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eclipse modeling PROJECT

# Model Driven Software Development using the Eclipse Modeling Project

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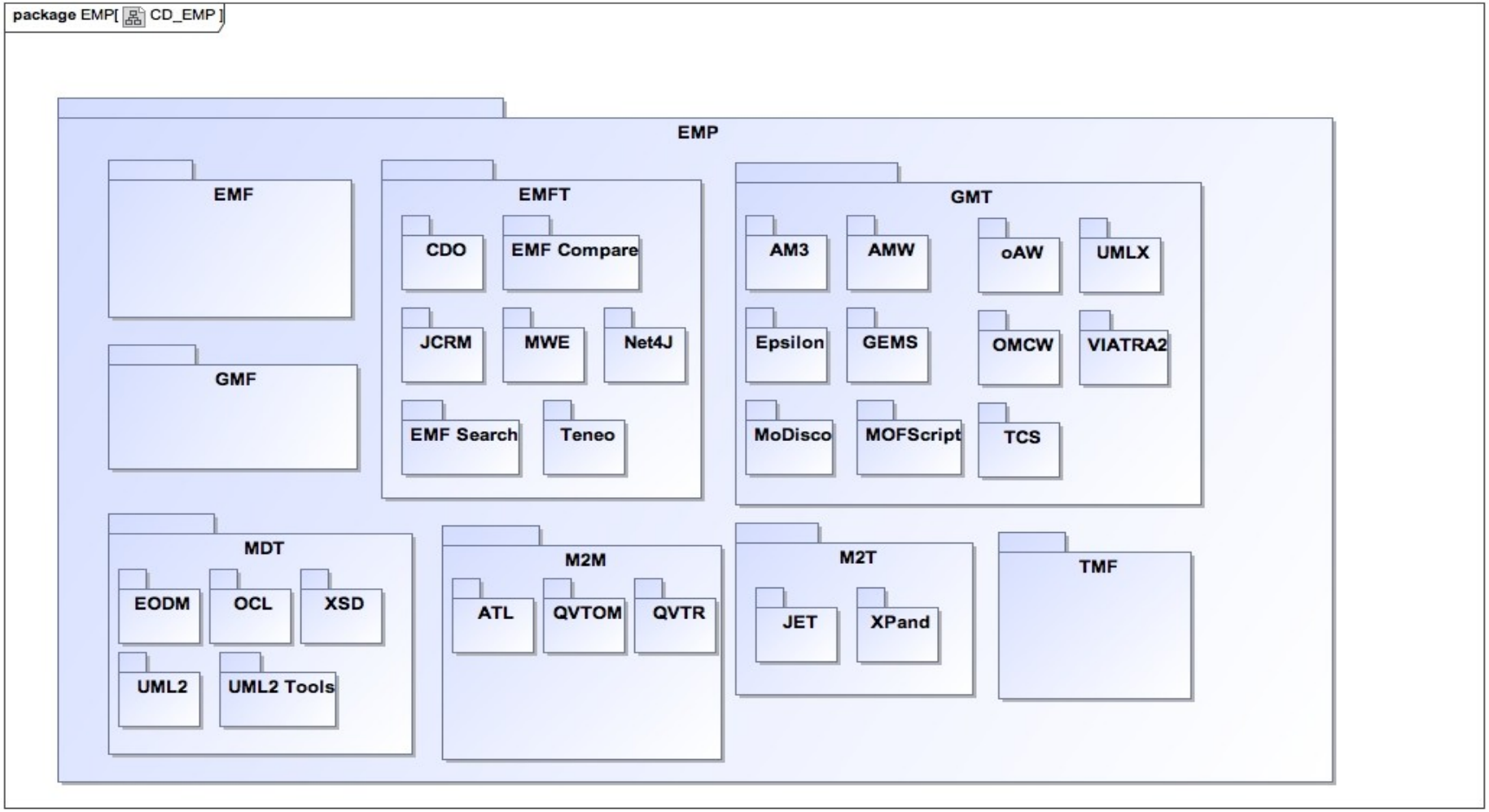
# Eclipse Modeling Project - Overview

