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<b>EMFT EMF Refactor</b>	<b>1</b>
<b>EMFT Henshin</b>	<b>1</b>
<b>EMFT JCRM</b>	<b>1</b>
<b>EMFT MTF</b>	<b>1</b>
<b>EMFT MXF</b>	<b>1</b>
<b>EMFT Texo</b>	<b>1</b>
<b>GMP GMF</b>	<b>1</b>
<b>GMT Epsilon</b>	<b>1</b>

<b>GMT MoDisco</b>	<b>2</b>
<b>GMT UMLX</b>	<b>2</b>
<b>M2M ATL</b>	<b>2</b>
<b>M2M QVTd</b>	<b>2</b>
<b>M2M QVTo</b>	<b>2</b>
<b>M2T Acceleo</b>	<b>2</b>
<b>M2T JET</b>	<b>2</b>
<b>M2T Xpand</b>	<b>2</b>
<b>MDT BPMN2</b>	<b>2</b>
<b>MDT MST</b>	<b>2</b>
<b>MDT OCL</b>	<b>2</b>
<b>MDT Papyrus</b>	<b>2</b>
<b>MDT UML2</b>	<b>2</b>
<b>MDT UML2 Tools</b>	<b>2</b>
<b>MDT XSD</b>	<b>2</b>
<b>PMF</b>	<b>2</b>
<b>TMF Xtext</b>	<b>2</b>

# EMF CDO

Eclipse Modeling Framework Connected Data Objects

## Overview

<http://www.eclipse.org/modeling/emf/?project=cdo>

CDO is both a technology for distributed shared EMF models and a fast server-based O/R mapping solution. With CDO you can easily enhance your existing models in such a way that saving a resource transparently commits the applied changes to a relational database. Optionally other connected clients are actively notified about these changes so that their model copies get partially invalidated and all user interfaces reflect the current state at once. Stored resources are demand-loaded from the database only as needed. CDO uses the Net4j technology as a flexible and scalable signalling backbone.

## Licensing

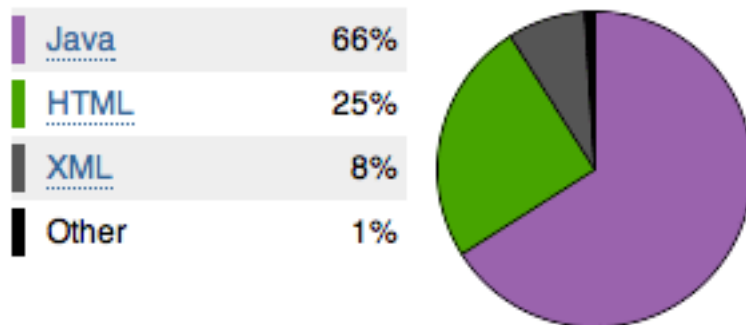
<http://www.ohloh.net/p/8908/analyses/latest>

Eclipse Public License

2299 files

## Platforms / Languages

<http://www.ohloh.net/p/8908/analyses/latest>



**Home Page:** <http://www.eclipse.org/modeling/emf/?project=cdo>

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emf.cdo](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emf.cdo)

**Wiki Page:** <http://wiki.eclipse.org/CDO>

## Predictability

**Release Train?** Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.emf.cdo>

**New & Noteworthy:** N/A

**Release Notes:** <http://www.eclipse.org/modeling/emf/news/relnotes.php?project=cdo&version=HEAD>

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emf.cdo>



## Releases

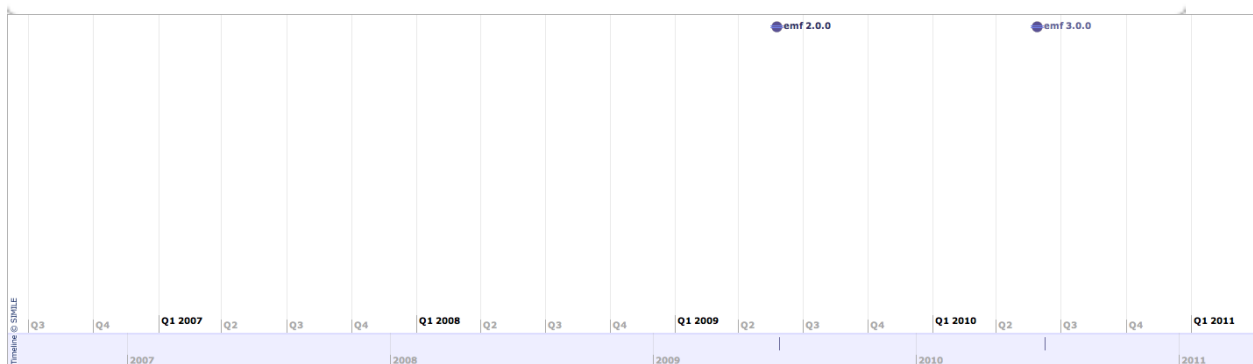
The Eclipse update site for this project is

<http://download.eclipse.org/releases/helios/>.

**3.0.0:** 2010-06-28 planned

**2.0.0:** 2009-06-24 completed

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emf.cdo](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emf.cdo)

### Lead(s)

Eike Stepper, individual

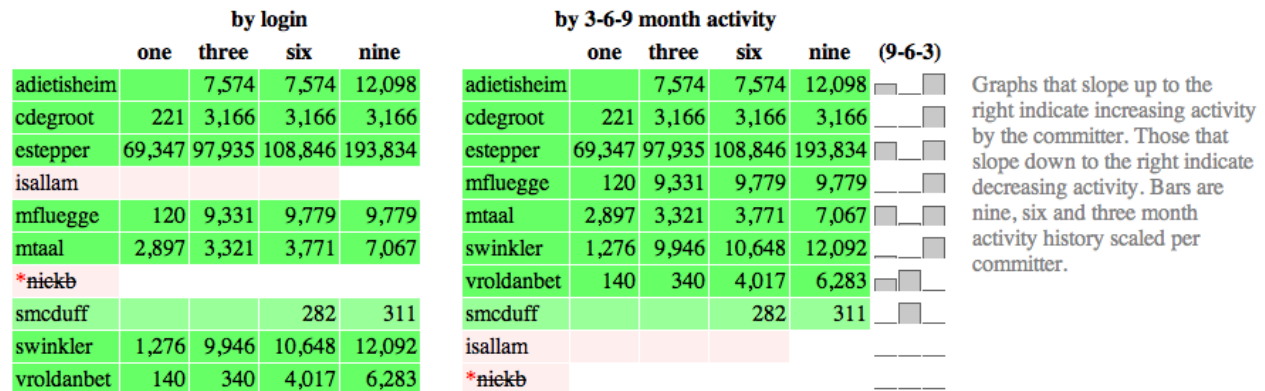
### Committers

Caspar De Groot, individual  
André Dietisheim, Puzzle ITC GmbH  
Martin Fluegge, individual  
Simon Mc Duff, individual  
Victor Roldan Betancort, individual  
Ibrahim Sallam, Objectivity Inc.  
Eike Stepper, individual  
Martin Taal, individual  
Stefan Winkler, individual

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/emf-dev/maillist.html>

## Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emf.cdo>



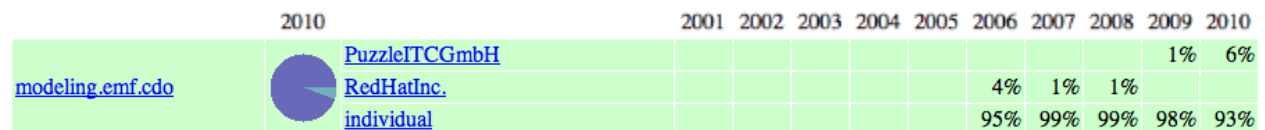
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emf.cdo>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
individual	6 (85.71%)	1 (50%)	7 (77.78%)	85.71%	6,879 (99.96%)	114,601 (93.84%)	17
PuzzleITCGmbH	1 (14.29%)	0 (0%)	1 (11.11%)	100%	3 (0.04%)	7,528 (6.16%)	2509
<b>Total</b>	<b>7</b>	<b>2</b>	<b>9</b>		<b>6,882</b>	<b>122,129</b>	

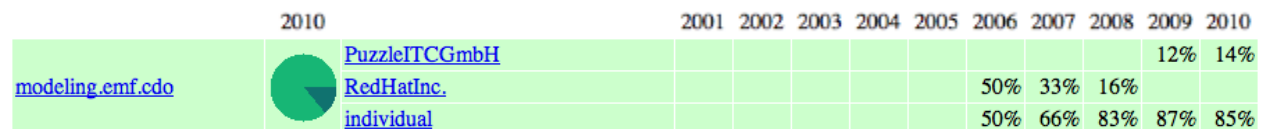
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

EMF CDO is widely used by the modeling community, in particular as a runtime technology in various high-end products.

