

# Introduction to ODX

## Agenda VectorAcademy

<b>Duration:</b>	1 Day
<b>Target Group:</b>	Project manager, ECU diagnostic developer
<b>Prerequisites:</b>	Knowledge on UDS and diagnostic development
<b>Goal:</b>	Overview of ODX, ODXStudio is shown as Viewer for ODX data

### 1 | Vehicle and Fleet Diagnostics 0.5 h

- > Overview of vehicle and fleet diagnostics today

### 2 | Tester Parameterization with ODX 0.5 h

- > Tester Parameterization

### 3 | Vehicle ODX 0.5 h

- > General overview of all sub-models (ODX CATEGORIES)  
Content of a vehicle ODX, Base Variants, ECU Variants, Functional Groups

### 4 | Diagnostic Services 1.0 h

- > General concept
- > REQUESTs, POS-RESPONSEs

### 5 | Data Organization 1.0h

- > TABLEs
- > Value Inheritance, Import of ECU-SHARED-DATA
- > odx-links, snrefs

### 6 | Diagnostic Authoring with ODXStudio 0.5 h

- > ODXStudio is used by the trainer to repeat the ODX details with the participants
- > ODXStudio is used as viewer

### 7 | Generating ECU ODX 0.5 h

- > Diagnostic Authoring with CANdelaStudio
- > ODX export

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### 8 | Building Vehicle ODX

0.5 h

- > Building Vehicle ODX with ODXStudio from generated ECU ODX by CANdelaStudio
- > Add Vehicle Info Spec with ODXStudio PlugIn

### 9 | Software Update

0.5 h

- > Software Update on ECUs
- > ODX-F
- > ODX-F Authoring

### 10 | Parameters and DOPs

1.0h

- > Typical Parameters, Byte and bit position
- > DOPs

### 11 | Fault Memories

0.5 h

- > DTCs
- > Extended Data and Snapshots

### 12 | Introducing ODX

material is distributed, optionally in the training

- > Authoring Guidelines
- > Hints for introducing ODX in processes
- > ODX and MCD-3D

### 13 | Technical Data Model Description with UML and XML

material is distributed, optionally in the training

- > How UML and XML are used to describe the ODX standard and ODX files
- > General ODX data model properties, exercises

### 14 | Questions, Feedback, Suggestions

- > Clarify questions and open discussion

# Creation of Diagnostic Data with ODXStudio

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<b>Duration:</b>	1 Day
<b>Target Group:</b>	Responsible Persons for ECU Diagnostics and ECU Diagnostic Developers, ODX Data Managers
<b>Prerequisites:</b>	"Introduction to ODX" training class or similar qualification
<b>Goal:</b>	Working with ODXStudio

### 1 | Introduction to ODXStudio 0.5 h

- > ODXStudio project management and using project templates

### 2 | Reading of ODX with ODX Perspective 1.5 h

- > Getting an overview what is in an existing ODX file with exercises
- > Comprehension questions, search for variants, services and parameters

### 3 | Diagnostic Data in the ECU Perspective 0.5 h

- > Content of ODX-RS Master Template, ECU Perspective GUI

### 4 | Create ODX Data with ECU Perspective or ODX Perspective 2.0 h

- > Create and edit ODX data for a diagnostic specification with exercises

### 5 | Modify ODX with ODX Perspective 1.5 h

- > Check existing ODX data according to ASAM checker rules, repair errors
- > Compare ODX data and create difference report, tips and tricks, Actions and Plugins

### 6 | Processes to Create Data 0.5 h

- > Use CANdelaStudio's CDD documents
- > Import of PARAMs, DOPs and DTCs from A2L, CDI, XLS, CANdb, FIBEX, AUTOSAR SD

### 7 | Integrate ODX data in the Vector Tool Chain 0.5 h

- > ODX in Vehicle Tester Indigo and CANoe
- > Diagnostic Validation with CANoe.DiVa

### 8 | Questions, Feedback, Suggestions

- > Clarify questions and open discussion

Note: To create ODX-F data is not covered by the training. If you are interested in this topic, please contact the training department with the subject "Webinar: ODX-F with ODXStudio".