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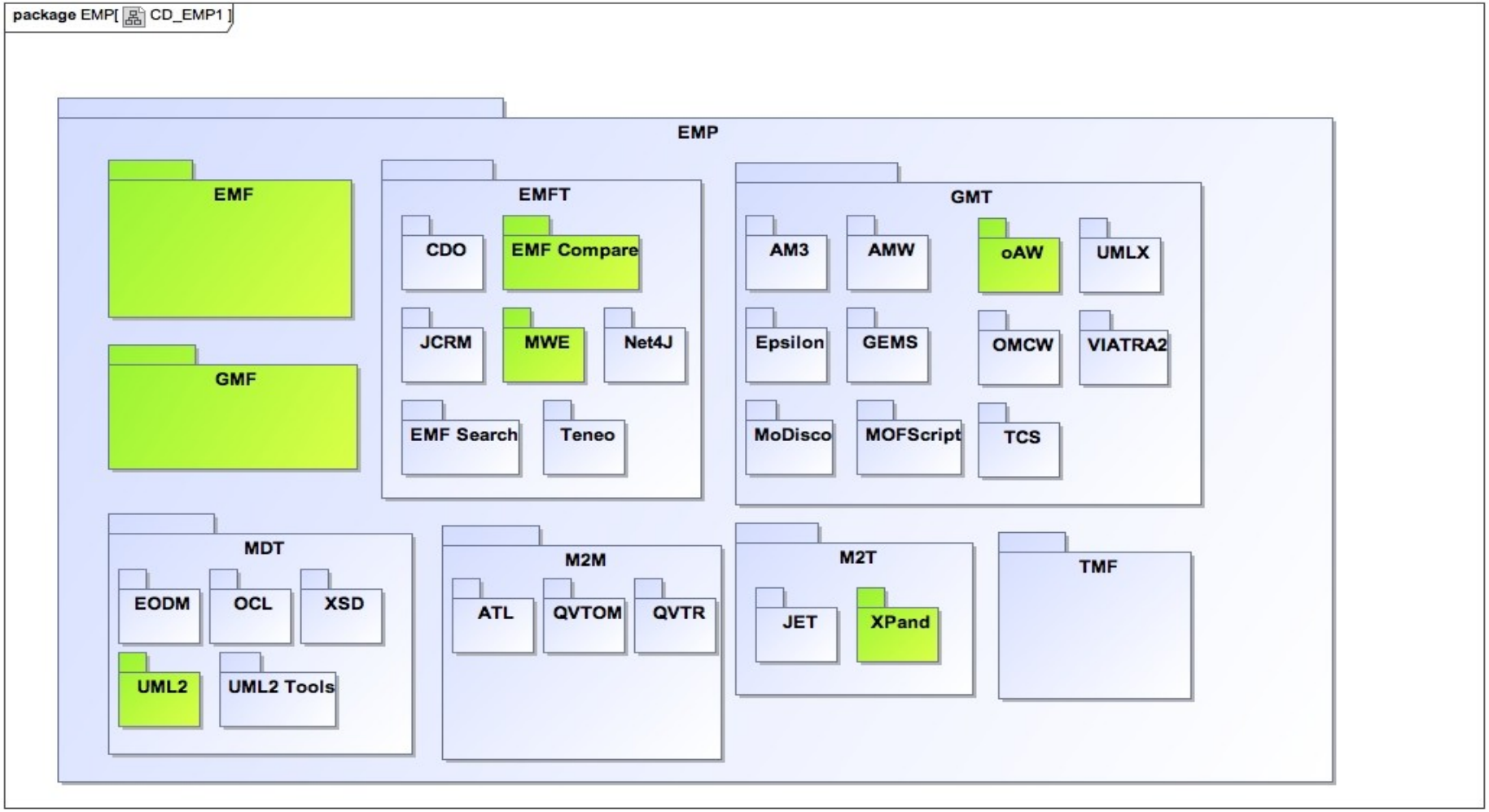
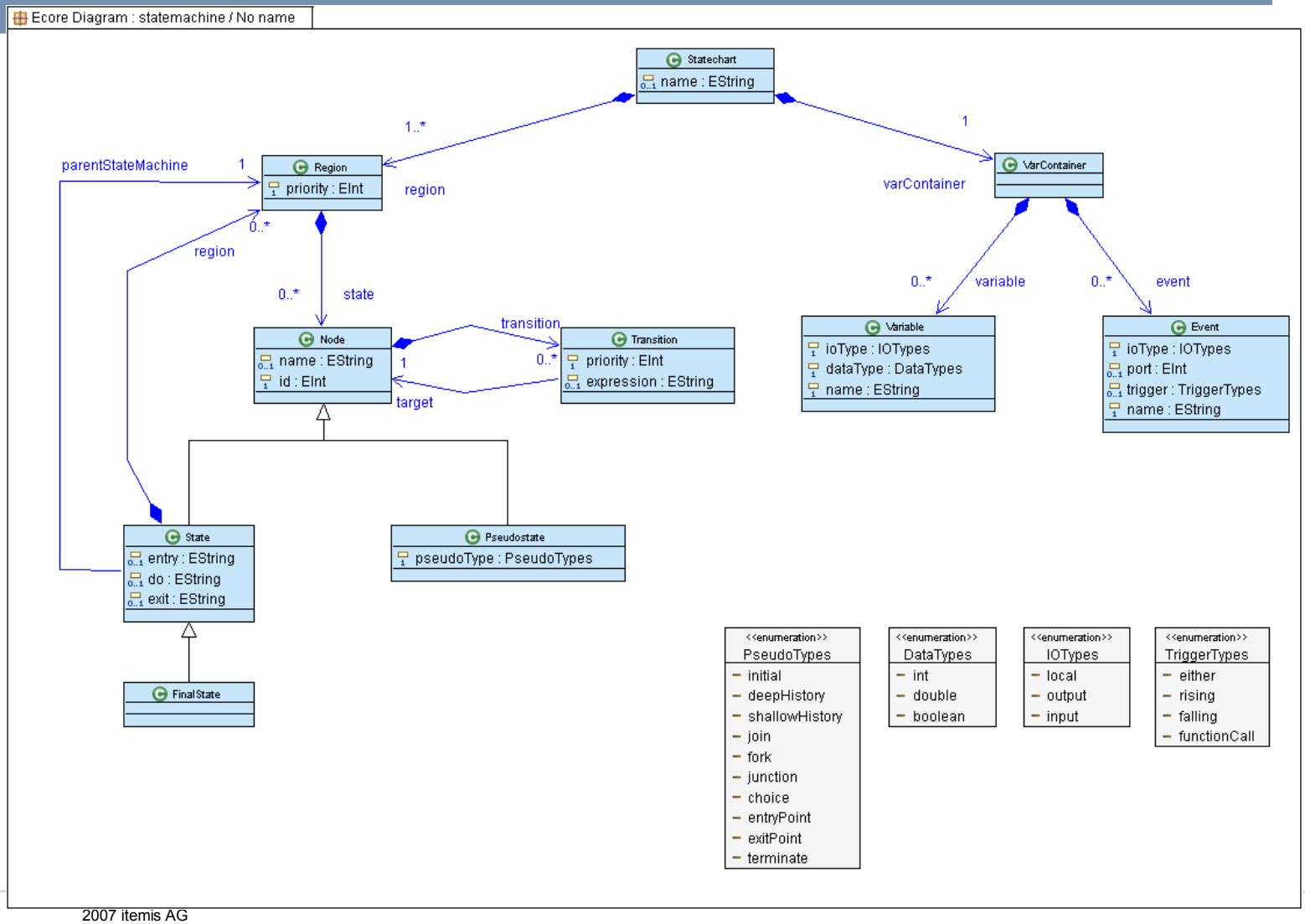
# Eclipse Modeling Project - Excerpt



# EMF - Eclipse Modeling Framework

emf
ECLIPSE MODELING FRAMEWORK

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# EMF UML2

- EMF basierte Implementierung des UML2 Standards
- Von vielen gängigen UML Tools unterstützt
- Wichtiges Modell Austauschformat

- IBM Rational Software Architect
- MagicDraw UML
- TopCased
- Omondo
- Papyrus UML
- Apollo
- ...

