

Using Enterprise Architect

Course Overview

This course provides an introduction to using the Sparx Systems' *Enterprise Architect* UML and SysML modelling tool. The course comprises a mixture of teaching and hands-on exercises. The taught content covers the background and use of the tool, along with more pragmatic issues, such as implementing base projects and the use of reference data to help standardise and streamline tool use in an organisation. The exercises reinforce the taught material.

Target Audience

This course is aimed at system and software engineers that have a working knowledge of Model-based Systems Engineering (MBSE) but who want to make the transition to using the tool.

This course is offered as an additional day to one of our MBSE courses or, for people who have already attended one or more of our courses, can be run with a preceding day of a workshop. This workshop not only provides a refresher to MBSE and SysML, but also allows attendees to produce their own model that can then be entered into the tool.

Course Outline

The course consists of five modules, each followed by a workshop exercise in which delegates put the concepts covered in the module into practice.

1 Settings

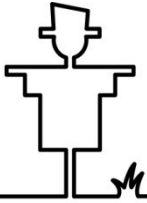
- Tool settings
- Authors
- Roles

This module covers local tool settings that allow EA to be configured according to a user's preferences. Definition of model authors and roles is also covered.

2 Project Structure

- Creating views and packages
- Creating diagrams
- The importance of model structure
- Base projects

This module discusses the structure of EA models and how to define model structure in terms of views, packages and initial diagrams. The importance of defining such a structure based on the needs of the project, rather than using the defaults provided by the tool, is considered which leads into a discussion of the role, creation and use of base projects.



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3 Drawing Diagrams

- Adding elements to diagrams
- Adding connectors to diagrams
- Properties
- Rearranging the model

This module discusses the ways in which diagrams can be edited, considering tool short-cuts that allow elements and connectors to be added quickly and efficiently. The importance and use of various element properties are discussed as are the various ways in which models can be rearranged as they are developed.

4. Model consistency and navigation

- Defining consistency for the model
- Setting up consistency links
- Model navigation
- Setting up navigation links

This module shows how to create a consistent, coherent and robust model by defining consistency and setting up links. The importance of ontologies and views is discussed as a vital mechanism for ensuring consistency.

The module also discusses model navigability, considering hyperlinks within a model and to external items, cross-referencing of model elements and the creation of index diagrams to aid the user of a model.

5. Stereotypes, Profiles & Patterns

- Stereotypes, profiles and patterns
- Creating stereotypes
- Profiles
- Patterns

This final module introduces the concepts of stereotypes, profiles and patterns and covers their creation, export and use. Their importance in establishing the way an organisation works with EA is discussed.

Course Material

A full set of professionally published course notes and exercises is provided. Delegates also receive an electronic (PDF) version of the course material.

This material is in addition to any course material if run as an additional module to another course.

Course Tutors

All of our course tutors are expert MBSE modellers with years of experience applying MBSE in industry and using various tools. Scarecrow Consultants have published nine books on MBSE and its application that are used throughout the world in many industries.

