

Modeling with the Unified Modeling Language (UML®)

Using Enterprise Architect 15.x or 16.x

Intermediate Level (Two-and-a-half-day course syllabus)

Introduction to Enterprise Architect

User Interface

- Desktop layout

 - Overview, Start Page, Visual Style, Portals

- Ribbons

- Perspectives, Workspace Layouts, and ribbon configuration

Managing Projects

- Creating and opening Projects

- Creating Root Nodes and Packages

- Browser features

- Organizing models

Managing Diagrams

- Toolbox

- Creation techniques

- Options in ribbons, context menu, properties dialog and window

- Navigation between diagrams

- Floating diagrams

- Copy/paste across diagrams

- Inline Specification Manager

Managing Elements

- Creation techniques

- Editing properties

- Drag and drop

- Diagram only elements

Customizing Diagram Element Appearance

- Background color, font, image

- Layering

- Feature visibility

- Sizing and alignment

Deleting Model Elements

- Diagram level deletions

- Repository level deletions

Managing Connectors

- Creation (toolbox and Quick Linker)

- Redirection

- Line bends and styles

Managing Packages

- Package Navigation

- Identifying and selecting favorite Packages

- Package Browser/List View (overview)

Tool Configuration

- Defining general types

- Personal and global configuration options

COURSE LEADER

Frank Truyen

is a principal consultant and trainer, with 30+ years of experience in the IT industry as a developer, architect, consultant and project leader.

Strong expertise in key modeling notations (UML®, SysML®, ArchiMate®, and BPMN™), as well as architectural frameworks (UPDM™, UAF®, SABSA®), allied with his extensive experience in using the Enterprise Architect modeling tool, allows Frank to successfully provide training and consulting services to a broad variety of customers across many industries.

Modeling Business Architecture

Managing Requirements

Creating Requirements via a diagram
Creating Requirements using the Specification Manager
Other features
Importing & exporting using Microsoft Excel
Organizing Requirements
Exercise

Behavioral models

UML Use Case diagram
Definition
Best practices
Creating Use Case diagrams
Discovering Actors
Guidelines for creating Use Cases
Modeling Use Case Scenarios
Defining constraints
Using behavioral diagrams to illustrate Scenarios
Tracing Requirements to Use Cases
Multiple exercises

Modeling Application Architecture

Structural models

UML Class diagram (Attributes)
Classes and Objects
Element visibility
Relationships
Defining Attributes
Adding rules and constraints
Defining Stereotypes and Tagged Values
Grouping elements into Packages
Multiple exercises

UML Composite Structure diagram

Part
Port
Connector

Exercise

UML Component diagram
Interfaces
Ports
Information Flows

Exercise

UML Deployment diagram
Optional exercise

Behavioral models

UML Class diagram (Operations)

Discovering and assigning responsibilities

Patterns for assigning responsibilities

Defining Operations, Receptions, and Interfaces

Exercise

UML Activity diagram

Core Features

Advanced Features (Part 1)

Exercise

UML Sequence diagram

Combined Fragments

Exercise

UML State Machine diagram

Exercise

UML Interaction Overview diagram

Traceability and Navigation

Overview

The Relationships window

The Relationship Matrix

The Traceability window

Other traceability features

Exercise

Optional half-day extensions to the above training course

Option 1: Workshop: UML end-to-end Modeling Exercise

The online bookstore model, or a User defined model

Option 2: Core tool features

Documentation Generation

RTF/DOCX/PDF generator

Diagram, Package, and Element options

Linking generated documents into Microsoft Word

Creating Model Documents

Creating Report Packages

Generating HTML

Creating Custom Documents

Other features

Document Artifacts

Creating Document Artifacts

Creating Linked Documents

Adding (dynamic) model content

External document links

Document window

Model Searches

- Initiating
- Configuring
- Viewing results
- Defining custom searches
- Other features

Managing Baselines and comparing models

- Creating baselines
- Administering baselines
- Package comparisons
- Diagram comparisons

Option 3: Collaboration features

- Model sharing strategies
- Model data (XML/XMI) import/export
 - Understanding globally unique identifiers (GUIDs)
- Import/Export of Reference Data
- Version Control
 - Setup
 - Usage
 - Other features
- Security
 - Administration
 - Usage
- Element Discussions
- Formal Reviews

Option 4: Extra Tool Features

Diagram Features

- Automatic layout
- Element resizing
- Connector features
- Boundaries, Swimlanes, Matrix, and Kanban
- Content filters
- Notes
- Active legends

Element Features

- Info View
- Element Browser
- Composite elements
- Linking notes to feature documentation
- Cloning diagrams, elements, Packages
- Time Aware Modeling

Other features

- Working Sets
- Package management
- Charts, Dashboards, and Heatmaps
- Managing Hyperlinks
- Keyboard shortcuts
- Getting help
- Glossary

Option 5: Code Engineering

- Generation options
- Generating from Class models
- Importing code files and libraries
- Using the built-in code editor
- Customizing the generators
- Build, test, run and other scripts
- Application patterns
- Miscellaneous features

Exercise

Option 6: Management Features

Project Management

- Element maintenance
 - Tracking Defects, Changes, Issues, Tasks, Decisions, and Events.

- Project Issues
- Roadmap diagrams
- MDG Technology for Project Management

Exercises

Test Management

- Workspace
- Importing Use Case Scenarios
- Reports

Exercise

Model Audit