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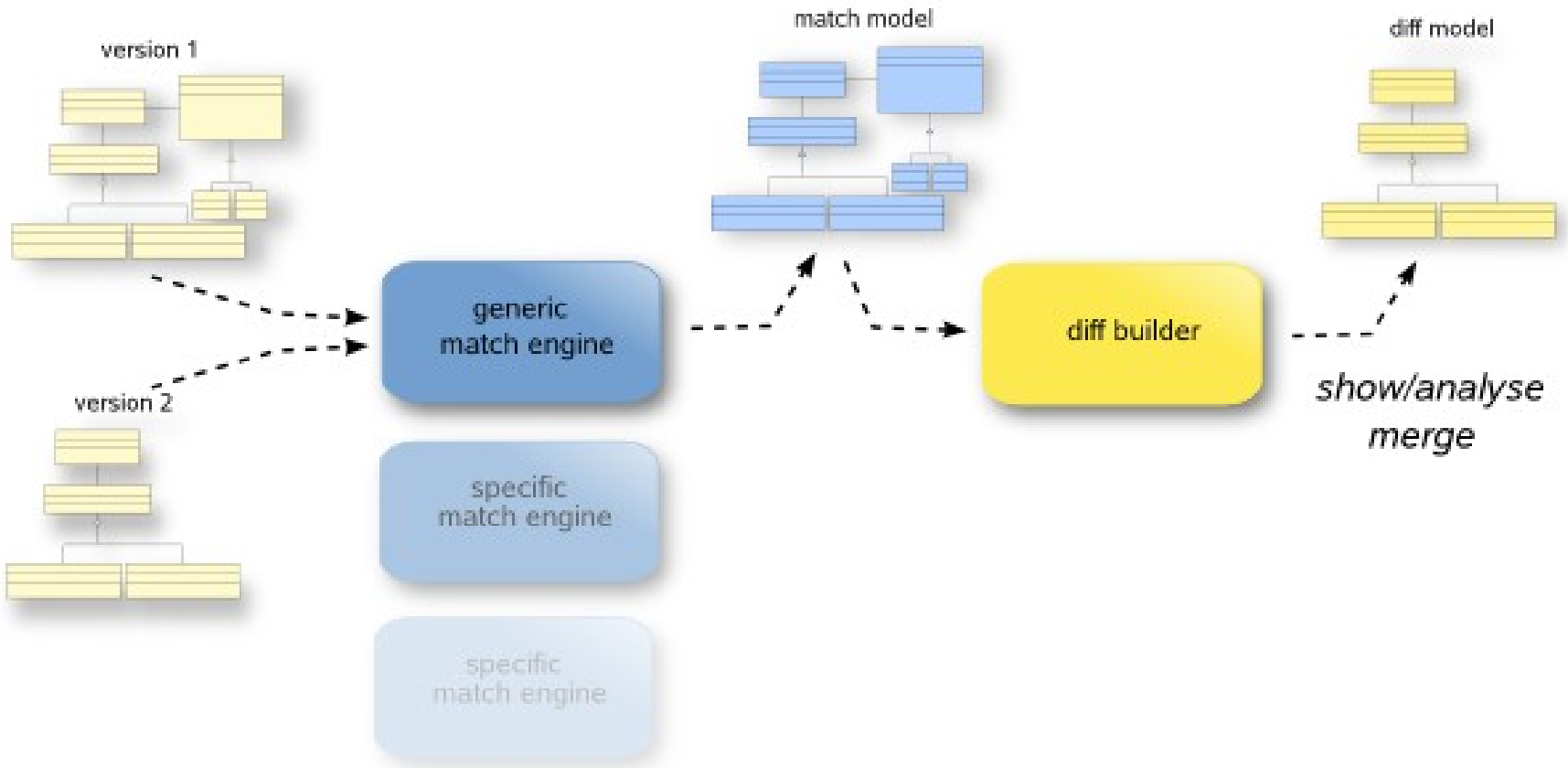
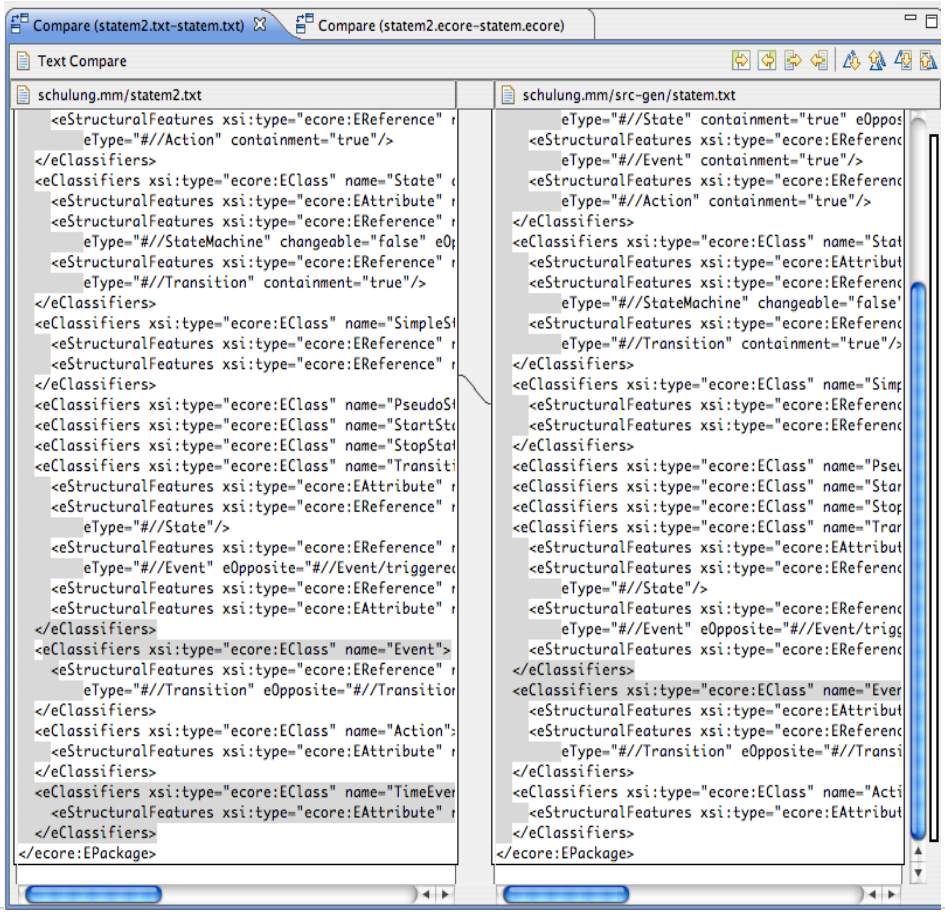
# EMF Compare

