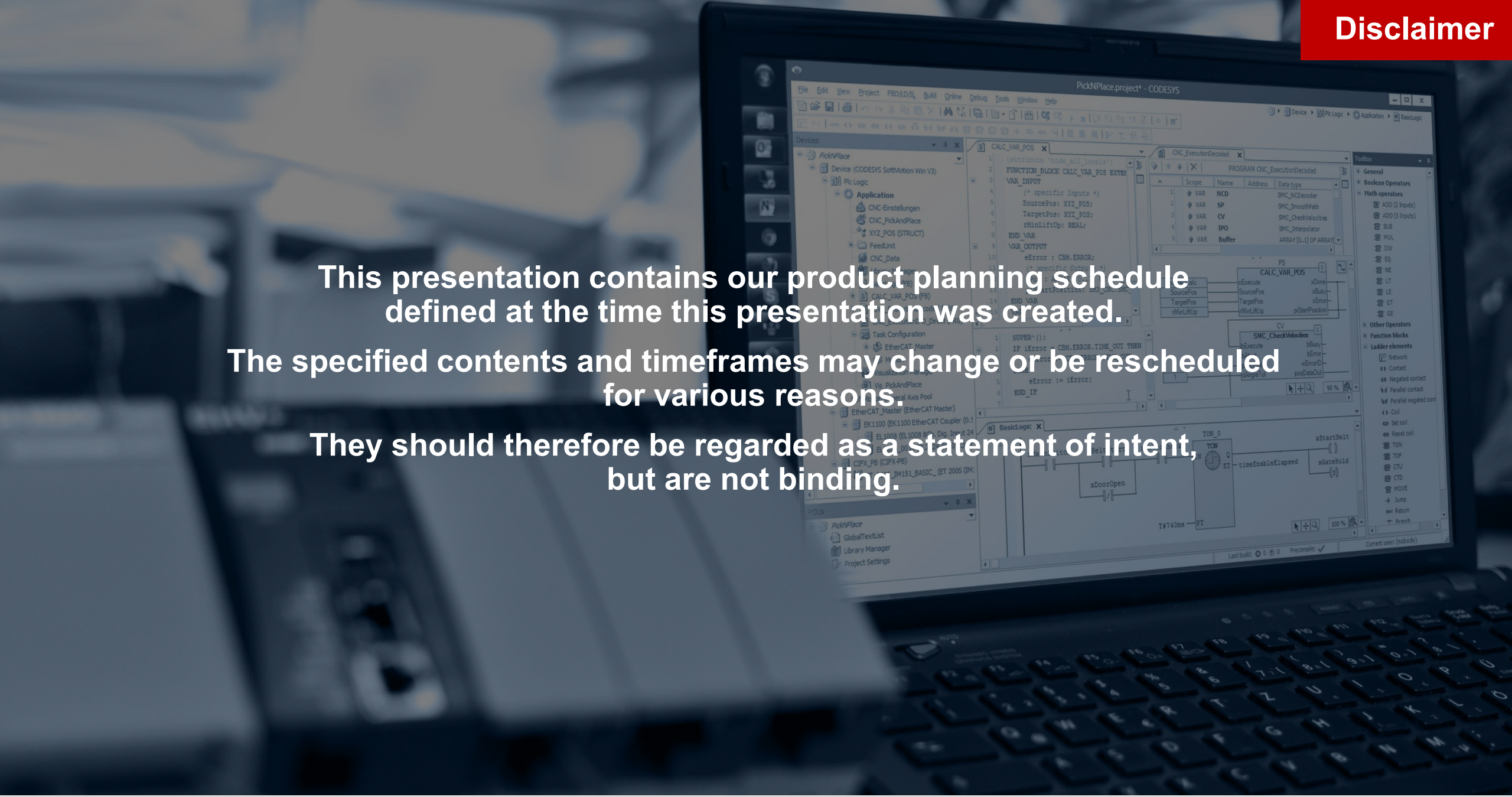
Disclaimer



This presentation contains our product planning schedule defined at the time this presentation was created.