## Downloads (Jul 1, 2008 - Mar 1, 2010)



## **Dependencies**

<http://www.eclipse.org/modeling/emf/downloads/?project=cdo>

Eclipse  
EMF EMF (Core)  
EMF Net4j  
EMF Teneo

## **Standards**

None.

# EMF Compare

Eclipse Modeling Framework Compare

## Overview

<http://www.eclipse.org/modeling/emf/?project=compare>

**EMF Compare** brings model comparison to the EMF framework, this tool provides generic support for any kind of metamodel in order to compare and merge models. The objectives of this component are to provide a stable and efficient generic implementation of model comparison and to provide an extensible framework for specific needs.

## Licensing

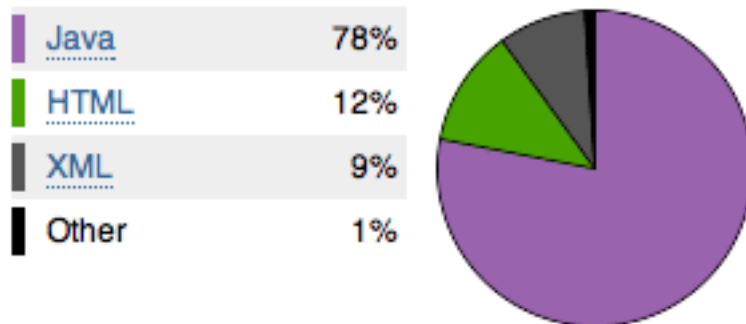
[http://www.ohloh.net/p/emf\\_compare/analyses/latest](http://www.ohloh.net/p/emf_compare/analyses/latest)

Eclipse Public License

448 files

## Platforms / Languages

[http://www.ohloh.net/p/emf\\_compare/analyses/latest](http://www.ohloh.net/p/emf_compare/analyses/latest)



**Home Page:** <http://www.eclipse.org/modeling/emf/?project=compare>

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emf.compare](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emf.compare)

**Wiki Page:** [http://wiki.eclipse.org/EMF\\_Compare](http://wiki.eclipse.org/EMF_Compare)

## Predictability

**Release Train?** Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.emf.compare>

**New & Noteworthy:** [http://wiki.eclipse.org/EMF\\_Compare\\_1.1.0\\_New\\_And\\_Noteworthy](http://wiki.eclipse.org/EMF_Compare_1.1.0_New_And_Noteworthy)

**Release Notes:**

<http://www.eclipse.org/modeling/emf/news/reInotes.php?project=compare&version=HEAD>





## Release Timeline



<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emf.compare>



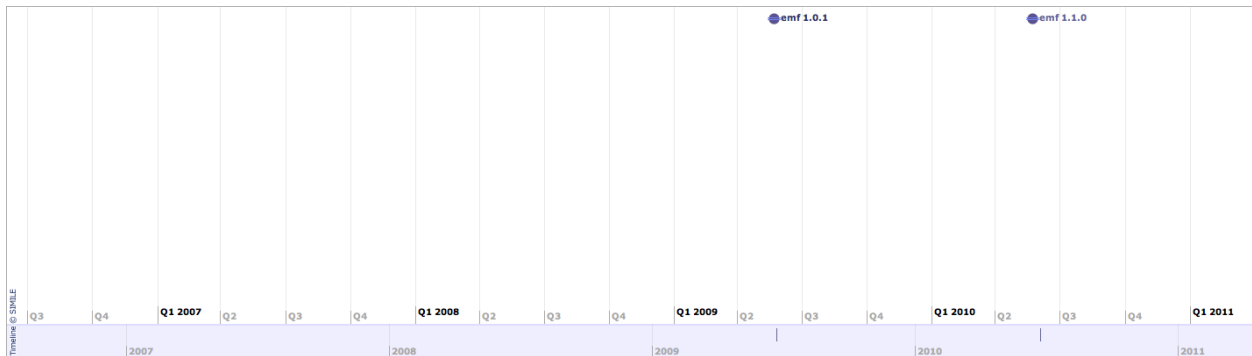
## Releases

The Eclipse update site for this project is </modeling/emf/updates/releases/>.

**1.1.0:** 2010-06-23 planned  

**1.0.1:** 2009-06-22 completed  

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emf.compare](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emf.compare)

### Lead(s)

Cedric Brun, Obeo

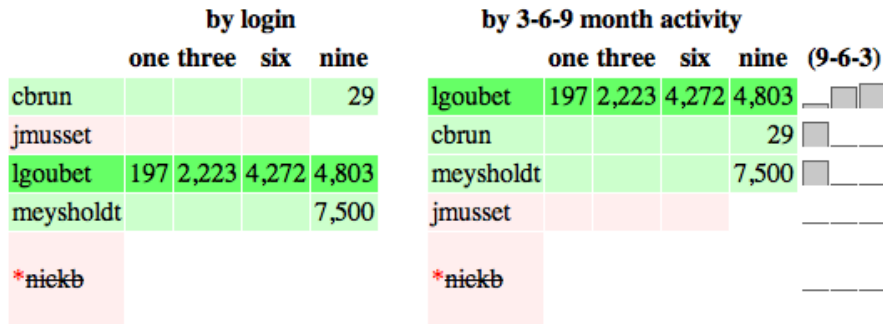
### Committers

Cedric Brun, Obeo  
Moritz Eysholdt, itemis AG  
Laurent Goubet, Obeo  
Jonathan Musset, Obeo

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/emf-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emf.compare>



Graphs that slope up to the right indicate increasing activity by the committer. Those that slope down to the right indicate decreasing activity. Bars are nine, six and three month activity history scaled per committer.

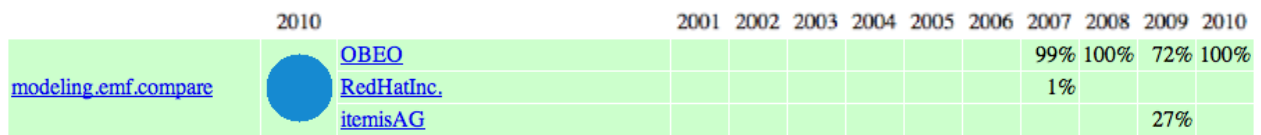
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emf.compare>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
OBEQ	1 (100%)	2 (50%)	3 (60%)	33.33%	11 (100%)	197 (100%)	18
<b>Total</b>	<b>1</b>	<b>4</b>	<b>5</b>		<b>11</b>	<b>197</b>	

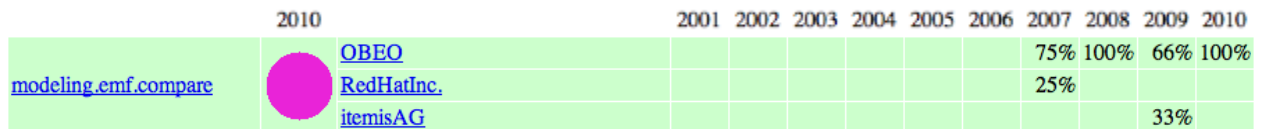
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



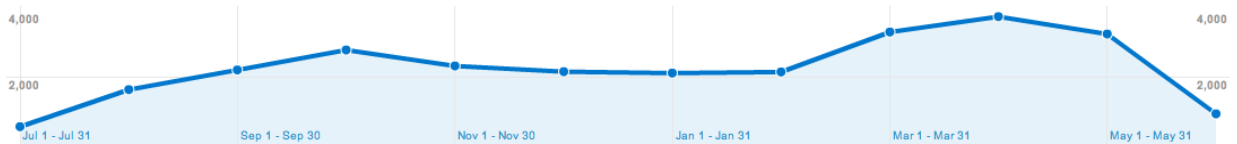
## User Community

The user community for EMF Compare includes users of EMF as a modeling tool.