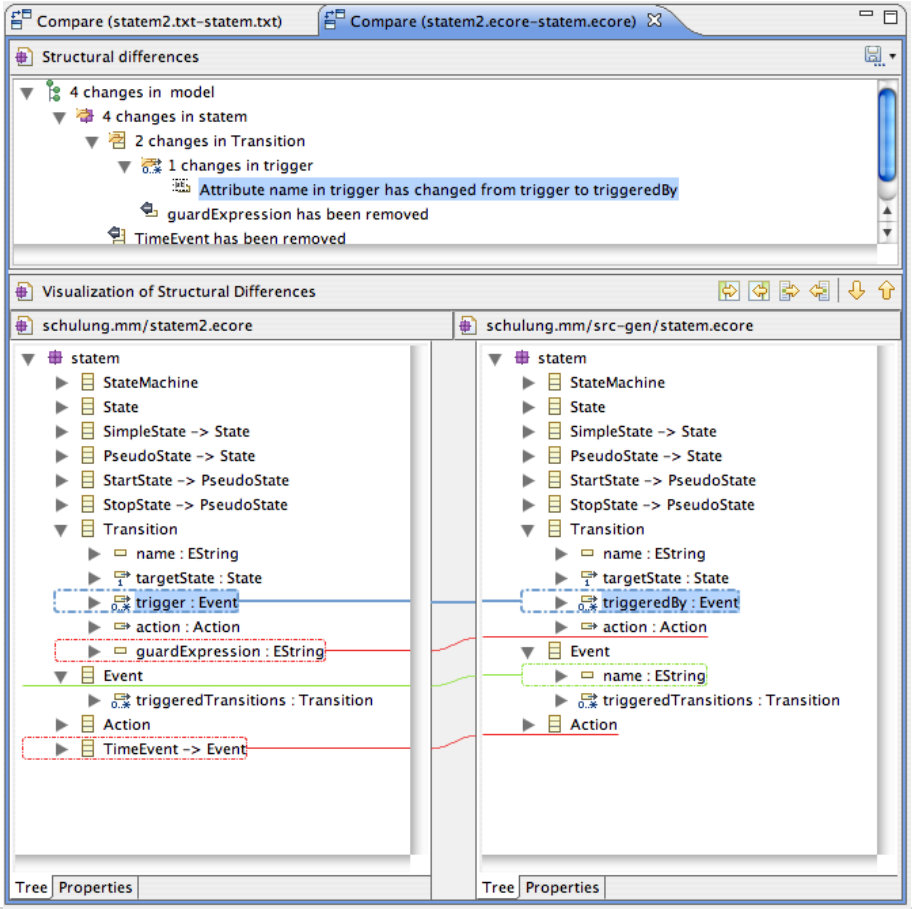

version 1
version 2
generic match engine
specific match engine
specific match engine
match model
diff builder
diff model
show/analyse
merge