The specified contents and timeframes may change or be rescheduled for various reasons.

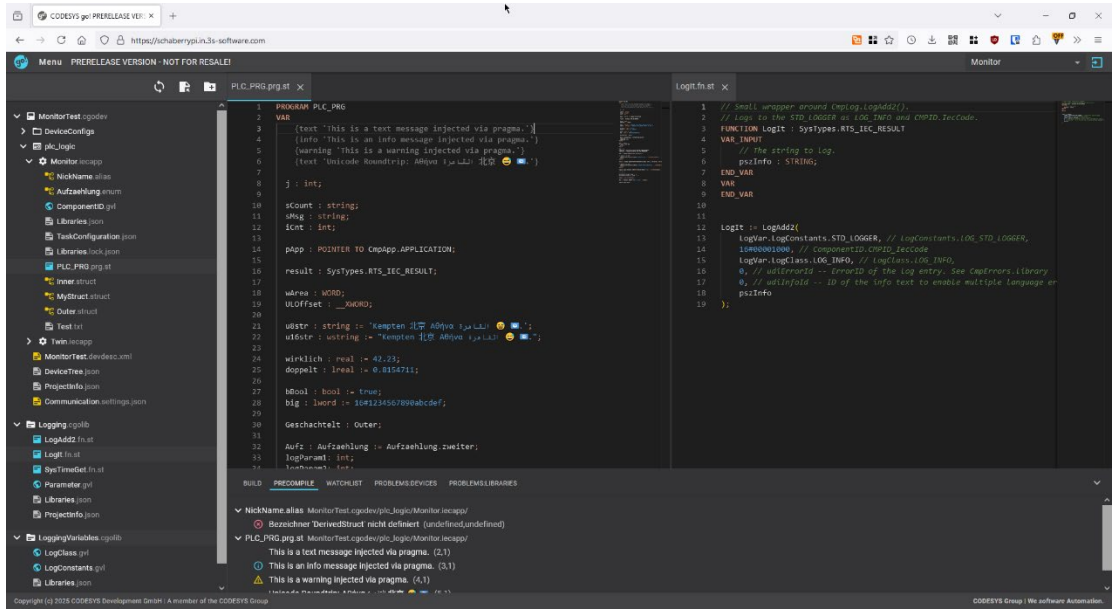
They should therefore be regarded as a statement of intent, but are not binding.

CODESYS *go!*

- Alternative programming tool based on web technology
  - Only the compilers that are proven in operation are reused from CODESYS V3.
- Compatible with CODESYS Control V3 – there will be no separate runtime for CODESYS *go!*

- Platform-independent engineering tool for CODESYS PLCs
  - Backend running on desktop, server, cloud, or on the PLC itself; Windows- and Linux-based
  - Frontend running on any device with web browser support
- Textual project storage