### Downloads (Jul 1, 2009 - Mar 1, 2010)



### Downloads (Jul 1, 2008 - Jun 30, 2009)



## Adopter Community

EMF Compare is used by other Eclipse project as a utility for unit-testing (comparing expected result with computed result) and in big IT and industrial companies as the support for their model evolution tooling.

## Learning

Documentation: [http://wiki.eclipse.org/EMF\\_Compare](http://wiki.eclipse.org/EMF_Compare)

### Training

<http://www.obeo.fr/pages/training/en>

## Support

Forum: <http://www.eclipse.org/forums/eclipse.tools.emf>

Bugs: <https://bugs.eclipse.org/bugs/buglist.cgi?product=EMF&component=Compare>

### Consulting

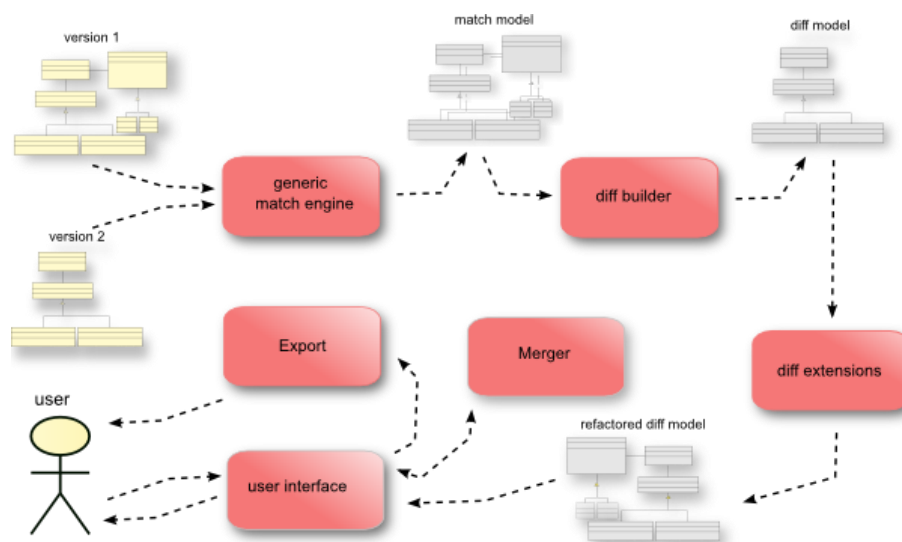
<http://www.obeo.fr/pages/mda-and-productivity/en>

## Customizability

EMF Compare supports customizability through the use of extensible components and through the “Diff Extension” mechanism which allows an adopter to specify its own kind of differences.

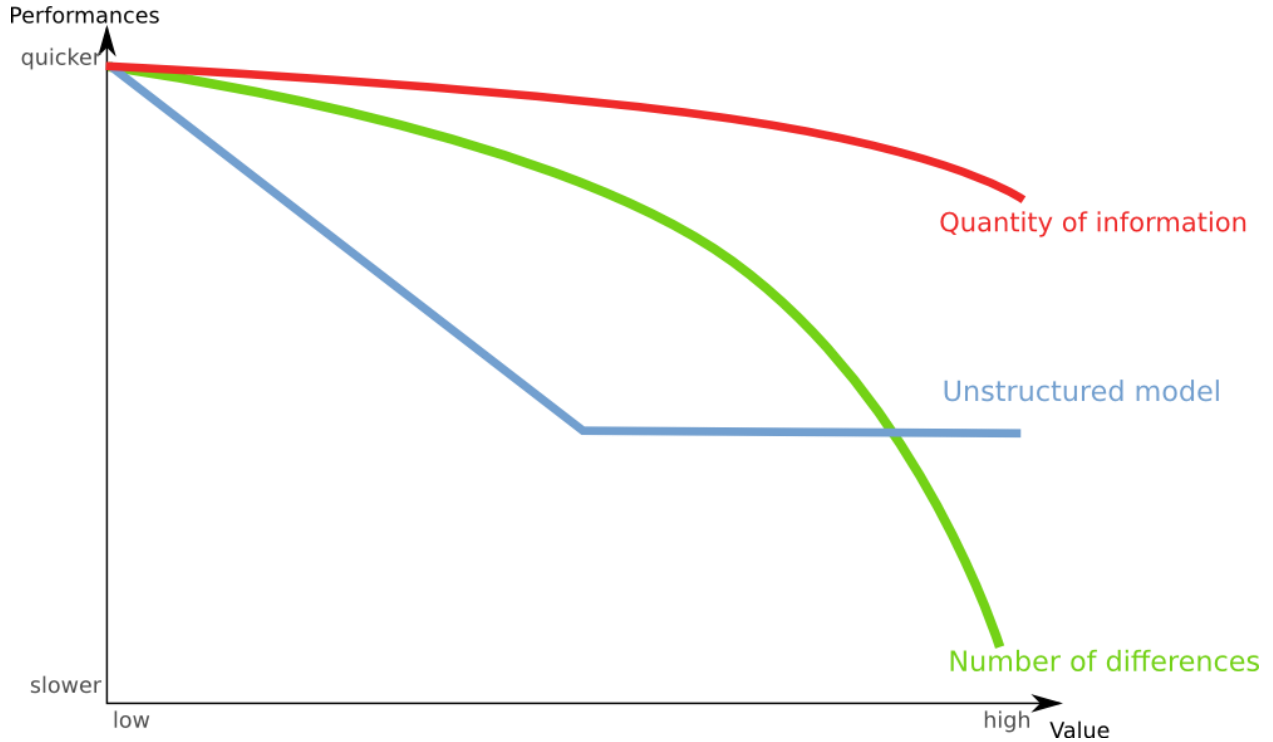
## Extensibility

The parts highlighted in red in the following diagram are extensible.



