

CANoe/CANalyzer Diagnostics Add-on Workshop

Agenda VectorAcademy

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| Duration: | 1 Day |
| Target Group: | CANoe/CANalyzer users developing, testing and/or applying diagnostics |
| Prerequisites: | Experience in using CANoe/CANalyzer and basic understanding of vehicle diagnostics |
| Goal: | Increased understanding of and skills in using the diagnostic support in CANoe/CANalyzer |

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| 1 Brief Introduction to Vehicle Diagnostics | 0.5 h |
| <ul style="list-style-type: none">> Motivation and need for vehicle diagnostics> Diagnostic protocols, transport protocols> Diagnostics on different bus systems | |
| 2 Diagnostic Descriptions | 0.5 h |
| <ul style="list-style-type: none">> Contents and Target Groups of Diagnostic descriptions> CANdelaStudio diagnostic descriptions (CDD files)> Open Diagnostic eXchange descriptions (ODX/PDX files)> Basic Diagnostics descriptions> Diagnostic description viewers in CANoe/CANalyzer | |
| 3 Diagnostic Feature Set (DFS) | 0.5 h |
| <ul style="list-style-type: none">> Diagnostic Console / Diagnostic Session Control / Fault Memory windows> Trace / Graphics / State Tracker (CANoe) windows> Seed & Key handling> OBD II support> Support on different bus systems | |
| 4 Working with Diagnostic Descriptions in CANoe/CANalyzer | 3.0 h |
| <ul style="list-style-type: none">> Integrating diagnostic description files (CDD, ODX/PDX, ...)> Using a Seed & Key DLL> Interpretation and filtering of diagnostic data in the Trace window> Monitoring diagnostic parameters in the Graphics and State Tracker windows> Creating Diagnostic sequences: Macro recorder / .NET snippets (CANoe)> Exercises | |
| 5 Diagnostics with CAPL | 1.0 h |
| <ul style="list-style-type: none">> Diagnostic CAPL functions and event procedures> Sending diagnostic requests / Receiving diagnostic responses> Parameterizing diagnostic requests / Analyzing diagnostic responses> Exercises | |

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6 | Diagnostic Support in a Simulated ECU in CANoe (0.5 h)

- > Creating a simulated ECU and adding diagnostic functionality to it
- > Exercise

7 | Diagnostic Testing with CANoe (0.5 h)

- > Diagnostic testing in CANoe: Combining the diagnostic feature set (DFS) and test feature set (TFS)
- > Test Modules / Test Units
- > Using the CANoe option DiVa (Diagnostic integration and Validation assistant) for test case generation
- > Exercise