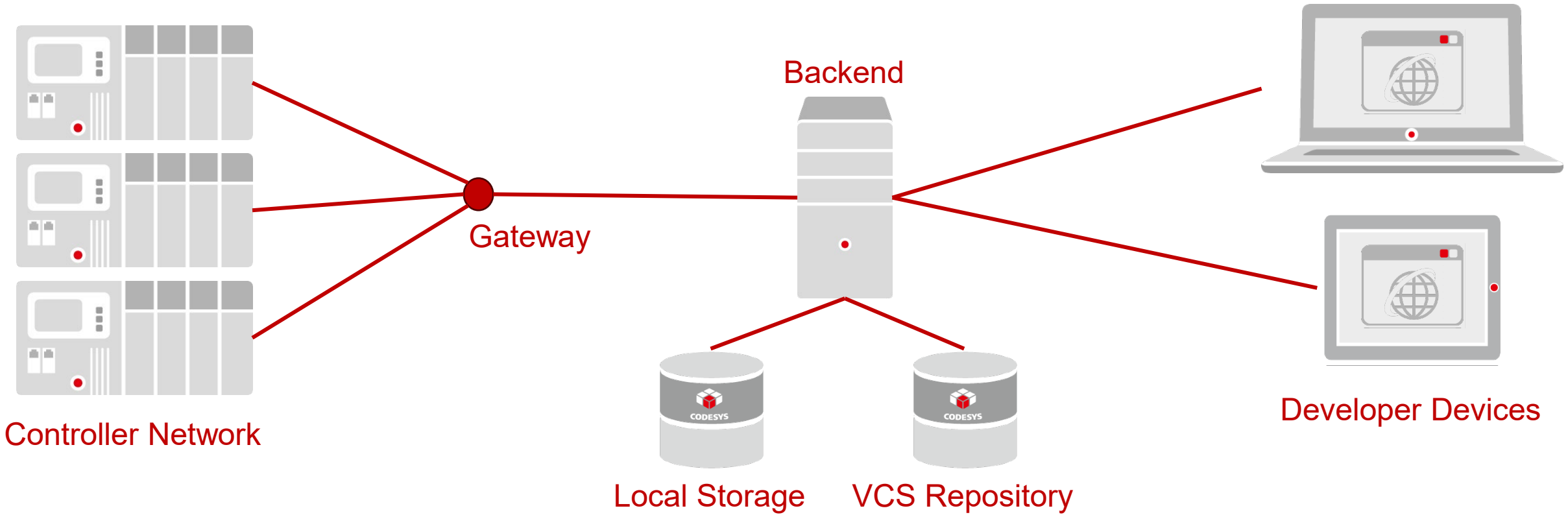
- The first version will be available in April 2026. It will provide limited functionality compared to V3.



CODESYS *go!*

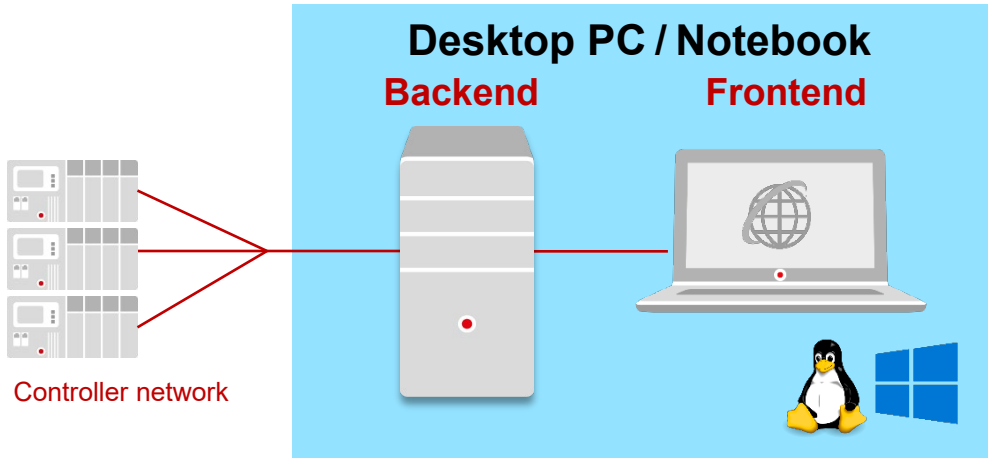
- After 2028, CODESYS *go!* will require a license fee.
- CODESYS *go!* will be released for the first time in April 2026 with limited functionality, focusing on two use-cases:
  - Implementation of simple applications
    (that do not require more than the currently available functionality)
  - CI/CD for libraries
- There will be frequent updates for CODESYS *go!,* bringing step by step new functionality.
- New functionality, current status, and modules under development will be announced in this roadmap and in the CODESYS Feature Briefing.

