Empowering Tomorrow's Automotive Software
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Smart fuzz testing for automotive systems **ESCRYPT CycurFUZZ**

Ensure compliance with UN R-155 and ISO/SAE 21434

Increasing complexity coupled with international regulations like UN R-155 and ISO/SAE 21434 make cybersecurity testing mandatory for the development and validation of automotive systems. Fuzzing is one of the test methods explicitly recommended in ISO/SAE 21434 for validating the robustness and cyberresilience of automotive systems and identifying weaknesses at an early stage. A smart automotive fuzz testing tool allows you to customize, automate, and accelerate the test procedure, while constantly improving and embedding it efficiently into your development process.

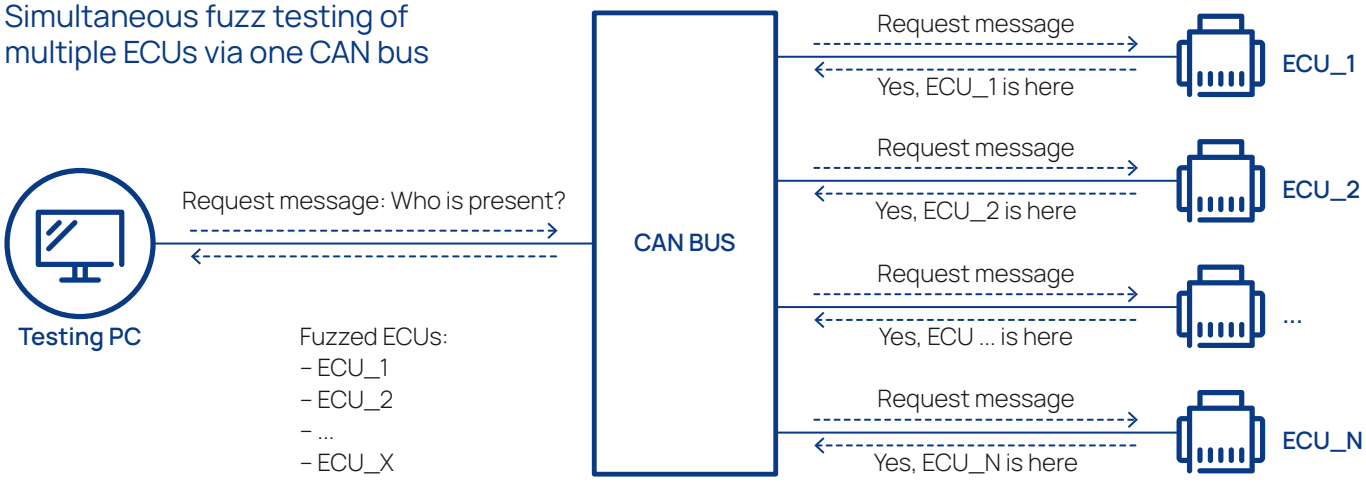
Improve the quality of your automotive software

ESCRYPT CycurFUZZ is a state-of-the-art fuzz testing tool that helps you meet current regulations and standards. With built-in automotive cybersecurity testing knowledge, ESCRYPT CycurFUZZ enables you to assess the security maturity of your automotive systems and to improve the software quality of your products throughout the development and validation process.

Unique defect detection rate and execution speed

ESCRYPT CycurFUZZ covers pre-dominant automotive protocols and takes customer specific demands, e.g., ARXML files, into consideration. Due to the dynamic timing feature, a particularly high test performance is achieved: ESCRYPT CycurFUZZ performs a unique defect detection rate at an execution speed much faster than other fuzz testing tools.

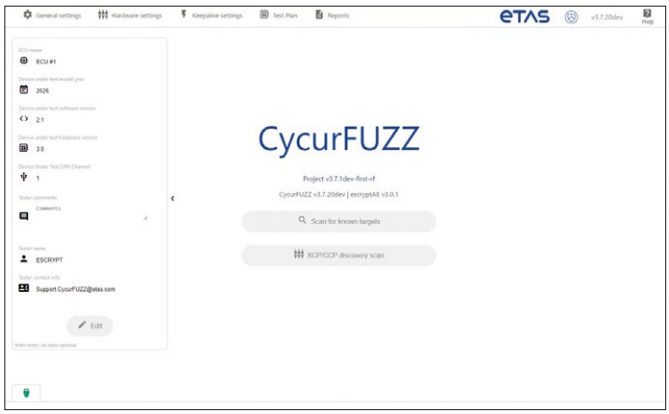
Simultaneous fuzz testing of multiple ECUs via one CAN bus



ESCRYPT CycurFUZZ at a glance

Setups & use cases

- System or integration tests to identify weaknesses/ vulnerabilities of a physical or virtual ECU
- Single virtual or physical ECU tests with easy setup (ECU, hardware connector, PC)
- The following test setups are possible:
  - SiL setup on component level in a single level 3 vECU
  - SiL Setup on system level with multiple ECUs on a PC (see front page)
  - HiL setup with integration of ESCRYPT CycurFUZZ to increase the speed of fuzz testing
- Professional fuzz testing services from ETAS: Fuzz testing, result reports, analysis and interpretation of findings and proposal for remediation.



Web-based GUI of ESCRYPT CycurFUZZ

Features & supported protocols

- Coverage of pre-dominant automotive protocols
  - CAN
  - CAN-FD
  - ISO-TP
  - J1939
  - UDS
  - DoIP (upcoming)
  - SOME/IP (upcoming)
- Support for various fuzzing modes: UDS, Inverse UDS, ISO-TP, ARXML, DBC, Random, and Monitor Mode
- Easy-to-use local PC and cloud-based version
- Vehicle-level fuzz testing: simultaneous fuzzing of multiple ECU targets via one CAN bus
- Full-headless mode: supports all common tools for bus access (DB9, USB connector), REST API for external integration

Your key benefits with ESCRYPT CycurFUZZ

- High-speed test execution, enabled by the dynamic timing feature of fuzzing messages
- Unique defect detection rate compared to competitor tools
- Built-in and continuously improved automotive security testing knowledge due to ESCRYPT professional security testing services
- Compliance to automotive cybersecurity regulations and standards, including ISO/SAE 21434 and UN R-155
- Straightforward local fuzz testing setups and considerably lower switching costs from competitor solutions
- Component-, system-, vehicle-level fuzzing
- Cross-platform support (Windows, Linux, Docker container)

Are you interested in ETAS products and solutions?
Please write to us at: **info@etas.com**

Further product information:
www.etas.com/CycurFUZZ

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