

**EC → Master**  
Best-in-class EtherCAT MainDevice stack

**EC → Monitor**  
Secure bridging to IoT

**EC → Motion**  
Streamline motion control

**EC → Engineer**  
Innovative & user-friendly configuration & analysis

**EC → Simulator**  
Rigorous verification & digital twins

**acontis**  
technologies

**The leading Experts for EtherCAT® Software**

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|--------------------------|--|
| <b>EC → Master</b>       | EtherCAT® Master Stack Software solution available for Linux, Windows, VxWorks, FreeRTOS, On Time RTOS-32, QNX, eT-Kernel, RTX, INtime, Xenomai, etc.  |
| <b>EC → Win</b>          | Powerful open real-time EtherCAT programming platform for Windows. Using EC-Win it is possible to build deterministic real-time EtherCAT solutions for Windows                                 |
| <b>EC → Engineer</b>     | Modern and powerful software tool to configure and analyze EtherCAT® networks. Integrated Windows EtherCAT Master for comprehensive online functions.  |
| <b>EC → Engineer Web</b> | EtherCAT software tool based on web technology for Windows and Linux. Modern browser-based user interface.   |
| <b>EC → Inspector</b>    | Troubleshooting and Monitoring Tool for EtherCAT® Networks.  |
| <b>EC → Lyser</b>        | EtherCAT diagnosis and error detection tool.   |
| <b>EC → Simulator</b>    | The EC-Simulator virtualizes EtherCAT® networks by simulating the EtherCAT® slave devices in order to run EtherCAT Master applications without real EtherCAT® slave hardware available.        |
| <b>EC → STA</b>          | EtherCAT Slave Test Application for slave software development and slave production testing. Extensible Windows application based on EC-Master Stack; performs extensive EtherCAT slave tests. |

# EtherCAT Software Real-Time Hypervisor



acontis offers **real-time software** for more than 20 years. We are the experts for our customers that need reliable real-time capabilities for machine controllers, medical devices, transportation systems and more. Our company is known for high quality products "Made in Germany".

We take real-time machine communication to the next level with our extensive portfolio of **EtherCAT software** - enabling our customers to realize the best-in-class EtherCAT controllers, as well as enabling thousands of companies to commission and operate EtherCAT networks with maximum performance and highest availability. With our unique EtherCAT simulation technology, we facilitate the realization of digital twins of devices and networks and also simplify implementation of EtherCAT SubDevices by simulating the devices-to-be-realized in real networks..

As a perfect complement to our EtherCAT MainDevice software, the leading acontis **real-time hypervisor technology** allows to operate real-time applications alongside Windows® or Linux. We enable our customers to consolidate systems, achieve deterministic response times, and unlock peak performance for their industrial automation needs - including PLC, HMI, measurement, IoT or supervision systems.

## EtherCAT® Software & Real-Time Hypervisor

The acontis EtherCAT MainDevice software is the core in countless EtherCAT networks - including machinery, aerospace, medical, automotive, measurement and many more industries.

Complementing to the EC-Master, acontis offers a full portfolio for all users of EtherCAT: From development and verification, commissioning and supervision to maintenance and trouble-shooting.

### Key Benefits of acontis EtherCAT software

- High performance and low CPU load for fast update rates.
- Ready-to-run for many operating systems.
- Supporting all major CPU architectures: x86, ARM, RISC.
- Available for many processors from AMD, Broadcom, Intel, NXP, Nvidia, Renesas, Rockchip, ST, Texas Instruments or Xilinx.
- Fast project realization by easy-to-use software and APIs, extensive documentation, examples and professional support.
- Most reliable and robust implementation, field-proven since 20 years in many high-profile controllers from Bosch Rexroth, Lenze, KUKA, Omron, Panasonic, Yaskawa and many more!

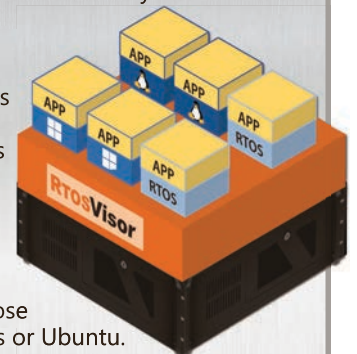
### acontis EtherCAT portfolio

- EC ↔ Engineer** Most convenient configuration, commissioning and analysis of EtherCAT networks
- EC ↔ Simulator** Use digital twins for controller or device development, verification and virtual commissioning
- EC ↔ STA** EtherCAT MainDevice and Testing functions combined in one powerful tool
- EC ↔ Monitor** Link EtherCAT data to IoT and supervision systems independent from EtherCAT controller!

acontis is a renown provider of real-time virtualization solutions, enabling customers to implement hard real-time applications in combination with the flexibility of Windows®.

Real-time Hypervisors are virtualization technology designed specifically for systems where timing and deterministic performance are critical, such as industrial controllers.

Unlike traditional Hypervisors, real-time Hypervisors maintain the deterministic performance of real-time operating systems (RTOS) alongside general-purpose operating systems like Windows or Ubuntu.



### Key Benefits of acontis Real-Time Hypervisor

- Consolidation of Multiple Applications
- Support for range of operating systems & RTOS
- Enhanced Security through Virtualization
- Combining virtualization and para-virtualization including pass-through hardware access for best performance
- Broad Industrial Application Support

### acontis Real-Time Hypervisor portfolio

- RTOSVisor** Type 1 RT-Hypervisor for maximum performance and flexibility - combining multiple operating systems and applications on a single device.
- LxWin** Type 2 RT-Hypervisor packages for easy setup and best performance - also available in combination with acontis EC-Master to realize top-class EtherCAT controllers.
- VxWin**
- RtaccWin** Innovative technology to realize hard real-time applications on Windows - perfect for former users of WindowsCE