Architecture of *CODESYS go!*

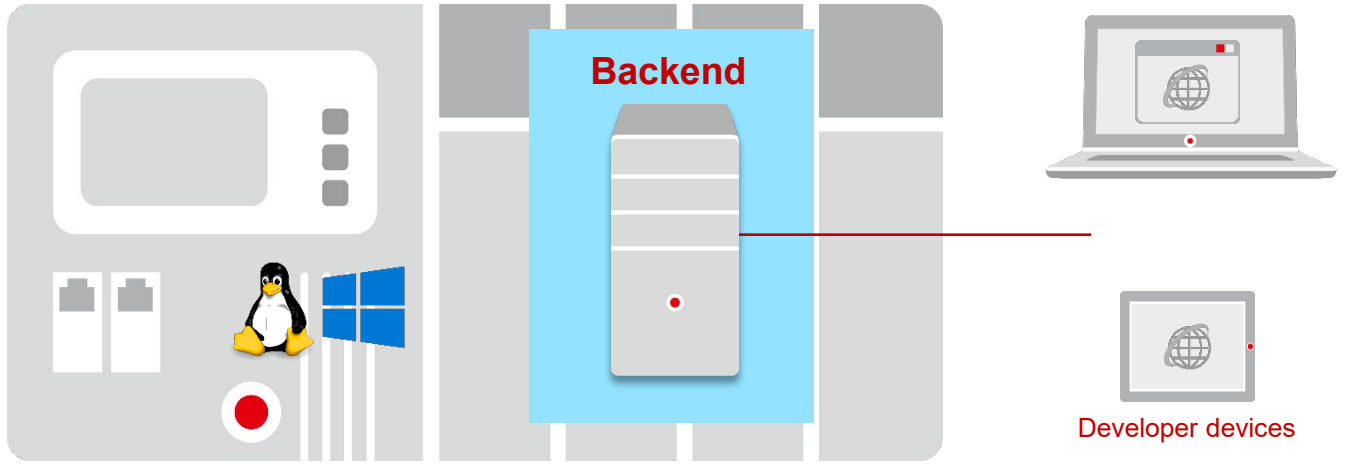


Deployment options of *CODESYS go!*

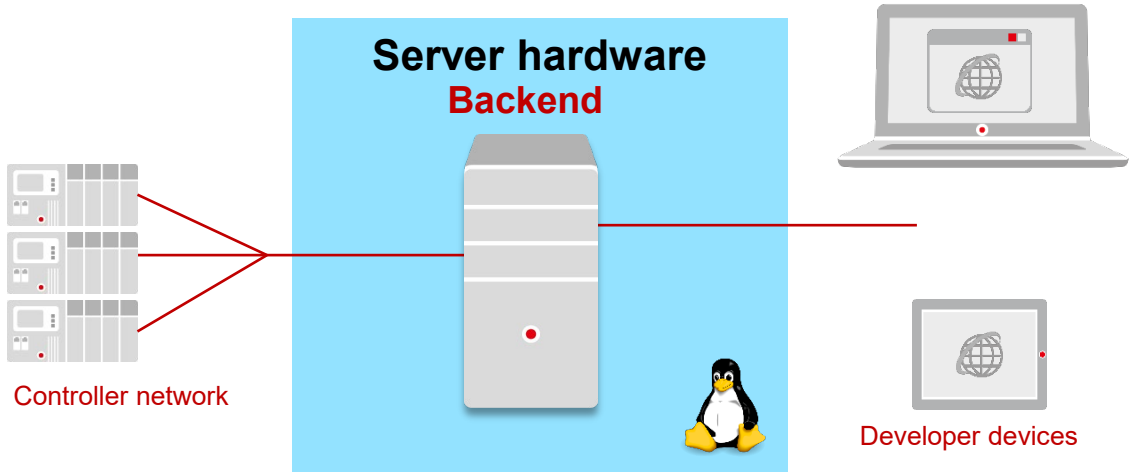
Desktop



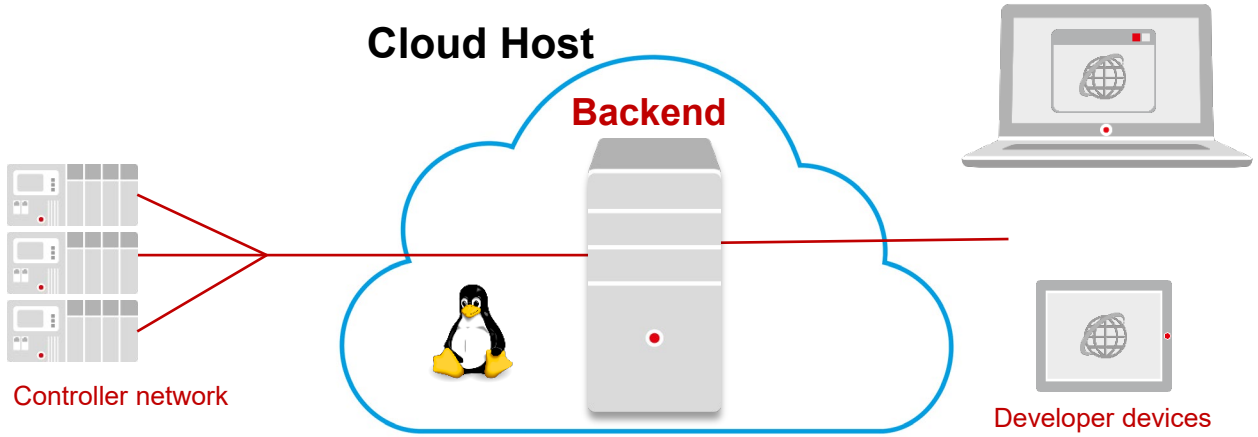
Device



On-premises



Cloud



CODESYS *go!* (April 2026)

- Architecture and Deployment
  - Extension platform – component-based architecture, allowing for customer extensions in the future
  - Controller deployment
    - Install and run the backend server on Raspberry Pi as proof of concept. Other Linux systems can be provided.
  - Desktop deployment
    - Install and run both frontend and backend server on a Windows desktop system.
  - On-prem deployment
    - Install and run the backend server on a Linux-based server.

CODESYS *go!* (April 2026)

- UI and editors
  - Navigator and editor/view host
  - Command infrastructure
  - ST editor
    - Enhanced offline functionality
    - Online mode and debugging
  - Ladder editor (offline)

- Fieldbus configuration:
  - Textual configuration of on-board GPIOs on Raspberry Pi with IO mapping
  - MODBUS configuration of client and server (textually and graphically)

- Compiled library generation, compatible with V3

Compiler

- **Raw ST parser (CODESYS *go!*, Q1 2026)**
  - Improve parsing of raw ST files in compiler to improve readability of File-Based Storage due to less specific metadata that are required in the files
  - Provide possibility to implement several POUs in one single file (FB with all methods)

- **Native compiler logging features (V3.5 SP22, Q1 2026)**
  - New compiler features to access compile information