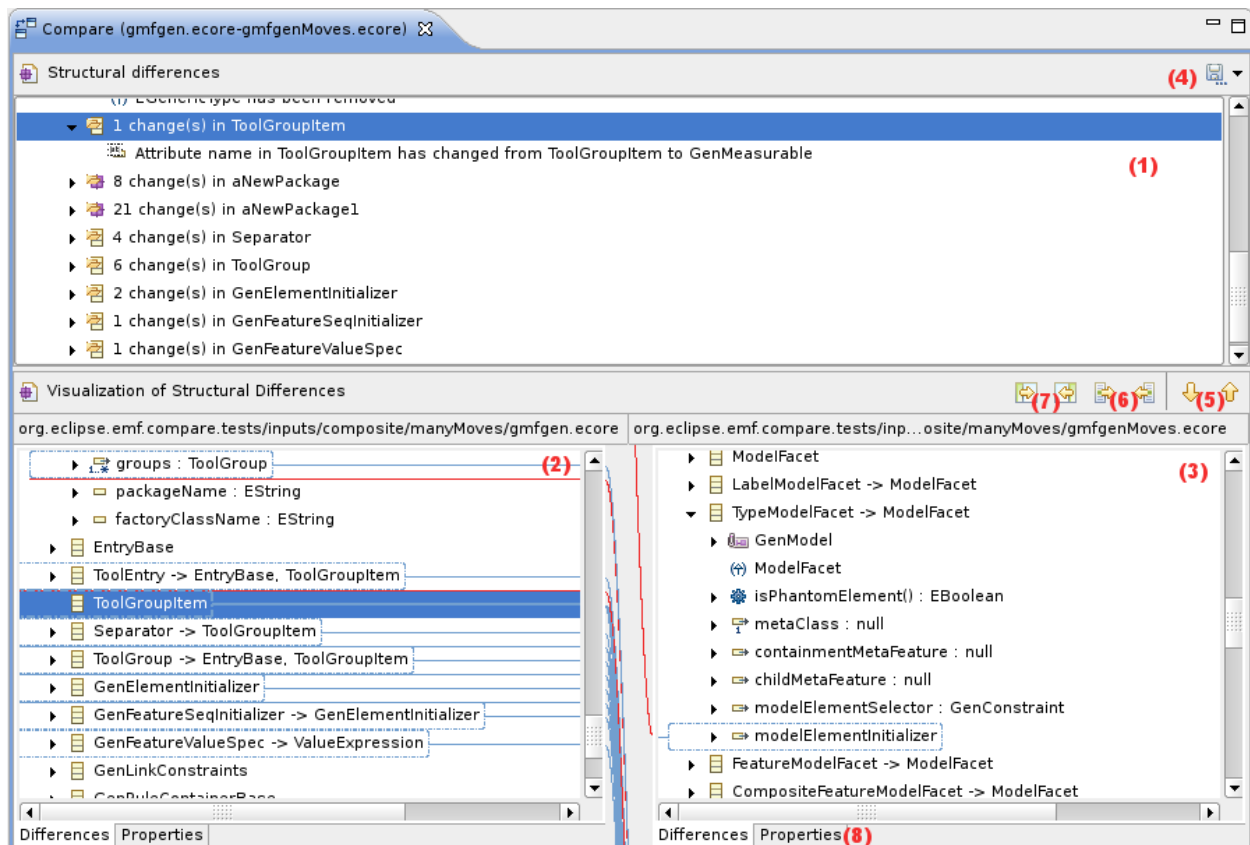
# Scalability

EMF Compare memory footprint is important as it's loading 2 versions of the whole models plus Match and Diff models. The Match model has a size which is a ratio of the compared models and the Diff model footprint is parameterized by the number of differences.



# Usability

Once activated, you can compare your file (locally or from any Configuration Management System supported by the Team API) using the "compare with" menu in Eclipse.



The following areas are highlighted in the image above:

1. The Diff model displaying all the differences found on the models
2. The version 1 model
3. The version 2 model
4. The "export differences" button
5. Move to next/Move to previous difference
6. Merge the current difference (left to right or right to left)
7. Merge all non conflicting differences (left to right or right to left)
8. Display properties differences

## Interoperability

EMF Compare is interoperable with any EMF-based model.

### Dependencies

<http://www.eclipse.org/modeling/emf/downloads/?project=compare>

Eclipse  
EMF EMF (Core)  
Subversive

### Standards

None.

# EMF EMF (Core)

Eclipse Modeling Framework EMF Core

## Overview

<http://www.eclipse.org/modeling/emf/?project=emf>

EMF is a modeling framework and code generation facility for building tools and other applications based on a structured data model. From a model specification described in XMI, EMF provides tools and runtime support to produce a set of Java classes for the model, a set of adapter classes that enable viewing and command-based editing of the model, and a basic editor. Models can be specified using annotated Java, XML documents, or modeling tools like Rational Rose, then imported into EMF. Most important of all, EMF provides the foundation for interoperability with other EMF-based tools and applications.

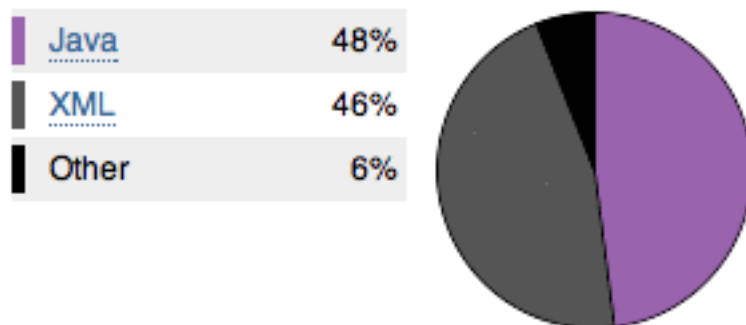
## Licensing

<http://www.ohloh.net/p/3509/analyses/latest>

Eclipse Public License	3267 files
Common Public License 1.0	71 files
Apache Software License	5 files

## Platforms / Languages

<http://www.ohloh.net/p/3509/analyses/latest>



Home Page: <http://www.eclipse.org/modeling/emf/?project=emf>

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emf.emf](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emf.emf)

Wiki Page: <http://wiki.eclipse.org/EMF>

## Predictability

Release Train? Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.emf.emf>

**New & Noteworthy:** [http://wiki.eclipse.org/EMF/New\\_and\\_Noteworthy/Helios](http://wiki.eclipse.org/EMF/New_and_Noteworthy/Helios)

**Release Notes:** <http://www.eclipse.org/modeling/emf/news/relnotes.php?project=emf&version=HEAD>

## Release Timeline



<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emf.emf>




## Releases



The Eclipse update site for this project is

<http://download.eclipse.org/modeling/emf/updates/releases/>.

**EMF (Core) 2.6.0:** 2010-06-23 planned  

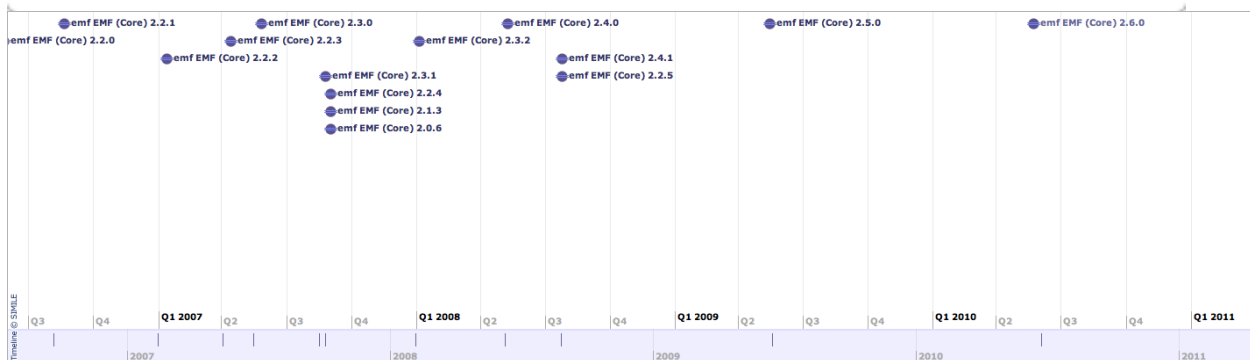
**EMF (Core) 2.5.0:** 2009-06-15 completed 

**EMF (Core) 2.4.1:** 2008-08-25 completed

**EMF (Core) 2.4.0:** 2008-06-09 completed  

**EMF (Core) 2.3.2:** 2008-02-05 completed

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emf.emf](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emf.emf)

### Lead(s)

Ed Merks, individual

### Committers

Nick Boldt, Red Hat Inc.

