

Using the Topcased Ecore Editor

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Introduction

Metamodelling based on EMF's tree views is not a very good solution. A better solution would be to use a graphical, UML-like editor. As part of the topcased project (www.topcased.org) they have built one. This documentation shows how to use it with oAW.

Thanks to the folks from Topcased for making this nice editor!

Installation

The topcased project has a much larger scope than „just“ an Ecore Editor. In order to not have to install all their (many many) plugin, you should download a distribution from their website and copy the following set of plugins into your Eclipse installation:

- org.apache.fop
- org.eclipse.emf.ocl
- org.eclipse.emf.validation
- org.eclipse.gmf.edit
- org.eclipse.gmf.runtime.common.core
- org.eclipse.gmf.runtime.common.ui
- org.eclipse.gmf.runtime.draw2d.ui
- org.eclipse.gmf.runtime.emf.clipboard.core
- org.eclipse.gmf.runtime.emf.commands.core
- org.eclipse.gmf.runtime.emf.core
- org.eclipse.gmf.runtime.emf.type.core
- org.eclipse.gmf.runtime.gef.ui
- org.eclipse.gmf.runtime.gef
- org.eclipse.gmf.runtime.notation
- org.eclipse.gmf.runtime
- org.topcased.draw2d
- org.topcased.facilities

- org.topcased.model.management
- org.topcased.modeler.diagrams
- org.topcased.modeler.di
- org.topcased.modeler.ecore
- org.topcased.modeler
- org.topcased.validation.core
- org.topcased.validation.ui

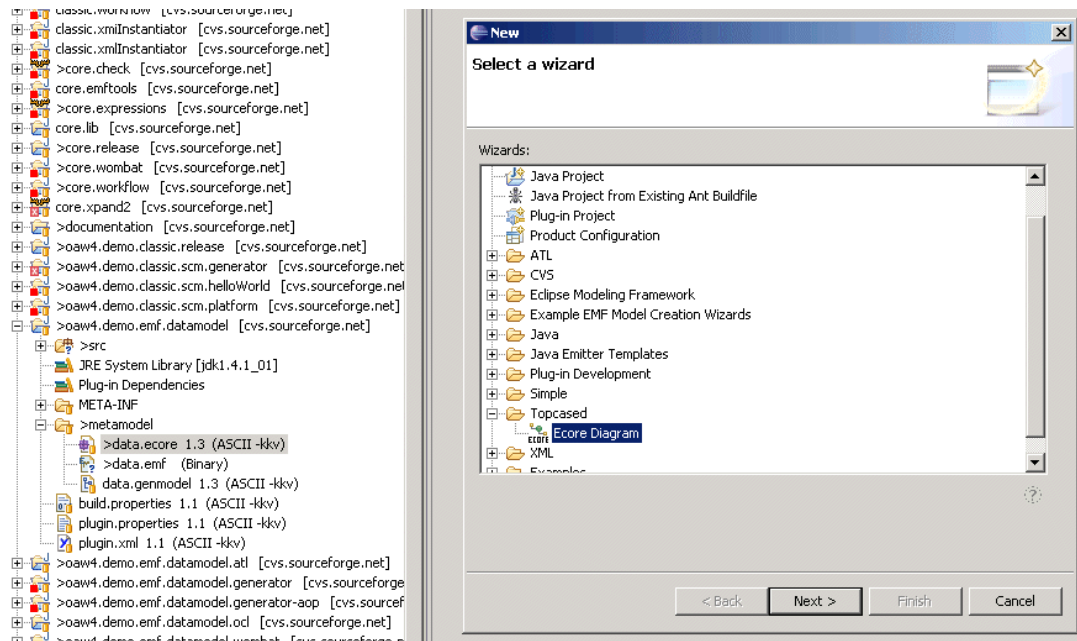
The last two plugins are not available in release 0.71, but that's no problem, the editor still works. **Also please note that you need Eclipse 3.1.2 for this to work! You also need to install the current GEF version, which can be obtained from www.eclipse.org/gef.**

Using the Editor with an existing Ecore model

Consider the datamodel example (project *oaw4.demo.emf.datamodel*). In the *metamodel* folder, you already have your *data.ecore* file. Let's render this as a diagram.