# EMF Compare

## Without EMF Compare




## With EMF Compare

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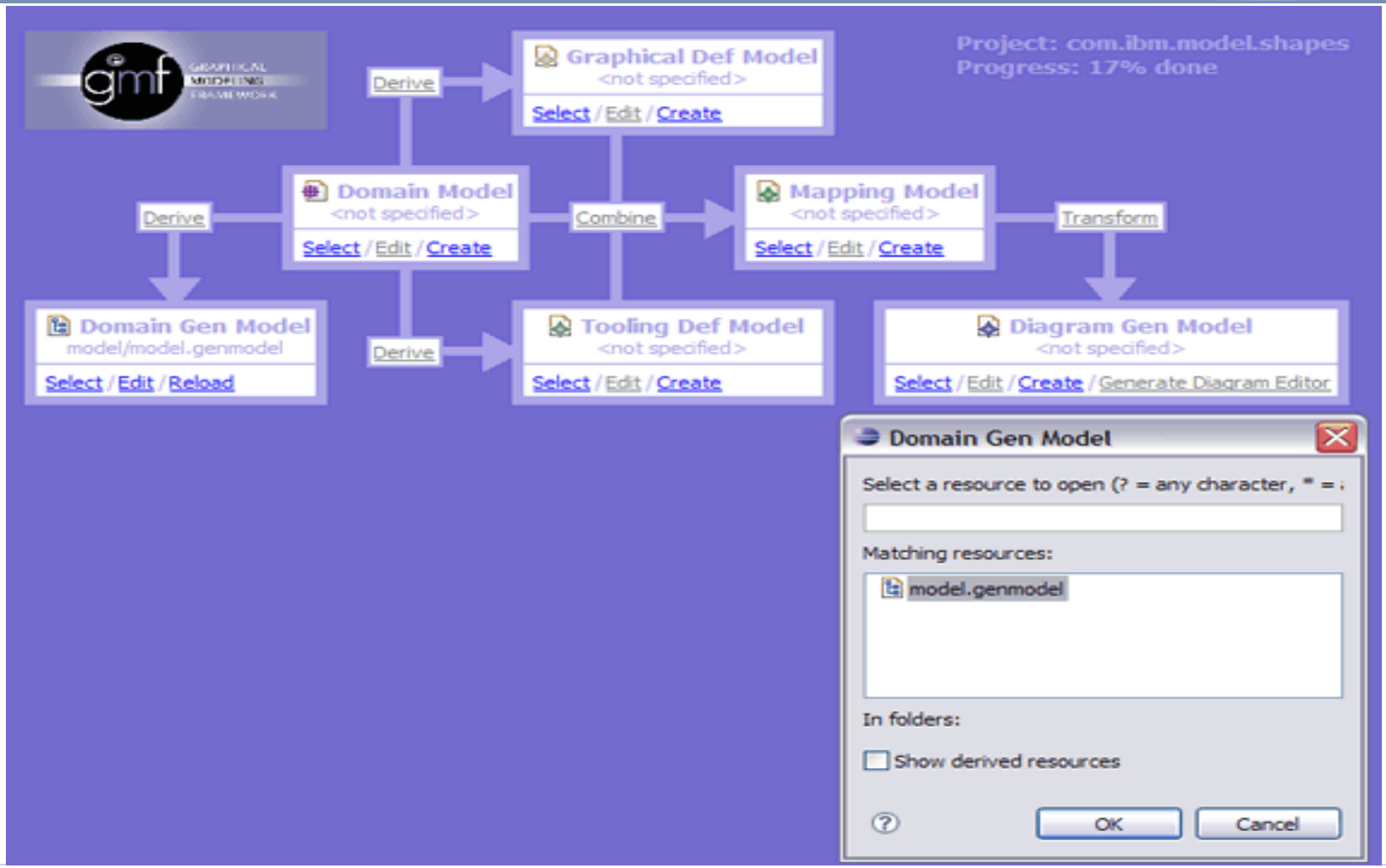
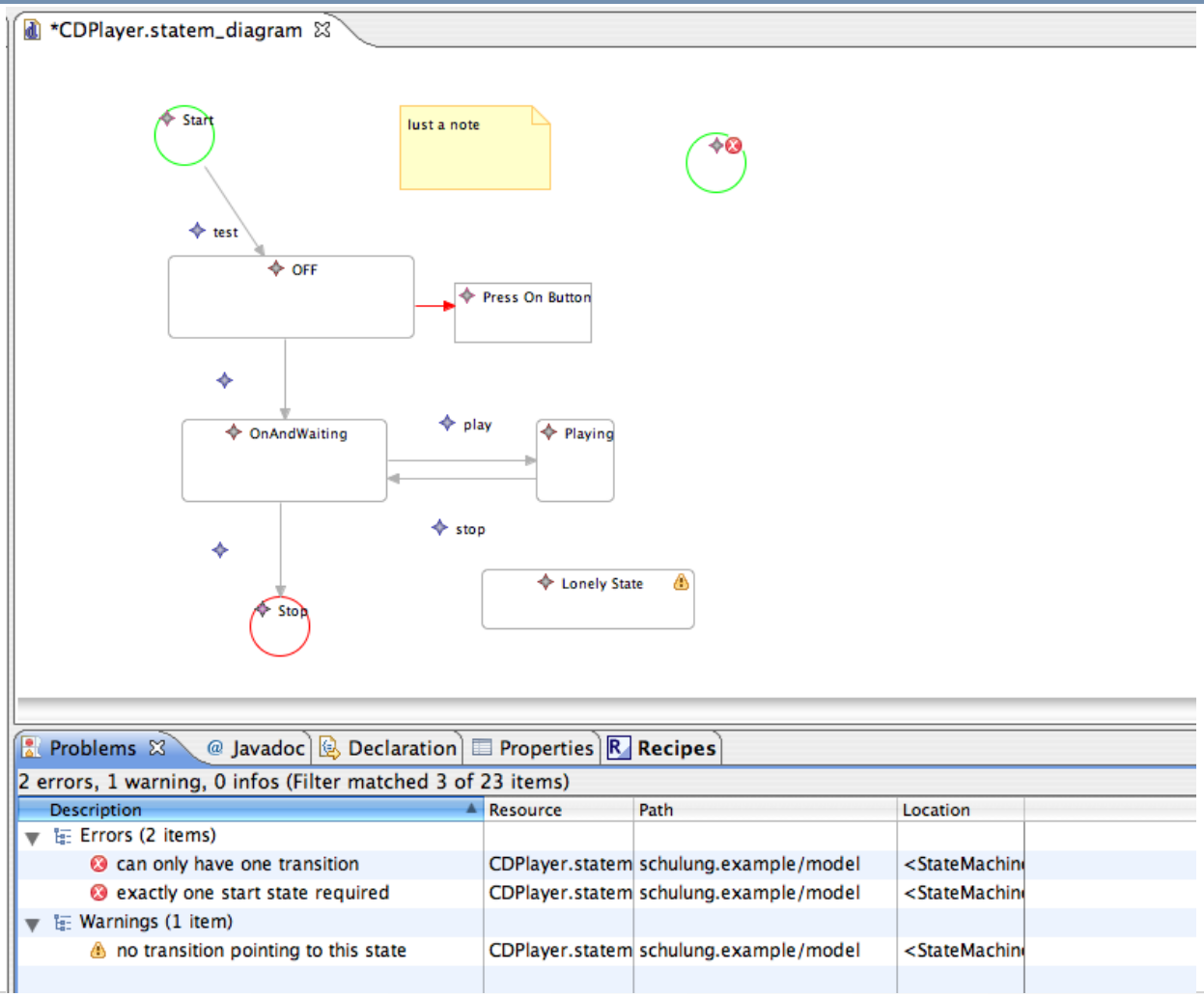
# GMF – Graphical Modeling Framework