Kenn Hussey, individual

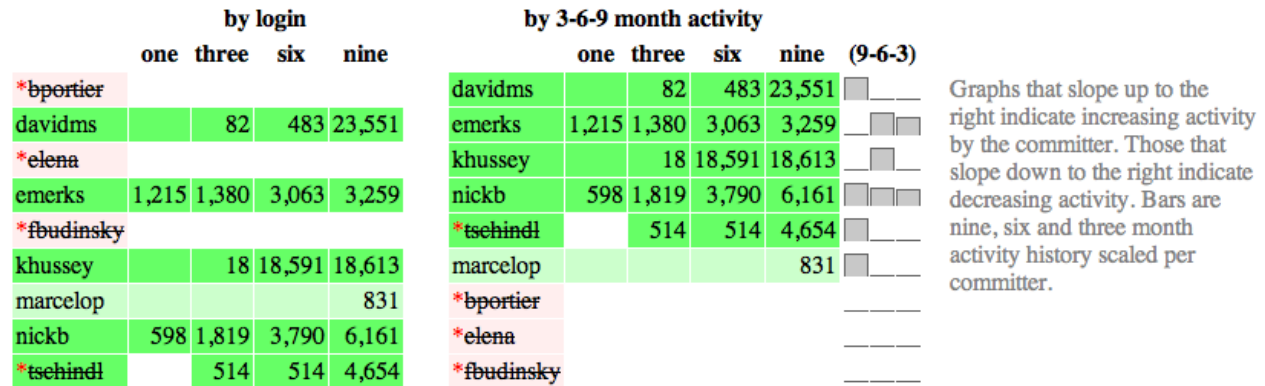
Ed Merks, individual

Marcelo Paternostro, IBM  
David Steinberg, IBM

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/emf-dev/maillist.html>

## Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emf.emf>



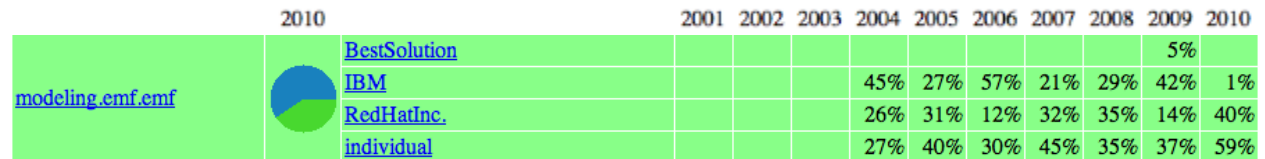
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emf.emf>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
IBM	1 (33.33%)	3 (50%)	4 (44.44%)	25%	2 (2.13%)	4 (0.19%)	2
individual	1 (33.33%)	2 (33.33%)	3 (33.33%)	33.33%	85 (90.43%)	1,240 (59.47%)	15
RedHatInc.	1 (33.33%)	0 (0%)	1 (11.11%)	100%	7 (7.45%)	841 (40.34%)	120
<b>Total</b>	<b>3</b>	<b>6</b>	<b>9</b>		<b>94</b>	<b>2,085</b>	

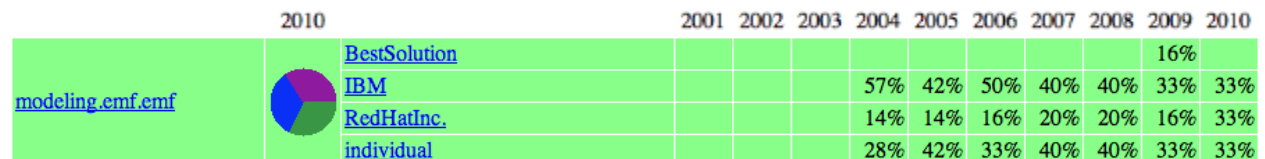
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>

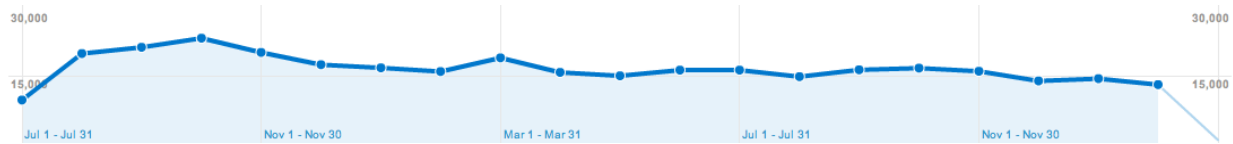




# User Community

EMF has a well established user community. The EMF book has published a second expanded edition. The newsgroup is very active.

## Downloads (Jul 1, 2008 - Mar 1, 2010)



# Adopter Community

EMF is widely used by other projects at Eclipse. It is always among Eclipse's most popular projects. Eclipse Summit Europe 2009's survey indicated it was second only to the Java Development Tools in terms of usage by Eclipse users.

# Learning

**Documentation:** <http://www.eclipse.org/modeling/emf/docs/>

## Training

- <http://www.macromodeling.com/>
- [http://www.opcoach.com/en/Training\\_Courses.html](http://www.opcoach.com/en/Training_Courses.html)
- <http://www.obeo.fr/pages/training/en>
- <http://www.itemis.com/itemis-ag/language=en/2642/education-and-coaching>
- <http://www.inferdata.com/training/eclipse.html>
- <http://www.ancitconsulting.com/elearning.htm>
- <http://www.eclipse-training.net/>
- <http://www.eclipseuniversity.org/>
- <http://www.elver.org/services/index.html>
- <http://www.cypal.in/training>
- <http://eclipsegang.com/>
- <http://www.sierrawireless.com/productsandservices/AirVantage.aspx>
- <http://www.industrial-tsi.com/index.php?id=139>

# Support

**Forum:** <http://www.eclipse.org/forums/eclipse.tools.emf>

**Bugs:** <https://bugs.eclipse.org/bugs/buglist.cgi?product=EMF&component=Core>

## Consulting

- <http://www.macromodeling.com/>
- <http://www.committerati.com/>
- <http://www.opcoach.com/en/Consulting.html>
- <http://www.obeo.fr/pages/mda-and-productivity/en>
- <http://www.itemis.com/itemis-ag/language=en/2621/portfolio>
- <http://www.inferdata.com/consult/index.html>
- <http://www.ancitconsulting.com/project.htm>
- <http://www.eclipseuniversity.org/services/eclipse.htm>
- <http://www.elver.org/services/index.html>
- <http://eclipsegang.com/>
- <http://www.sierrawireless.com/productsandservices/AirVantage.aspx>

<http://www.industrial-tsi.com/index.php?id=139>

## Customizability

Many different tools can be built around and using EMF. It does not dictate any particular development process.

## Extensibility

EMF is the core of a very large extend framework. As such it's proven itself as highly extensible.

## Scalability

EMF provides minimal footprint implementation classes that scale well. For example, EMF instances are generally much smaller than corresponding DOM instances for the same XML instance. The extended framework around EMF, e.g., CDO, supports working with instances larger than can be contained in the heap.

## Usability

EMF's tools are relatively crude. The framework is very powerful and relatively challenging to use effectively, though simple things are simple to do.

## Interoperability

EMF supports interoperability with the OMG's EMOF. Ecore is isomorphic to EMOF and EMF can serialize Ecore to EMOF and deserialize Ecore from EMOF.

## Dependencies

<http://www.eclipse.org/modeling/emf/downloads/?project=emf>

Eclipse

## Standards

[Meta Object Facility \(MOF\)](#)

[XML Metadata Interchange \(XMI\)](#)

# EMF Teneo

Eclipse Modeling Framework Teneo Model Relational Mapping

## Overview

<http://www.eclipse.org/modeling/emf/?project=cdo>

Teneo is a database persistency solution for EMF using [EclipseLink](#) or [Hibernate](#). It supports automatic creation of EMF to Relational Mappings and the related database schemas. The solution contains a runtime layer to support specific EMF features. EMF Objects can be stored and retrieved using advanced queries (HQL or EJB-QL). EMF resource implementations are provided for integration with EMF Editors. The persistence logic and mapping can be controlled using EJB3/JPA-like annotations. Most of the EJB3/JPA mapping standard is supported.