Setting up the diagram

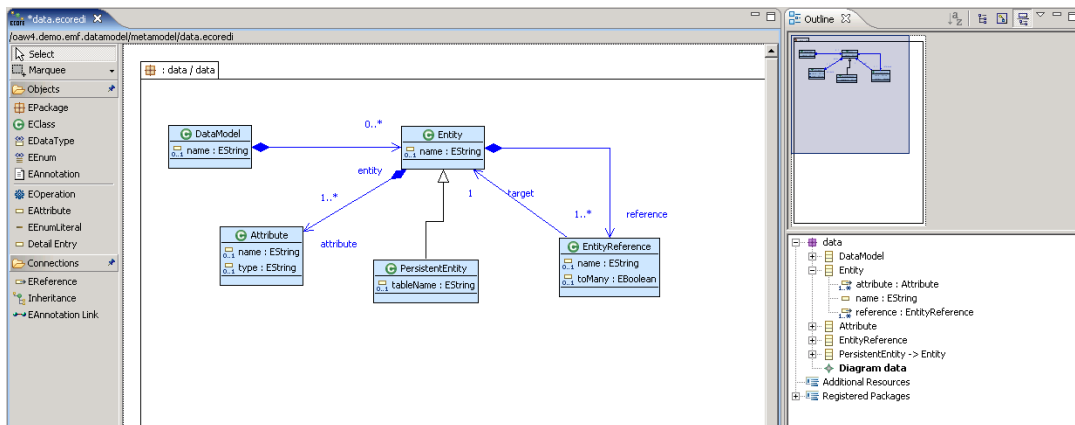
So, right-click the *data.ecore* file and select *New->Other->TopCased->Ecore Diagram* as shown in the following illustration.



Press *Next*. In the following dialog, all settings are already suitable, so you can press *Finish*. This completes the setup.

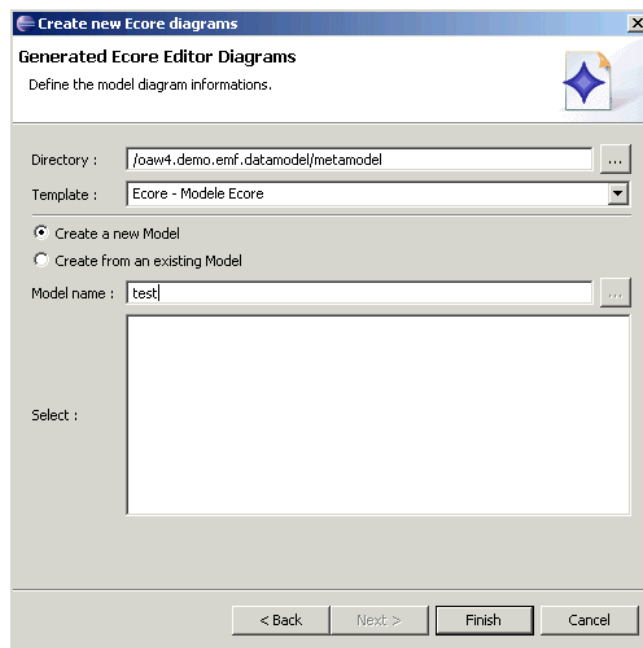
Populating the diagram

You can now start populating the diagram by dragging model elements from the lower right tree view into the diagram. Note that as you make changes and save the diagram, your ecore file is kept in sync automatically.



Creating a new Model

Creating a new model is also simple. Right-Click on the folder you want the model to be in and select the same item from the context menu as before. The following dialog now suggests to create a new ecore model / diagram. You need to specify the name of your new model – for example, *test*.



Pressing *Finish* creates and opens the empty diagram. In your selected folder, it also creates a *test.ecore* and a *test.ecoredi* file.

Select an *EClass* from the palette, drag it over to the diagram canvas. Save the diagram. If you open the *.ecore* file in the normal ecore editor, you can see the new class that has been created.

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