# GMF generated editor with oAW Live Validation

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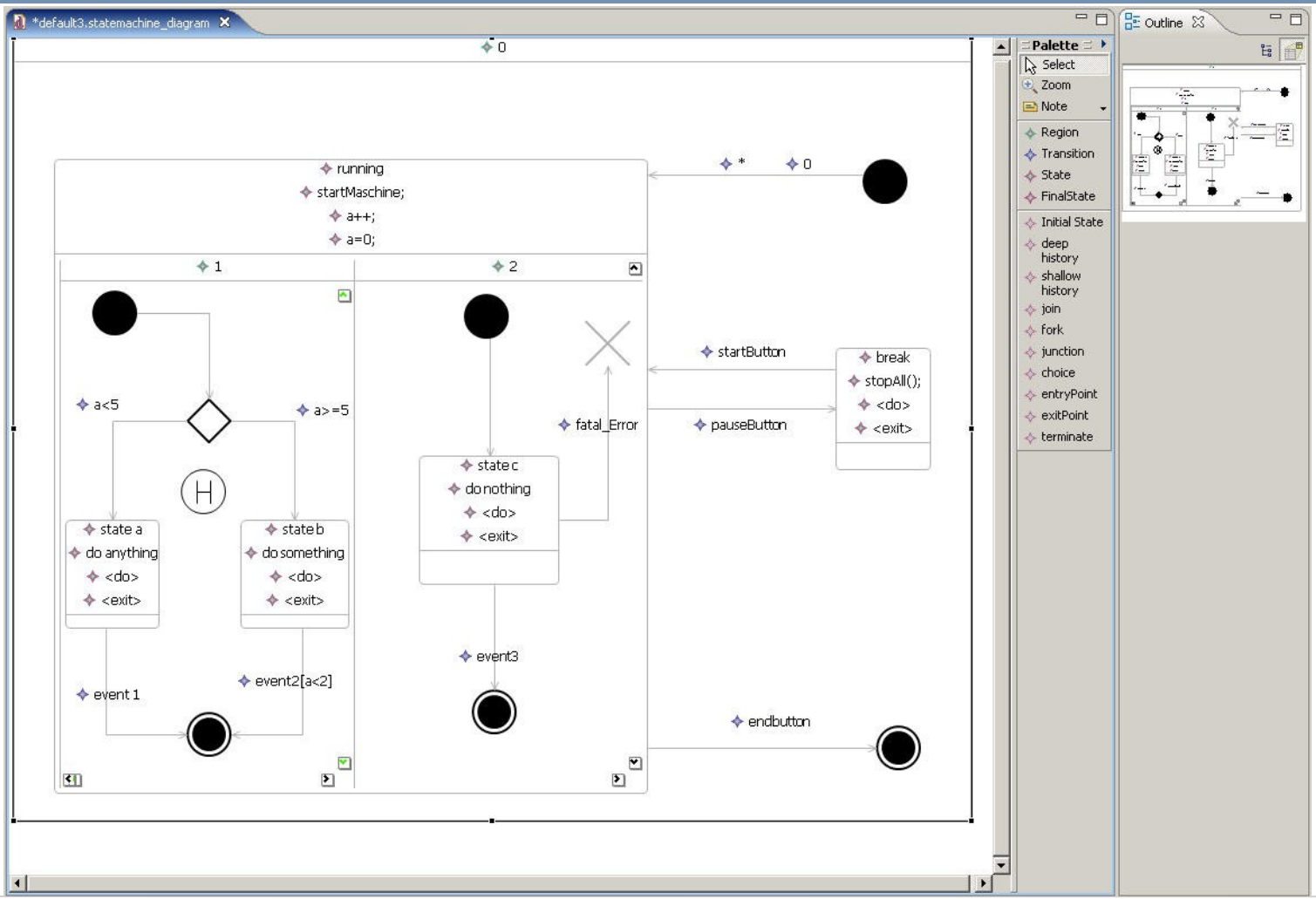
# GMF generated Editor



