

# CAPL and Testing for LIN

<b>Duration:</b>	1 day
<b>Target group:</b>	LIN users
<b>Prerequisites:</b>	LIN Fundamentals, CANoe/CANalyzer Option LIN

## 1 Introduction to the CAPL Programming Language (1.0 h)

**Goal:** Brief introduction to the event-oriented programming language CAPL (Communication Access Programming Language), presentation of potential uses of CAPL programs in the LIN environment, overview of CAPL language syntax

**Contents:** System-specific and LIN-specific procedures, basic event procedures, typical CAPL key words (this)

## 2 LIN Cluster Simulation with CAPL (3.0 h)

**Goal:** Simulate LIN network nodes with the help of CAPL

**Contents:** Simulation of Slave tasks for LIN1.3 and 2.0 clusters, simulation of Master tasks, scheduling of unconditional, diagnostic, event-triggered and sporadic frames, network management, exercises

## 3 LIN Stress Feature Set (1.0 h)

**Goal:** Generate errors and load situations on the LIN bus

**Contents:** Error simulation in the header, manipulation of baudrate, short circuit simulation, exercise

## 4 Testing with LIN (1.2 h)

**Goal:** Overview of testing in the LIN environment, presentation of the LIN Conformance Test

**Contents:** LIN Conformance Test and Test Feature Set in CANoe, exercises

## 5 LIN Analysis Feature Set (0.8 h)

**Goal:** Overview of auxiliary LIN-specific analysis functions in CAPL

**Contents:** Analysis functions that supplement representation in CANoe analysis windows.

## 6 Questions, Suggestions, Requests

**Goal:** Clarification of open issues and open discussion as feedback for Vector