  - Helps application programmers to log info more easily and precisely

- **Support method overloading (CODESYS *go!*, Q1 2026)**
  - A compiled library generated with *go!* using this new feature will work also with V3.

Toolbox customization (V3.5 SP22, Q1 2026)

- Customers can define the toolbox content according to their preferences.
- First editor to use this new feature: ST, others will follow

CODESYS Online Help Chatbot (11.2025)

- AI Chatbot answering user questions
  - Based on Online Help Portal

Code / Line Completion (2026?)

- For ST editor
- Proposes snippets while user is coding
- Fine-tuned LLM for CODESYS compiler syntax and features

Research topics!
Timeline and content may change!

Model context protocol MCP (Q2 2026)

- Allows for AI coding tools to interact with CODESYS
- Will require V3.5 SP22

CODESYS Control (V3.5 SP22, Q1 2026)

- Improved handling of signed certificates / CSRs
  - CODESYS Automation Server as a certificate server to renew/update certificates
- Support Wibu licensing with EWF/EBWF filter
  - Support of read-only file systems
- Licensing infrastructure for device vendors
  - Single license mechanism for device vendors
  - Application-Based Licenses (ABL) support for device vendors
- Redundancy improvements

Company goal 2025

- Security: Process certification according to IEC 62443-4-1

CODESYS Control (2026+)

- Independent release cycle for runtime toolkits
  - Instead of releasing the runtimes along with CODESYS V3 Essentials, they can be released in an independent cycle.

