OPCOACH
ECLIPSE TRAINING AND CONSULTING

emf
ECLIPSE MODELING FRAMEWORK

Course Plan

ECLIPSE MODELING FRAMEWORK

Objectives	Audience	Pre-requisites	
✔ Understanding the Modeling project ✔ Studying the Ecore language ✔ Designing a business concept ✔ Generating the source code	✔ Software architects ✔ Developers	✔ Modeling basics	Duration 1 day

Modeling / EMF

- Introduction to modeling
- Overview of current languages and tools
- Project historical background
- Role within Eclipse
- Description of key components

Ecore

- Language description
- Component hierarchy
- Component-specific properties
- Relationship definition
- Basic validation of the model
- Examples

Tools

- EMF tools
- The Modeling project
- The default EMF Ecore editor
- The EcoreTools Ecore editor
- Creating your own model
- Managing relationships
- Managing data types
- Model import/export

Default code generation

- The generation model (genmodel)
- Key settings
- Generated layers
- Using generation
- Exploring the generated code

Custom generation

- Protection principles
- Modifying generated classes
- Modifying default generators
- Configuring the validation

Modeling API

- Generic model browsing
- Loading a model
- Instantiating model objects
- Model modification listening

Industrialisation

- Using EMF in a project
- Project interactions
- Management policies
- Model versioning

Advanced use

- EMF extension points (factory, validation)
- Introduction to code generation (M2T, Xtend, Acceleo).