

Introduction to UDS

Agenda VectorAcademy

Duration:	1 day
Target Group:	Engineers working on UDS/ISO 14229 diagnostic implementations
Prerequisites:	Knowledge of CAN and CAN FD network operation.
Goal:	Gain knowledge of UDS diagnostic protocol and use cases

1 | Introduction to Vehicle Diagnostics

2 | Transport Protocol

- > ISO 15765-2 TP for Diagnostics on CAN
- > Additional Features for CAN-FD
- > Addressing on CAN

3 | UDS (ISO 14229) Details

- > Diagnostic Message Structure
- > Response Types
- > Services Overview
- > Basic Data Read/Write Services
- > Sessions
- > Security Access for Diagnostic Services
- > Routines
- > Input/Output Control
- > Communication Services
- > Dynamic Identifiers
- > Periodic Reading
- > Suppress Positive Response
- > Timing Parameters

4 | Fault Memory

- > Overview and Lifecycle of a Fault
- > Environment Data of a Fault (Extended Data vs. Snapshot Data)
- > UDS Communication of Fault Information

5 | Reprogramming

- > Reprogramming Overview
- > Reprogramming with UDS
- > Reprogramming on Different Networks