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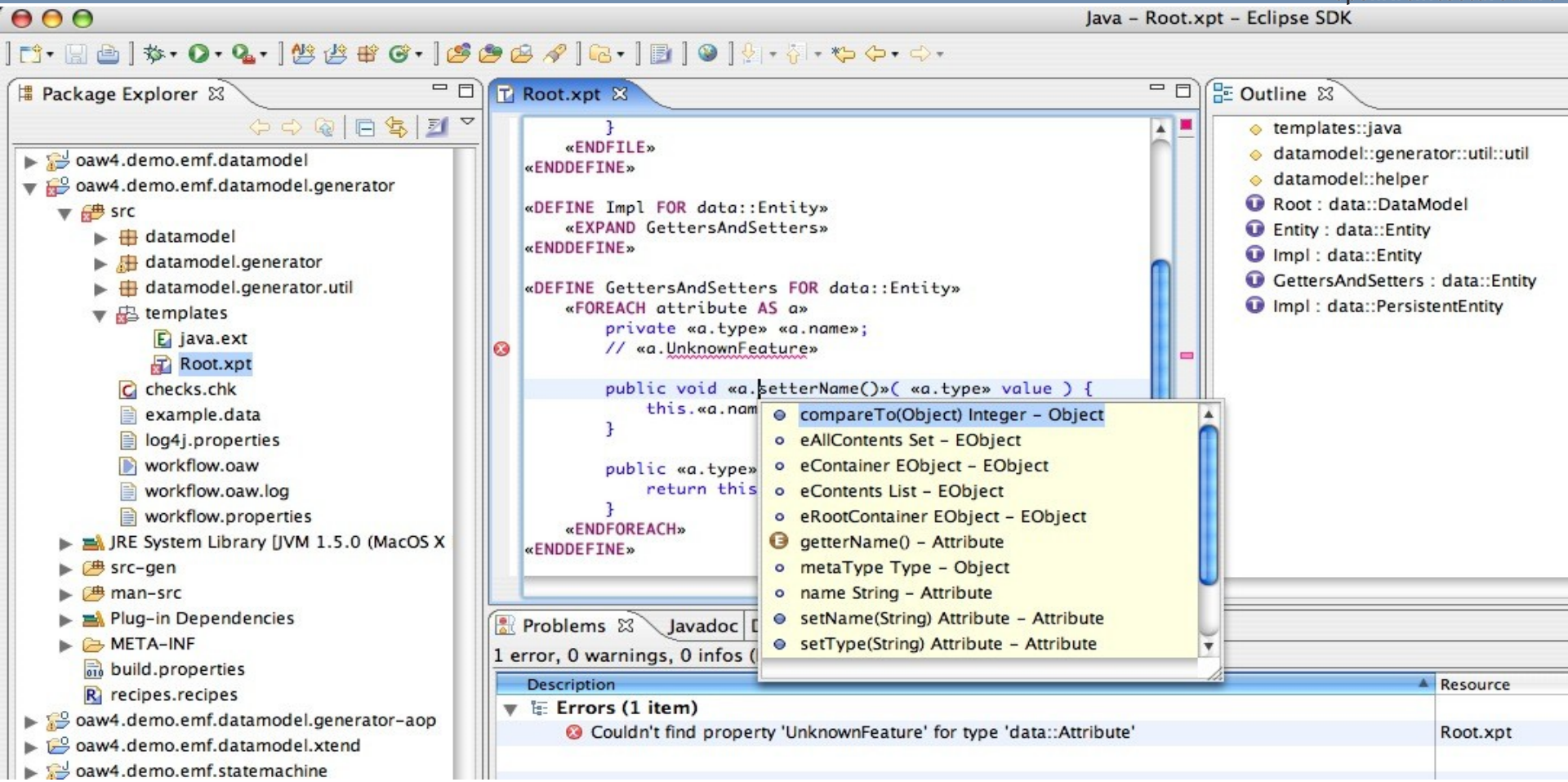
# oAW Xpand Editor

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# oAW Generierung – Command Line / Ant