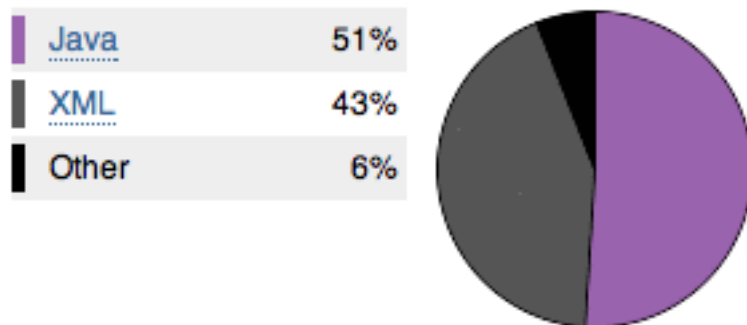
## Licensing

<https://www.ohloh.net/p/emf-teneo/analyses/latest>

Eclipse Public License 805 files

## Platforms / Languages

<https://www.ohloh.net/p/emf-teneo/analyses/latest>



**Home Page:** <http://www.eclipse.org/modeling/emf/?project=teneo>

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emf.teneo](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emf.teneo)

**Wiki Page:** [http://wiki.eclipse.org/EMF/Teneo/EclipseLink\\_JPA](http://wiki.eclipse.org/EMF/Teneo/EclipseLink_JPA)

## Predictability

**Release Train?** Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.emf.teneo>

**New & Noteworthy:** N/A

**Release Notes:** <http://www.eclipse.org/modeling/emf/news/relnotes.php?project=teneo&version=HEAD>

## Release Timeline


<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emf.teneo>




## Releases

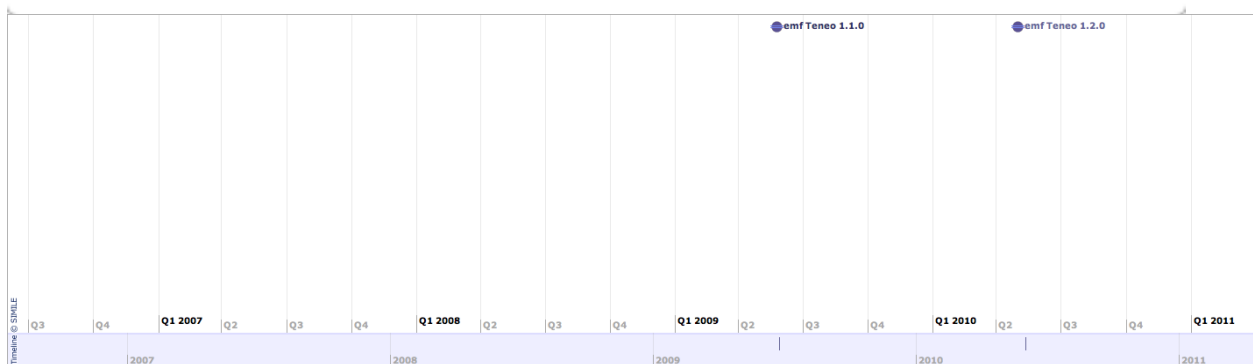
The Eclipse update site for this project is

<http://download.eclipse.org/modeling/emf/updates/interim/>.

**Teneo 1.2.0:** 2010-06-01 planned 

**Teneo 1.1.0:** 2009-06-24 completed 

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emf.teneo](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emf.teneo)

### Lead(s)

Martin Taal, individual

### Committers

Stephan Eberle, Geensys

Shaun Smith, Oracle

Martin Taal, individual

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/emf-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emf.teneo>

by login					by 3-6-9 month activity				
	one	three	six	nine	one	three	six	nine	(9-6-3)
mtaal	26,197	28,582	44,976	111,050	mtaal	26,197	28,582	44,976	111,050
*niekb					seberle			5,723	
seberle				5,723	ssmith			15	
ssmith				15	*niekb				

Graphs that slope up to the right indicate increasing activity by the committer. Those that slope down to the right indicate decreasing activity. Bars are nine, six and three month activity history scaled per committer.

## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emf.teneo>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
individual	1 (100%)	0 (0%)	1 (25%)	100%	1,422 (100%)	26,197 (100%)	18
<b>Total</b>	<b>1</b>	<b>3</b>	<b>4</b>		<b>1,422</b>	<b>26,197</b>	

## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>

	2010	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
modeling.emf.teneo	GeensysformerlyTNI-Software								1%	16%	
	Oracle								1%	1%	
	RedHatInc.						1%	2%	1%		
	individual						98%	97%	98%	83%	100%

## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>

	2010	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
modeling.emf.teneo	GeensysformerlyTNI-Software								1%	16%	
	Oracle								1%	1%	
	RedHatInc.						1%	2%	1%		
	individual						98%	97%	98%	83%	100%

## User Community

Teneo is being used in RCP as well as web-service oriented development projects using EMF. Usage includes both in custom development projects as well as inclusion in standard software products. Teneo has an active user community with several forum posts a week.

Some numbers:

- Almost 4000 forum posts since July 2006 (count done by searching for all forum posts with the word Teneo in them)
- Total bugs: 475, current open bugs: 22

## Downloads (Jul 1, 2008 - Mar 1, 2010)



## Adopter Community

**Internal:** Teneo is being used in the CDO (<http://wiki.eclipse.org/CDO>) framework as part of the CDO Hibernate Store ([http://wiki.eclipse.org/CDO\\_Hibernate\\_Store](http://wiki.eclipse.org/CDO_Hibernate_Store)).

**External:** Considering the amount of forum posts, Teneo is actively being used in development projects outside of eclipse.org. There are several companies who use Teneo as a component in their standard product offering.

## Learning

**Documentation:** [http://wiki.eclipse.org/EMF/Teneo/EclipseLink\\_JPA](http://wiki.eclipse.org/EMF/Teneo/EclipseLink_JPA)

### Training

<http://www.springsite.com>

## Support

**Forum:** <http://www.eclipse.org/forums/eclipse.tools.emf>

**Bugs:** <https://bugs.eclipse.org/bugs/buglist.cgi?product=EMF&component=teneo>

### Consulting

<http://www.springsite.com>

## Customizability

Teneo allows manual override of every mapping decision it makes automatically. Teneo has a specific process to ensure that manual overrides are maintained.

The mapping generation is completely driven by JPA annotations in the model. When Teneo processes a model it will automatically generate JPA annotations when no manual JPA annotation is present. Teneo can automatically handle models without manual JPA annotations, a partially annotated model and a fully annotated model. In all cases the manual JPA annotations are preserved. The result is a fully annotated model which can be a combination of manual and automatically generated annotations. The fully annotated model then drives the mapping generation.

Next to support for all JPA annotations, Teneo also has 40+ configuration options to easily control mapping and runtime behavior. See here for more information: [http://wiki.eclipse.org/Teneo/Hibernate/Configuration\\_Options](http://wiki.eclipse.org/Teneo/Hibernate/Configuration_Options).

## Extensibility

Teneo has an extension mechanism which makes it possible to replace core Teneo classes with custom implementations. This includes classes for automatic mapping and classes which are involved in runtime model-relational mapping. There are around 50 extension points (classes which can be replaced by custom implementations). See this wiki page for more information:

<http://wiki.eclipse.org/Teneo/Hibernate/Extensions>.

## Scalability

Teneo has the same scalability characteristics as EclipseLink, Hibernate and EMF. It can be used by small development teams as well as large development teams in the same way as EclipseLink, Hibernate and EMF can.

## Usability

Teneo has a very low starting barrier. There are several tutorials available (<http://wiki.eclipse.org/Teneo/Hibernate#Tutorials>) which show that you can have Teneo up and running in a very short time.

Teneo has strong automatic mapping functionality which means that it can automatically map virtually every EMF model without any manual mapping effort. For more advanced usage, Teneo can be controlled in detail by a combination of manual JPA annotations, configuration options and custom extensions.

At runtime Teneo does not change the interface/API a developer works with. So a developer using Teneo normally is not aware of its presence, a developer works with the standard API's provided by EclipseLink, Hibernate and EMF.

Teneo is supported by an extensive wiki (<http://wiki.eclipse.org/Teneo>) providing tutorials, detailed information on extension and configuration and trouble-shooting and FAQ.

## Interoperability

Teneo makes use of standard JPA annotations as specified by the Java community process (<http://www.jcp.org>).