- Audit trail
  - Documentation and supervision of user activities

- Security: Product certification according to IEC 62443-4.2
  - CODESYS Control
  - CODESYS Control for SIL2

CODESYS Control RTE (V3.5 SP22, Q1 2026)

- Support for EC1000 internet interface

RTOSVisor (Acontis): new product in the CODESYS Store

- Third-party hypervisor solution

RTS Hypervisor (Real-Time Systems): new product in CODESYS Store (2026)

- Third-party hypervisor solution

CODESYS Control for Weidmüller SL (4.18.0.0, Q4 2025)

No need for root access (Q2 2026)

- Allow for the execution of Linux-based runtimes with specific user rights (no root access).

XDP support for PROFINET and EtherCAT

- X86 systems (Q2 2026)
- Selected ARM systems (2026)

CODESYS Virtual Control SL

- Support of Red Hat UBI (universal base image) (4.20.0.0, Q2 2026)

- Cluster support (2026)
  - Kubernetes
  - Margo

Safe Control

- **Two products:**
  - Safe Control Core Toolkit (Q2 2026)
    - For device manufacturers
  - Virtual Safe Control SL
    - Ready-to-use product for standard hardwares with Linux

- **New features**
  - FSoE Master support (Q1 2026)
  - External library interface (Q1 2026)
    Interface to extend Virtual Safe Control SL with own safety-related functionality as external function block
  - Time provider improvements (Q1 2026)
  - ARM/ARM64 devices support (Q3 2026)

SIL2

- No more strict version binding (2026)
  - SIL2 runtime versions may differ from IDE version.
  - Device manufacturer can qualify a new IDE version much easier for existing runtime versions.
    -> No runtime update required when the IDE is updated.

OPC UA Server

- GDS support (V3.5 SP22, 2026)
  - Supports OPC UA certificate management by connecting to a third-party global discovery server.
- Support of backticks (2026)
- Node set export (4.7.0.0, Q4 2025)
  - Supports offline configuration of OPC UA clients connecting to our PLC.

OPC UA Client (V3.5 SP22, Q1 2026)

- Supports certificate chain analysis.

Symbol Sets Editor (2026)

- Supports PLCHandler, in addition to OPC UA.

OPC UA PubSub (1.3.0.0, Q4 2025)

- Secure communication

DNP3 (2.0.0.0, Q4 2025)

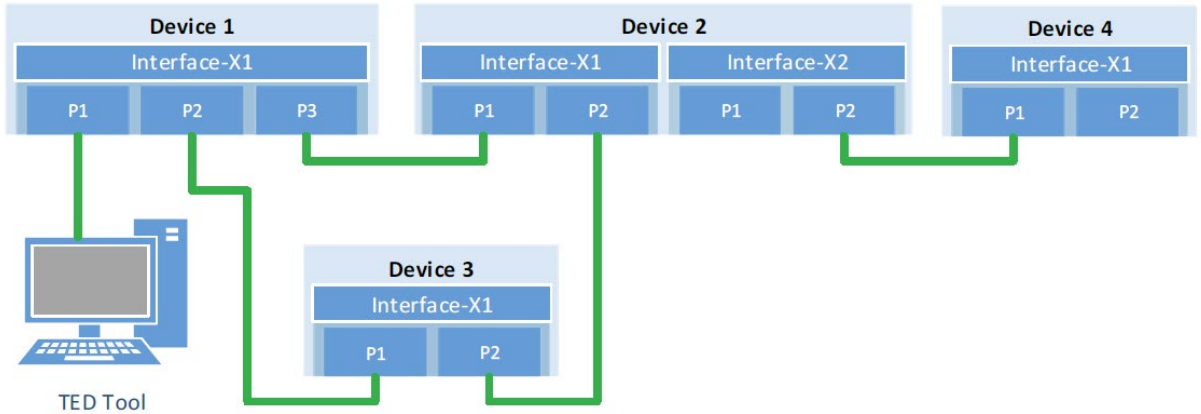
- Master implementation
- Support of additional datatypes
- Support of events and unsolicited responses

