

# Unmask hidden security risks in your system

## ESCRYPT fuzz testing service



## Introduction

With each passing year, vehicles become more complex and connected. In fact, International Data Corporation predicts that by 2023, nearly 70 % of worldwide new light-duty vehicles and trucks will have embedded connectivity. In the U.S., the number is even higher – 90 %.

While this connectivity provides consumers the driving experience they demand, it also significantly increases the vehicle's attack surface – USB connections, connected entertainment, navigation systems and wireless systems. This makes vehicle cybersecurity testing even more critical to prevent criminals from stealing the vehicle and compromising vehicle systems, privacy, and safety of occupants.

A powerful testing technique to check software and system robustness is fuzzing. Fuzzing tests the target's reaction to randomly generated invalid or unexpected input in such a way that it triggers hidden bugs in the implementation. These bugs can lead to insecure and undefined behavior – leaking of secrets and crashes.

### Your fuzz testing benefits

- Address bugs before release
- Reduce number of open vulnerabilities
- Reduce bugs in carry over software

## ETAS – your fuzzing partner

ETAS' security testing experts are providing fuzz testing to customers for over five years. They use commercially available and with ESCRYPT CycurFUZZ in-house fuzzers for automotive and OEM specific protocols, such as UDS and J1939.

By this, they have already discovered weak points and implementation errors in numerous customer projects – up to and including the sudden crash of safety-relevant ECUs.

## Our services at a glance



### Holistic fuzz testing service suited for your needs

- Commercially available and in-house fuzzers for automotive and OEM specific specifications, such as GM CG4579
- In-house R&D including several patents
- Support of system level and Software-in-the-Loop (SiL) fuzz testing
- ECU reponse monitoring on several layers (protocol specific, amperage, power cycles, camera detection, ...)



### All relevant protocols & applications supported

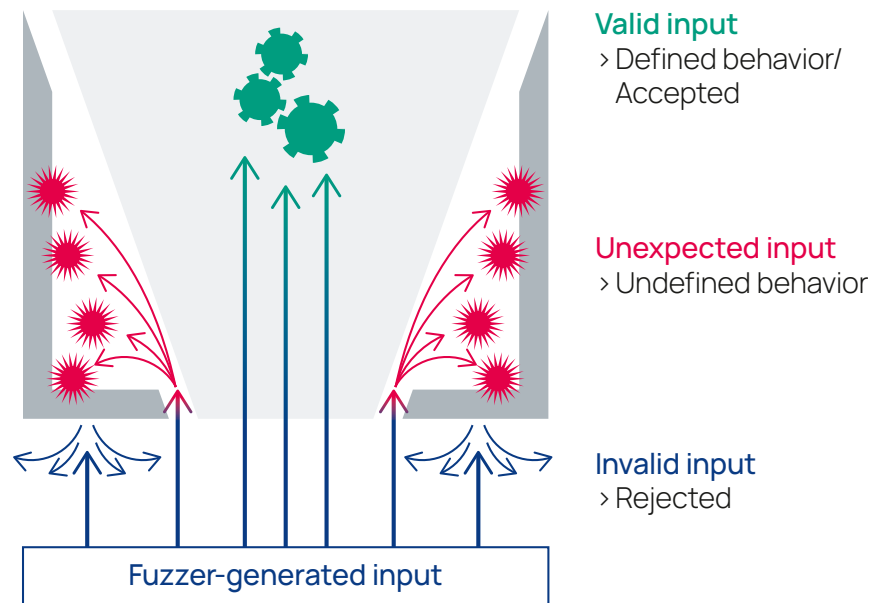
The ESCRYPT fuzzing service is available for CAN-based protocols, Ethernet-based protocols (TCP, TLS, etc), automotive connected ECU protocols (WIFI, BT, USB, etc.) and many more.

Please contact us for a full list, covering more than 40 protocols!



### Fast, informative and reliable test results

Pre-notification of findings and comprehensive report with management summary, carried out tests, list of findings with severity assessment and suggested mitigations.



## Your benefits with the ESCRYPT fuzz testing service

- Support via experienced testing team and fully equipped testing lab
- We align our testing portfolio with all major OEMs to cover their fuzz testing requirements
- Comprehensive report with management summary, carried out tests, list of findings with severity assessment and suggested mitigations
- Pre-notification of findings