At runtime a developer does not use the Teneo api explicitly (only for minor initialization at application start). A developer only makes use of and works with industry standards such as EclipseLink, Hibernate, HQL, EJB-QL and EMF. Teneo does not add proprietary API's or change API's of these standard solutions.

## Dependencies

<http://www.eclipse.org/modeling/emf/downloads/?project=teneo>

Eclipse  
EMF EMF (Core)  
EclipseLink or Hibernate

## Standards

[Enterprise Java Beans \(EJB\) 3.0 Java Persistence API \(JPA\)](#)  
[XML Schema Definition \(XSD\)](#)

# EMF Validation

Eclipse Modeling Framework Validation

## Overview

<http://www.eclipse.org/modeling/emf/?project=validation>

The validation component provides the following capabilities.

- Constraint Definition - Provides API for defining constraints for any EMF meta-model (batch and live constraints).
- Customizable model traversal algorithms - Extensibility API to support meta-models that require custom strategies for model traversal.
- Constraint parsing for languages - Provides support for parsing the content of constraint elements defined in specific languages. The validation framework provides support for two languages: Java and OCL.
- Configurable constraint bindings to application contexts - API support to define "client contexts" that describe the objects that need to be validated and to bind them to constraints that need to be enforced on these objects.
- Validation listeners - Support for listening to validation events.

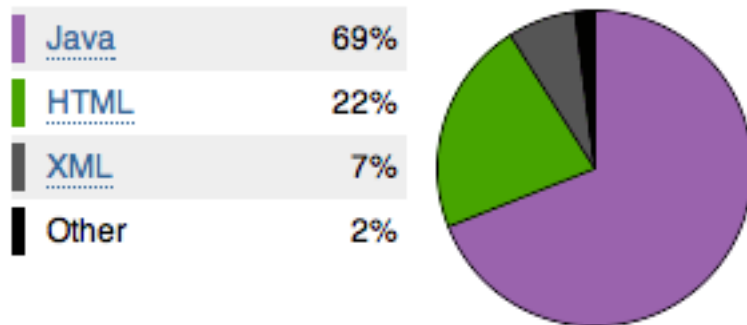
## Licensing

<https://www.ohloh.net/p/emf-validation/analyses/latest>



## Platforms / Languages

<https://www.ohloh.net/p/emf-validation/analyses/latest>



Home Page: <http://www.eclipse.org/modeling/emf/?project=validation>

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emf.validation](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emf.validation)

Wiki Page: <http://wiki.eclipse.org/EMF/Validation>

## Predictability

Release Train? Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)



<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** <http://www.eclipse.org/projects/project-plan.php?planurl=http://www.eclipse.org/modeling/emf/validation/project-info/plan.xml&component=Validation>

**New & Noteworthy:** [http://wiki.eclipse.org/EMF/Validation/New and Noteworthy](http://wiki.eclipse.org/EMF/Validation/New_and_Noteworthy)

**Release Notes:**

<http://www.eclipse.org/modeling/emf/news/relnotes.php?project=validation&version=HEAD>

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emf.validation>

N/A

## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emf.validation](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emf.validation)

### Lead(s)

Boris Gruschko, SAP AG

### Committers

Nick Boldt, Red Hat Inc.

Boris Gruschko, SAP AG

Anthony Hunter, IBM

Martin Strenge, SAP AG

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/emf-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emf.validation>

N/A

### Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emf.validation>

N/A

### Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>

2010

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

N/A

### Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>

2010

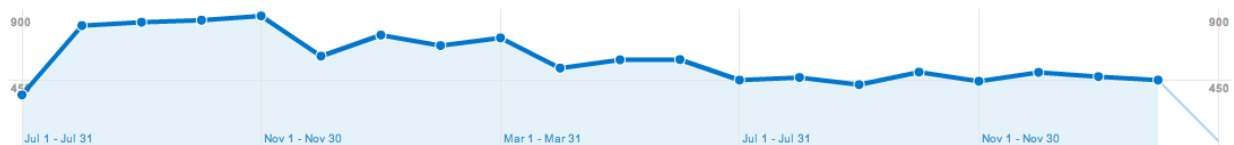
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

N/A

## User Community

N/A

### Downloads (Jul 1, 2008 - Mar 1, 2010)



## Adopter Community

N/A

## Learning

Documentation: <http://www.eclipse.org/modeling/emf/docs/>

### Training

N/A

## Support

Forum: <http://www.eclipse.org/forums/eclipse.tools.emf>

Bugs: <https://bugs.eclipse.org/bugs/buglist.cgi?product=EMF&component=Validation>

### Consulting

N/A

## Customizability

EMF Validation does not provide much in the way of customizability.

## Extensibility

Parsers, constraints, and categories can be contributed via extensions.

## Scalability

The traversal algorithm needs to be improved in order to handle large models.

## Usability

There is not much UI in EMF Validation for the end user.

## Interoperability

EMF Validation is interoperable by the virtue of its being based on EMF (and Ecore).

## **Dependencies**

<http://www.eclipse.org/modeling/emf/downloads/?project=validation>

Eclipse  
EMF EMF (Core)  
MDT OCL (optional)

## **Standards**

None.

# EMFT Doc2Model

Eclipse Modeling Framework Technology Document to Model

## Overview

<http://eclipse.org/proposals/doc2model/>

The Doc2Model (Document to Model) framework is a proposed open source component under the Eclipse Modeling Framework Technology project for parsing structured documents (e.g., xlsx, docx, odt, odf...) to produce EMF models. It is in the Project Proposal Phase ([as defined in the Eclipse Development Process document](#)) and is written to declare its intent and scope. This proposal is written to solicit additional participation and input from the Eclipse community. You are invited to comment on and/or join the project. Please send all feedback to the Eclipse Modeling Framework Technology ([eclipse.technology.emft](mailto:eclipse.technology.emft)) newsgroup with [doc2model] as a prefix of the subject line.

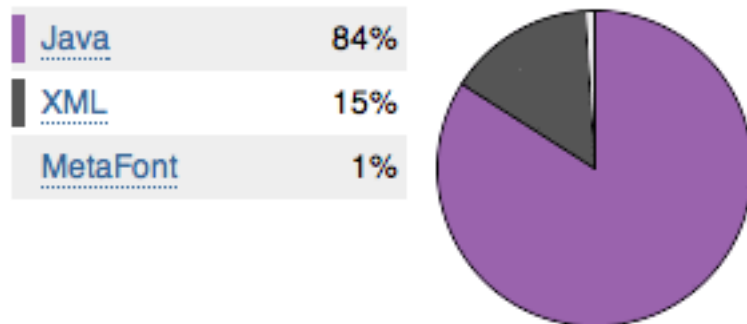
## Licensing

<https://www.ohloh.net/p/doc2model/analyses/latest>



## Platforms / Languages

<https://www.ohloh.net/p/doc2model/analyses/latest>



**Home Page:** <http://eclipse.org/proposals/doc2model/>

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.doc2model](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.doc2model)

**Wiki Page:** N/A

## Predictability

**Release Train?** No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** N/A

**New & Noteworthy:** N/A

Release Notes: N/A

### Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emft.doc2model>

N/A

## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.doc2model](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.doc2model)