Online change support in IO configuration

- Extended online change support of
  - Local I/O drivers (V3.5 SP22, Q1 2026)
  - PROFINET (Q2 2026)
  - MODBUS (2026)

PROFINET

- Topology editor (Q2 2026)
  - Defines and supervises the topology of all PROFINET devices graphically.



CAN FD (SP22, Q1 2026)

- Configuration dialog for Gateway communication

ControlElement Libraries (Q4 2025)

- FBs (PID, filters, …) for programming control loops
- New package that contains the library “Control Loop Library” from the CODESYS Store
- Managed by the CODESYS Installer

IIoT Libraries (Q4 2025)

- „JSON Utilities 2 SL“ as successor of “JSON Utilities SL“ supports faster operations

Base Libraries (5.0, Q1 2026)

- New version without obsolete CAA libraries

SRCI (Q1 2026)

- Robotics interface library following PI SRCI specification

Robotics improvements (4.20.0.0, Q4 2025)

- New axisbased blending modes

Cam table improvements (4.20.0.0, Q4 2025)

- Function to evaluate a cam table

CNC improvements (4.21.0.0, Q2 2026)

- G-code for robotics: Allows for programming a robot in G-code
- CNC editor: Supports already existing kernel features (e.g. subprograms, expressions, …)

Security

Company goal 2025

- Process certification according to IEC 62443-4-1 (SP22, Q1 2026)
- Product certification according to IEC 62443-4-2
  - Runtime Toolkit (SP23, Q1 2027)

Git (Q2 2026)

- File-based storage as backend

File-Based Storage (Q2 2026, V1.0)

- New alternative text-based project format for CODESYS V3
- Similar, yet not identical with *CODESYS go!* project format
  - Allows for the import / export of *go!* projects (for objects available in both worlds)
- V0.9 is available since June 2025
- Is part of the Professional Developer Edition and requires this license.
- V1.0 takes into account your feedback on V0.9. It will provide…
  - file format changes,
  - harmonized line endings,
  - optimized user experience.

Test Manager (Q2 2026)

- Provides a script driver interface to enable usage in CI/CD workflow.

Simulation interface (1.0.0.0, Q2 2026)

- Enables virtual commissioning and automated HW/SW testing of CODESYS-controlled machines.
- Integrates CODESYS applications in third-party simulation tools (Software-in-the-loop).
- Standard interface based on OPC UA Pub/Sub and information model
- Alternate easily between simulation and real target without project changes
- Preview version for evaluation is already available.

On-premises support (1.0, Q1 2026)

- Cloud-independent Automation Server on customer's own IT infrastructure
- Support of CODESYS Virtual Control
- Release candidate available in Q4 2025

File management / backup / restore

- Exchange files between PLCs and clients via browser (already released)
- Manage files and folders on PLCs (already released)
- Central file management on the Automation Server (Q4 2025)
- Deployment of additional files (Q4 2025)
- Backup & restore of PLC files in the Automation Server (Q2 2026)

Visu dialog optimizations (4.9.0.0, Q4 2025)

- New edit dialogs for special data types like date and time
- Numpad/keypad can also be operated via the keyboard.
- Different keys can be assigned to the keyboard, depending on which language is to be displayed.

