CODESYS Control for Linux SL

CODESYS Control Linux SL is an IEC 61131-3-compliant SoftPLC for PC-based industrial controllers running on Linux with soft real-time properties.

Product description

CODESYS Control Linux SL converts an industrial PC into a high-performance PLC – scalable to nearly any degree by the PC performance. The system is suitable for applications without hard demands on the real-time behavior.

Benefits

The runtime system supports numerous I/O interfaces, such as discrete inputs and outputs or fieldbus adapters, as well as integrated IEC 61131-3 protocol stacks. The fieldbuses are configured directly in the CODESYS Development System without using any additional tools.

- Communication with the CODESYS Development System, also for debugging the running application
- Execution of controller functions and generation of graphical user interfaces
- Operation of I/O systems and fieldbuses

Detailed information can be found in the CODESYS Online Help.

Interfaces

- CODESYS OPC UA Server, as full version for data exchange.

Visualization

- CODESYS WebVisu, is included as full version in the delivery of the runtime package.

SL Extension

The SL Extension Package is included in the Runtime Package and offers additional functions:

- Integration of existing C code
- Implementation of external functions
- Support of start/stop switches
- Usage of local I/Os
- Use of external event tasks
- Connect persistent memories (Retains

Fieldbus support

With the delivery of the Runtime Package the following fieldbuses are supported:

- CODESYS CANopen Manager / Device
- CODESYS EtherCAT Master
- CODESYS EtherNet/IP Scanner / Adapter
- CODESYS Modbus TCP Master / Slave
- CODESYS Modbus Serial Master / Slave
- CODESYS PROFIBUS Master
- CODESYS PROFINET Controller / Device

Product options

Further products can be licensed for a fee:

- CODESYS BACnet SL
- CODESYS Control for Linux MC SL
- CODESYS KNX SL
- CODESYS Redundancy SL
- CODESYS SoftMotion SL
- CODESYS SoftMotion CNC+Robotics SL
- CODESYS DNP3

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General information

Supplier:

CODESYS GmbH
Memminger Strasse 151
87439 Kempten
Germany

Support:

This product includes a free addition to an otherwise paid support entitlement of one hour of support.
The redemption must be made within 1 year from the date of purchase. After this time, the support entitlement expires.

https://support.codesys.com

Item:

CODESYS Control for Linux SL

Item number:

2302000005

Sales/Source of supply:

CODESYS Store
https://store.codesys.com

Included in delivery:

- Setup.deb (64-bit)
- License key

System requirements and restrictions

Programming System	CODESYS Development System V3.5.17.0 or higher
Supported platforms and devices	Runs on Debian-based Linux (64-bit) Note: Use the tool “Device Reader” to find out the supported features of your device (free of charge component of CODESYS Development System). Supported Hilscher hardware: • PROFIBUS Master: Hilscher CIFX or netX 100/500 controller with firmware 2.8.0.0 • PROFINET Controller: Hilscher CIFX or netX 100/500 controller with firmware 3.x

Additional requirements	• A SSH server must be running on the Linux system, to install the CODESYS runtime with the CODESYS Development System. • Dynamic libraries needed by the CODESYS Control Runtime binary: ◦ libm.so.6 ◦ libpthread.so.0 ◦ libdl.so.2 ◦ librt.so.1 ◦ libc.so.6 ◦ libgcc_s.so.1
Restrictions	IEC applications are bound to one CPU core. Other distributions may also be used at your discretion but are not part of the product release and related tests. Not released for use in containers or virtual machines (VMs)!
Licensing	 Single device license: The license can be used on the target device/PLC on which the CODESYS runtime system is installed. Licenses are activated on a software-based license container (soft container), which is permanently connected to the controller. Alternatively, the license can be stored on a CODESYS Key (USB dongle). By replugging the CODESYS Key, the license can be used on any other controller. Note: In demo mode, the software runs for two hours without a license. After that, a manual restart is required.
Required Accessories	Optional: CODESYS Key

Note: Technical specifications are subject to change. Errors and omissions excepted. The content of the current online version of this document applies.

Creation date: 2023-10-30