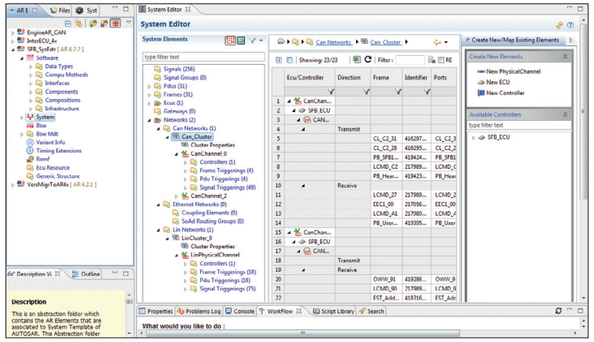
ISOLAR-A News

The integrated AUTOSAR architecture and basic software configuration tool ETAS ISOLAR-A **supports AUTOSAR developers** through sophisticated editors, the importing of DBC, LDF, FIBEX, and ODX formats, and assistance with iterative customer workflows. ISOLAR-A is the tool of choice for configuring AUTOSAR systems and software, for generating system, ECU, and diagnostics extracts, and for carrying out RTE configurations up to and including the latest AUTOSAR Release 4.2.2. For configuration of the ECU basic software, users have a powerful and expandable tool at their disposal with the Basic Software Configuration Tool (BCT) add-on. In addition, BCT supports code generation for the basic software (using ETAS RTA-BSW for instance). Both ISOLAR-A and BCT are based on Eclipse and Artop, which facilitates integration into customer-specific development environments. The integration of other ETAS and third-party tools is also possible.



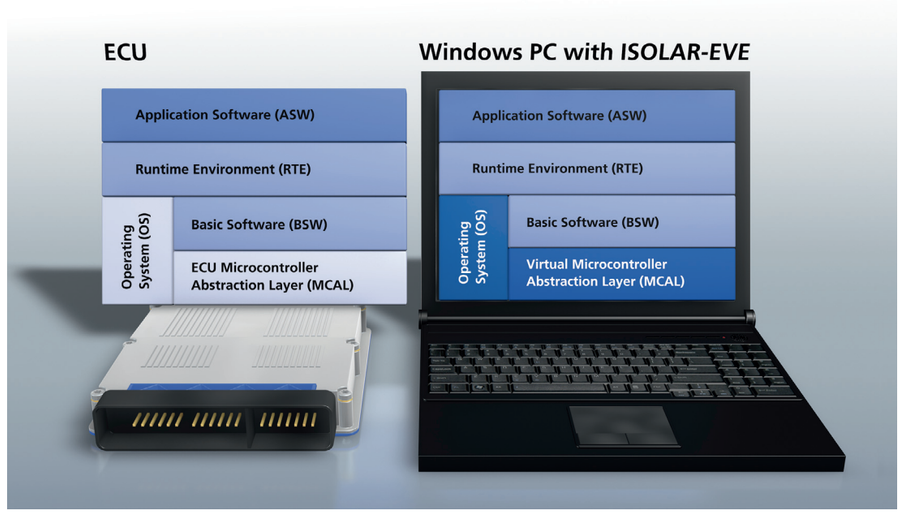
The system editor helps users configure networks, messages, protocol data units (PDUs), signals, and more.

New RTA Products

ETAS RTA-BSW (Basic Software) is the **next-generation software platform for AUTOSAR basic software** that supports ECUs. Easy to configure, integrate, and test, it supports the deployment of applications on real ECU hardware as well as on virtual targets. RTA-BSW components have been developed as safety elements out of context (SEooC) in accordance with ASIL D-compliant ISO 26262 processes and can be used in even the most demanding safety-critical applications. It supports AUTOSAR 4.x and consists of several stacks that provide support for a wide range of features, including the operating system, runtime environment, memory, communication via CAN and LIN, and diagnostic and calibration protocols such as XCP. ETAS provides an RTA Starter Kit, which comprises a complete AUTOSAR environment, including ISOLAR-A editor, basic software components, operating system (RTA-OS), and runtime environment (RTA-RTE).

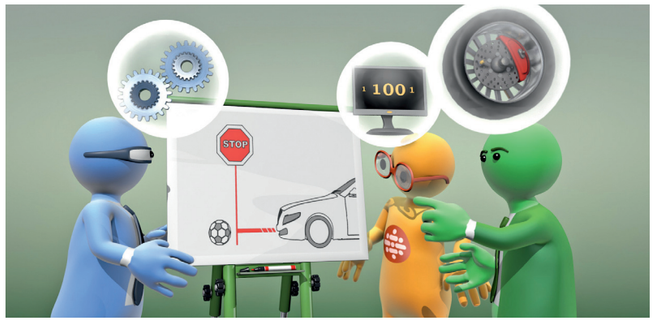
Innovations in ISOLAR-EVE

Version 3.1 of ETAS ISOLAR-EVE, the latest version of the ETAS tool for developing and testing with the aid of virtual ECUs, **can also be installed on Windows 10 systems**. Because it now exclusively supports 64-bit Windows and LINUX operating systems, it can make optimum use of PC resources. ISOLAR-EVE V3.1 supports AUTOSAR R4.2 and was expanded to incorporate a microcontroller abstraction layer (MCAL) for **automotive Ethernet.** In addition, it offers a range of enhanced details, including through the use of new versions of RTA-OS (AUTOSAR operating system) and RTA-RTE (AUTOSAR runtime environment). ISOLAR-EVE V3.1 permits the use of runtime environments and AUTOSAR basic software supplied by ETAS as well as third-party providers.



ISOLAR-EVE realistically simulates an ECU on a Windows PC.

New Safety and Security Video



Scene from the video *Safety and Security with ETAS and ESCRYPT.*

In cars, safety and security are paramount: they ensure **safe driving without compromises**. This also holds true for the software embedded in a vehicle's many electronic control units. The software has to work reliably in all situations, which is easier said than done. Our entertaining new video *Safety and Security with ETAS and ESCRYPT* spells out the development steps needed for the relevant software. All aspects of safety and security are guaranteed even when malfunctions occur thanks to the solutions by ETAS and ESCRYPT. You can find the video here: www.etas.com/safetyvideo. Enjoy!

New LABCAR Boards

The new boards for the ETAS ES53xx product family are used flexibly in many typical **HiL test applications for automotive ECUs**, such as in powertrains or hybrid electronic vehicles. They provide functions for the generation and measurement of the following:

- Analog and discrete I/O signals
- Digital and PWM I/O signals (e.g. ES5321, ES5340, ES5350)
- Arbitrary signal forms (ASG)
- Multi-pulse signals
- Resistor cascades
- Current signals (e.g. ES5321, ES5335, ES5385)

In addition, some of the boards, for instance the ES5392, allow the simulation of battery nodes such as terminal 15 or terminal 30 and of electrical injector loads (controlled valve operation, CVO, and valve closing control, VCC). Other boards, e.g. ES5321 and ES5338, support the automotive protocols SENT and PSI5. Thanks to the use of PCIe technology, the ES53xx boards are also open to boards from third-party providers and their functionalities.