Media Player Element for TargetVisu (SP22, Q1 2026)

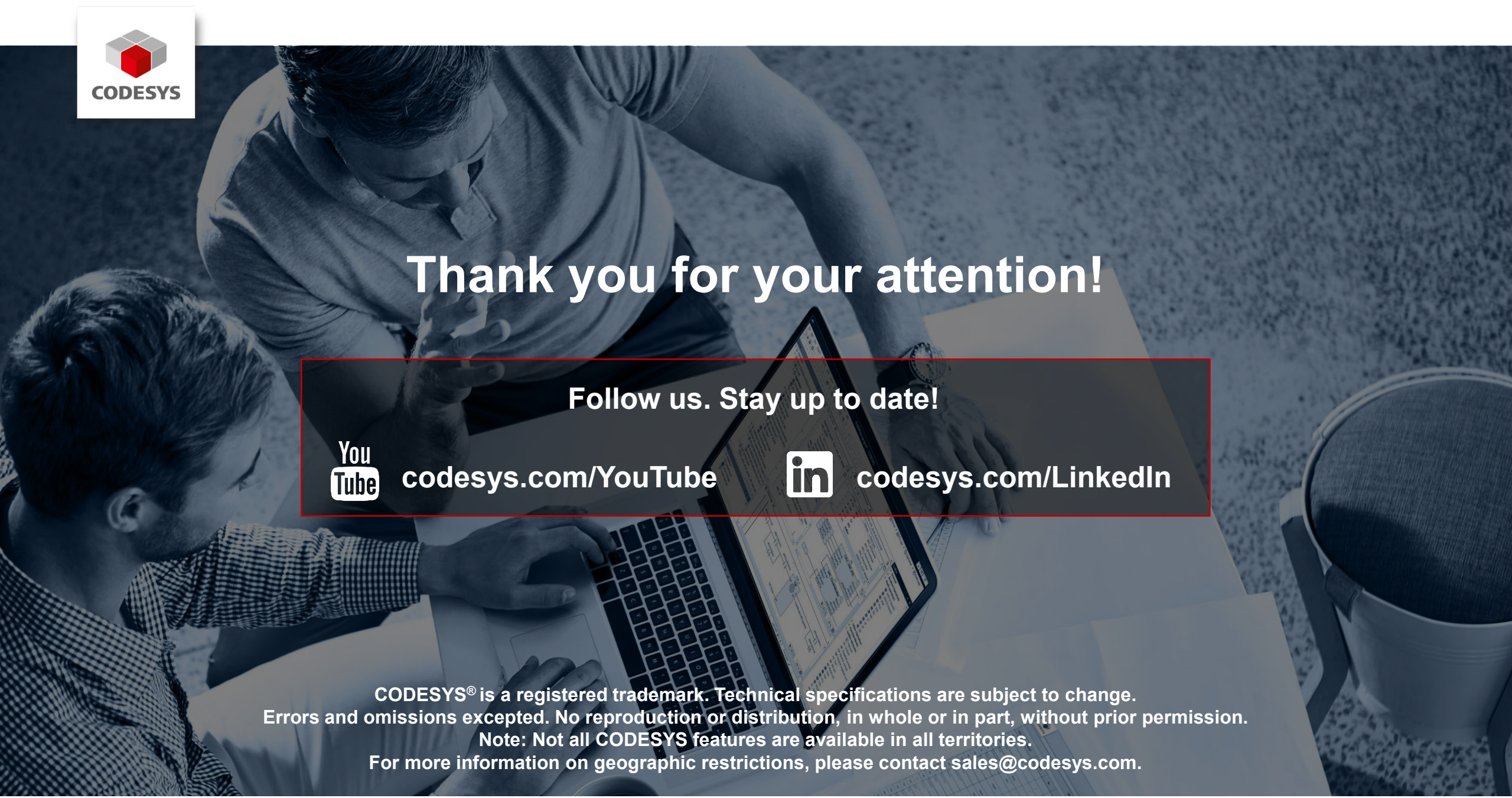
- Support of the Media Player Element for TargetVisu
  - Possibility to display camera streams
  - Possibility to display video streams

WebSocket support for WebServer and WebVisu (V3.5 SP22 & 4.9.0.0, Q1 2026)

- Reduce network load by leveraging WebSocket technology

TargetVisu overlay optimizations (2026)

- Performance optimization for…
  - loading/switching pages
  - drawing/updating pages



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