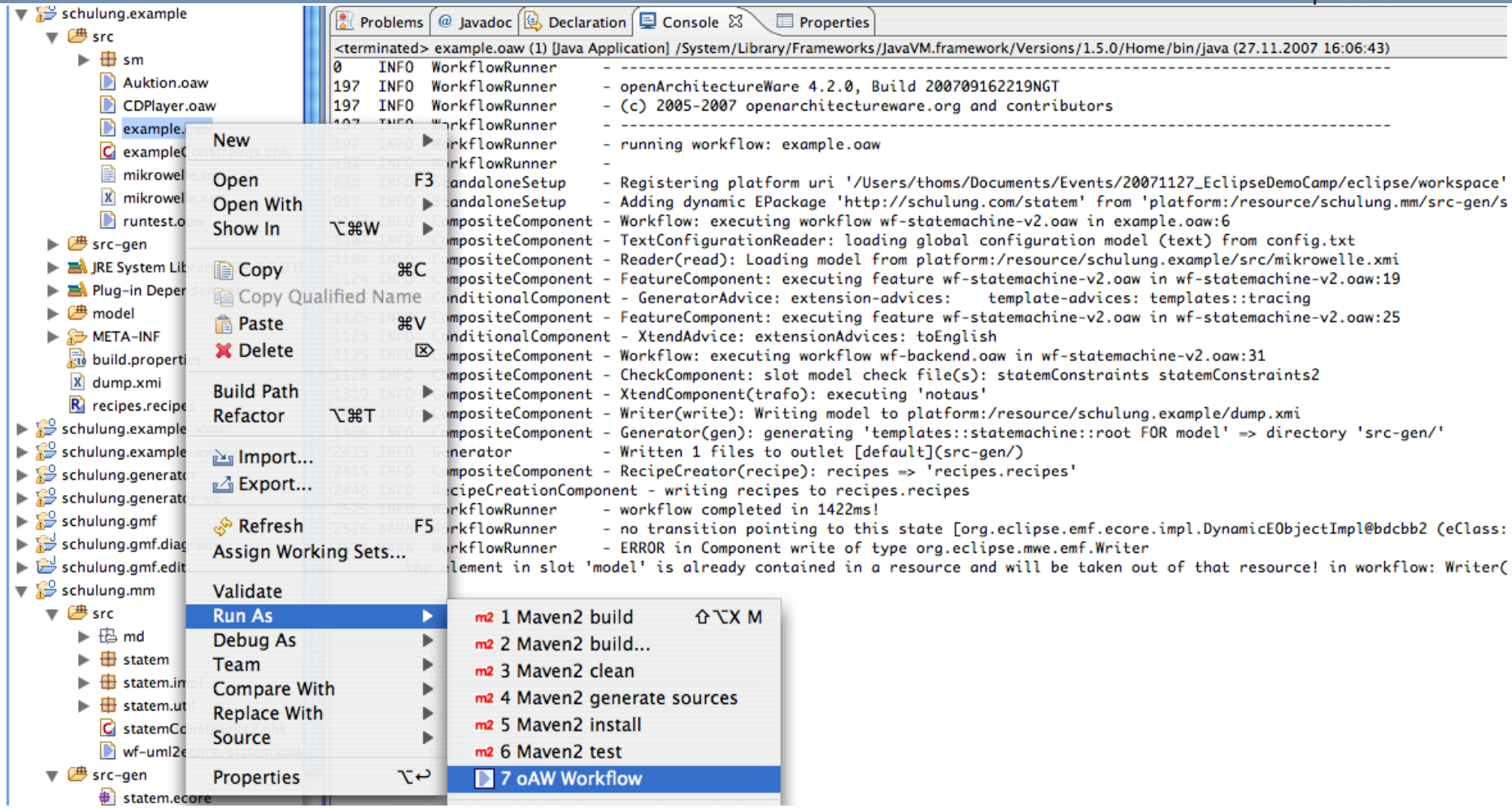
openArchitectureWare

```
thoms:~/Documents/Events/20071127_EclipseDemoCamp/eclipse/workspace/HibernateCartridge thoms$ ant
Buildfile: build.xml

clean:
   [delete] Deleting 14 files from /Users/thoms/Documents/Events/20071127_EclipseDemoCamp/eclipse/workspace/HibernateCartridge/src/generated
generate:
     [java] 0    INFO  WorkflowRunner     - ----------------------------------------------------------------------------------------
     [java] 604  INFO  WorkflowRunner     - openArchitectureWare 4.2.0, Build 200709162219NGT
     [java] 605  INFO  WorkflowRunner     - (c) 2005-2007 openarchitectureware.org and contributors
     [java] 606  INFO  WorkflowRunner     - ----------------------------------------------------------------------------------------
     [java] 606  INFO  WorkflowRunner     - running workflow: workflow.oaw
     [java] 607  INFO  WorkflowRunner     -
     [java] 3815 INFO  CompositeComponent - XmiReader: file 'src/main/resources/example-model.uml' => slot 'model'
     [java] 4012 INFO  CompositeComponent - Workflow: executing workflow org/fornax/cartridges/uml2/hibernate/hibernate.oaw in workflow.oaw:29
     [java] 4016 INFO  CompositeComponent - TextConfigurationReader: loading global configuration model (text) from hibernateConfig.txt
     [java] 4017 INFO  CompositeComponent - FeatureComponent: executing feature org/fornax/cartridges/uml2/hibernate/hibernate.oaw in org/fornax/cartridges/uml2
/hibernate/hibernate.oaw:60
     [java] 4018 INFO  CompositeComponent - XtendComponent: executing 'org::fornax::cartridges::uml2::hibernate::extensions::ModelTransformation'
     [java] 4787 INFO  IOExtensions       - --------------------
     [java] 4794 INFO  IOExtensions       - Starting Modelmodifications
     [java] 4796 INFO  IOExtensions       - Naming unnamed association-ends
     [java] 5890 INFO  IOExtensions       - Creating default-keys
     [java] 6456 INFO  IOExtensions       - --------------------
     [java] 6457 INFO  CompositeComponent - CheckComponent: slot model check file(s): org::fornax::cartridges::uml2::hibernate::checks::Constraints org::fornax:
:cartridges::uml2::hibernate::checks::AssociationChecks
     [java] 6570 INFO  CompositeComponent - FeatureComponent: executing feature org/fornax/cartridges/uml2/hibernate/hibernate.oaw in org/fornax/cartridges/uml2
/hibernate/hibernate.oaw:98
     [java] 6572 INFO  ConditionalComponent - Generator(hibernateCartridge_mapping_generator): generating 'org::fornax::cartridges::uml2::hibernate::templates::
feature_mappings::Root FOR model' => directory 'null'
     [java] 7118 WARN  GlobalVarExpression - Global variable 'list_set_property' is null. Is it configured?
     [java] 7377 INFO  Generator          - Written 6 files to outlet [default](/Users/thoms/Documents/Events/20071127_EclipseDemoCamp/eclipse/workspace/Hiberna
teCartridge/src/generated/resources)
```

# oAW Generierung – Eclipse integriert

openArchitectureWare



# Resources

- Eclipse Modeling Project: http://wiki.eclipse.org/Modeling_Project
- Eclipse Modeling Framework: http://www.eclipse.org/modeling/emf/
- Graphical Modeling Framework: http://www.eclipse.org/gmf/
- Eclipse MDT UML2: http://wiki.eclipse.org/MDT-UML2
- EMF Compare: http://wiki.eclipse.org/index.php/EMF_Compare
- openArchitectureWare:
  - http://www.openarchitectureware.org/
  - http://www.eclipse.org/gmt/oaw/doc/
- The Fornax Platform: http://www.fornax-platform.org/cp/display/fornax/Fornax

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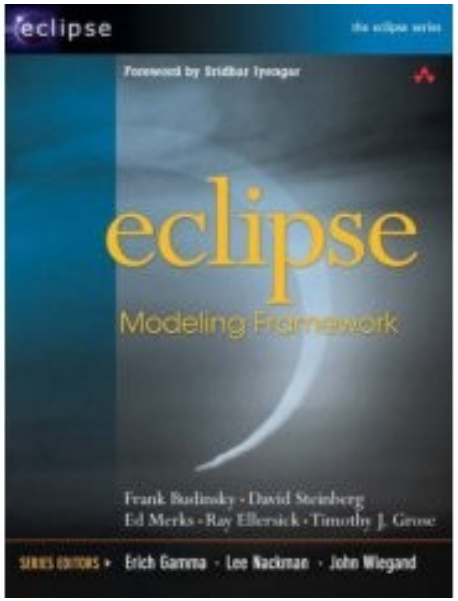
eclipse
Foreword by Sridhar Iyengar
eclipse
Modeling Framework
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Ed Merks · Ray Ellersick · Timothy J. Grose
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