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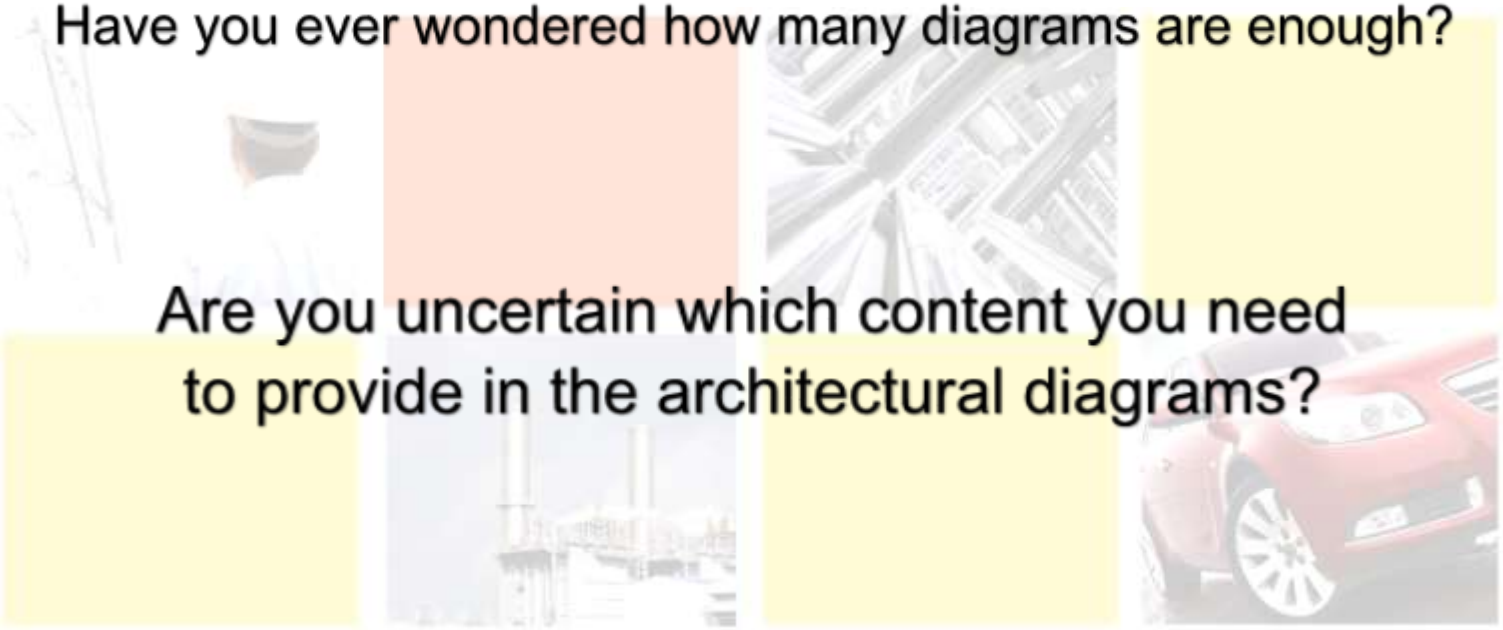
Have you ever asked yourself how to develop a semi-formal software architecture in an efficient way?

Have you ever wondered how many diagrams are enough?



Are you uncertain which content you need to provide in the architectural diagrams?

Do you want to know the meaning of semi-formal in the context of safety standards like ISO 26262 and IEC 61508?

# Join our training and learn more about semi-formal software architecture

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# DE0304 Semi-Formal Software Architecture Development with UML

This training will support to lay a basis for the development of a semi-formal software architecture using UML. It will introduce the syntax and semantics of the different diagram types and notation elements and gives a practical approach to the necessary content of such a software architecture description and the application method.

The learning success will be supported by examples and exercises.

The training will also include the interpretation and application of the safety standards IEC61508 and ISO26262 regarding semi-formal software architecture design.

To consolidate the learnt a half a day's workshop will give some hands-on experience (tool based or/and with paper and pen) for an example project which can be adopted to your needs.

| | |
|---|---|
| **Duration:** | 2 days (1.5 days training + 0.5 days' workshop) |
| **Language:** | Can be chosen between German or English, training material will be in English |
| **Location:** | 3 options free of choice:<br>can be in-house at your location, or<br>location can be organised by *exida*, or<br>can be *exida* trainings location at:<br>*exida.com* GmbH office<br>Prof.-Messerschmitt-Straße 1<br>D-85579 Neubiberg / Germany |
| **Certificate**: | Each participant gets a letter of attendance. |

# DE0304 Semi-Formal Software Architecture Development with UML

## Who should attend?

- Software Architects
- Development Engineers (System and Software)
- Safety Managers
- Project Leaders of safety related development projects
- Managers responsible for definition and implementation of work processes

## Agenda

- Overview methods for the architecture development and description
- Model based software development
- Semi-Formal Methods: UML
- Diagram types
  - Notation elements
  - Linking and combination of different diagrams / views
  - Traceability concept
- UML Tools (e.g. Sparx Enterprise Architect , PTC Integrity Modeler)
- Content of software architecture descriptions in the scope safety standards
- Development approaches and methods incl. application of diagrams and notation elements for the development of the
  - Static software architecture design aspects
  - Dynamic software architecture design aspects
- Software design pattern
- Content of design guidelines
- Verification strategies for UML model based architectures
- Tool based documentation generation
- Workshop: Guided development of a software architecture example

For more information, please contact:

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