MICROSAR Cybersecurity Advanced Course

Agenda VectorAcademy

Delivery Format:	This Course is offered in Classroom **or** in Remote Format
Duration:	Classroom: 1 day Remote: 6 hours
Target Group:	ECU Developers
Prerequisites:	Participation in the "AUTOSAR Classic Platform Basic Course" Training or good knowledge about AUTOSAR Classic Platform
Goal:	Obtain an overview on the usage of Cybersecurity in an AUTOSAR based ECU and acquire practical skills to configure a MICROSAR Cybersecurity Basic Software

1. Introduction to Basics in Automotive Cybersecurity

- Motivation for Cybersecurity in the Vehicle
- Goals of Cybersecurity
- Security Principles and General Approaches
- Basics of Crypto Primitives
- Solutions for Implementing Security Primitives
- Use Cases

2. Basic Concepts

- Basic Concepts Primitives
- Basic Concepts Keys
- Basic Concepts Jobs
- Basics AUTOSAR Crypto Stack

3. MICROSAR Csm

- Overview
- Crypto Jobs and Services
- Csm Key, Csm Queues and Csm Primitives
- Scheduling of Jobs
- Additional Features

4. MICROSAR Cfylf

- Overview
- Crylf Channels and Crylf Keys
- Supporting Multiple Crypto Modules

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5. MCIROSAR Crypto

- Overview
- Crypto Driver Objects
- Key Attributes
- Types of Crypto Drivers
- MICROSAR Crypto(SW) Extensions

6. MICROSAR KeyM

- Overview
- Use Case: Diagnostic Access to ECUs
- Use Case: Secure Communication (Transport Layer Security = TLS)
- Digression Certificates
- Certificate Management Submodule
- Interaction within the BSW Stack