### Lead(s)

Tristan Faure

### Committers

Tristan Faure

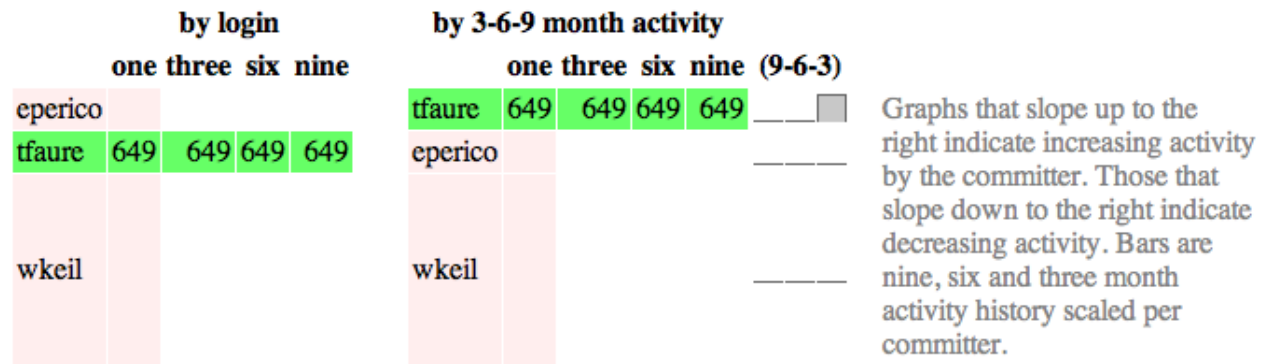
Werner Keil

Emilien Perico, individual

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/emft-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emft.doc2model>



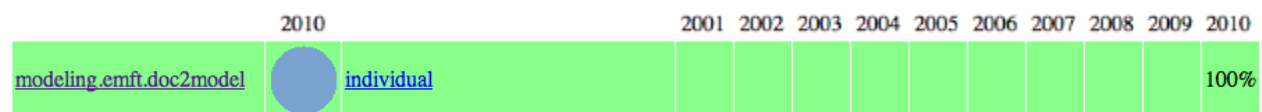
### Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emft.doc2model>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
individual	1 (100%)	0 (0%)	1 (100%)	100%	431 (100%)	649 (100%)	2
<b>Total</b>	<b>1</b>	<b>0</b>	<b>1</b>		<b>431</b>	<b>649</b>	

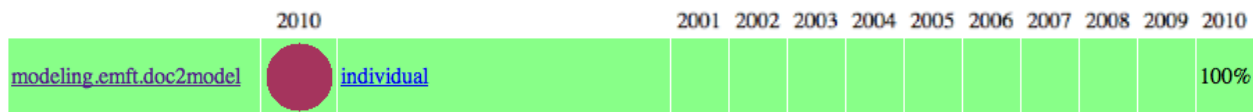
### Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

N/A

## Adopter Community

N/A

## Learning

Documentation: N/A

## Training

N/A

## Support

Forum: <http://www.eclipse.org/forums/eclipse.technology.emf>

Bugs: [https://bugs.eclipse.org/bugs/enter\\_bug.cgi?product=EMFT.Doc2Model](https://bugs.eclipse.org/bugs/enter_bug.cgi?product=EMFT.Doc2Model)

## Consulting

N/A

## Customizability

Doc2model provides an action language which allows users to define behaviors for EMF model creation. The action language includes a custom action which can call Java classes defined by user.

## Extensibility

Doc2model can accept, via extension points

- new types of input documents
- new types of document recognition (other than predefined as regular expression and styles)
- value interceptors for specific process during value assignment

## Scalability

N/A

## Usability

3 different actors are identified for doc2model. They are ordered by complexity ascending:

End user: he launches doc2model configuration model and extract data from its document.

Configuration designer: he knows doc2model language and the target metamodel, he can design a mapping for the end user.

Parser writer: he wants to provide new input document format management and writes java code to create specific parser.

## **Interoperability**

N/A

### **Dependencies**

Eclipse  
EMF Compare  
EMF EMF (Core)

### **Standards**

None.

# EMFT Ecore Tools

Eclipse Modeling Framework Technology Ecore Tools

## Overview

<http://www.eclipse.org/modeling/emft/?project=ecoretools>

The **Ecore Tools** component provides a complete environment to create, edit and maintain Ecore models. This component eases handling of Ecore models with a Graphical Ecore Editor and bridges to other existing Ecore tools (Validation, Search, Compare, Emfatic, generators...). The Graphical Ecore Editor implements multi-diagram support, a custom tabbed properties view, validation feedbacks, refactoring capabilities... The long-term goal is to provide the same level of services as does JDT for Java.

## Licensing

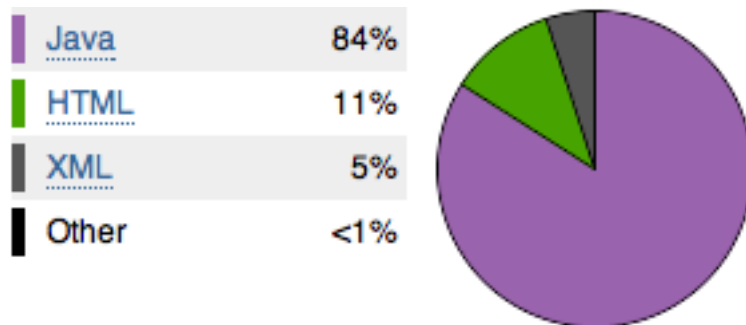
<http://www.ohloh.net/p/9584/analyses/latest>

Eclipse Public License

462 files

## Platforms / Languages

<http://www.ohloh.net/p/9584/analyses/latest>



Home Page: <http://www.eclipse.org/modeling/emft/?project=ecoretools>

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.ecoretools](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.ecoretools)

Wiki Page: [http://wiki.eclipse.org/Ecore\\_Tools](http://wiki.eclipse.org/Ecore_Tools)

## Predictability

Release Train? Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

Plan: <http://www.eclipse.org/projects/project-plan.php?planurl=http://www.eclipse.org/modeling/emft/ecoretools/project-info/plan.xml&component=EcoreTools>



**New & Noteworthy:** [http://wiki.eclipse.org/EcoreTools\\_New\\_Noteworthy](http://wiki.eclipse.org/EcoreTools_New_Noteworthy)

**Release Notes:**


<http://www.eclipse.org/modeling/emft/news/relnotes.php?project=ecoretools&version=HEAD>

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emft.ecoretools>

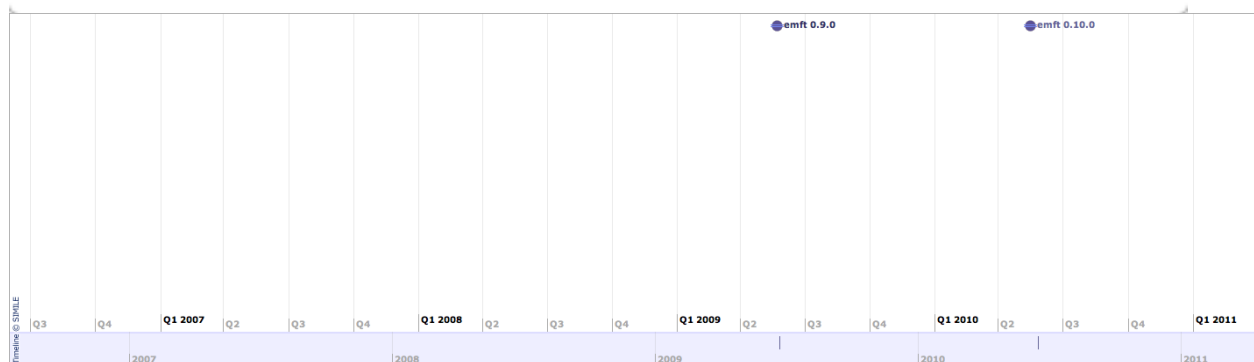


The Eclipse update site for this project is  
<http://download.eclipse.org/releases/galileo/>.

**0.9.0:** 2009-06-22 completed 

**0.10.0:** 2010-06-16 planned

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.ecoretools](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.ecoretools)

### Lead(s)

David Sciamma, Anywhere Technologies

### Committers

Lucas Bigeardel, individual  
Gilles Cannenterre, Anywhere Technologies  
Jacques Lescot, Anywhere Technologies  
David Sciamma, Anywhere Technologies

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/emft-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emft.ecoretools>

**by login**

	one	three	six	nine
dsciamma				
gcannente				
jlescot	34	47	47	63
lbigearde				

**by 3-6-9 month activity**

	one	three	six	nine (9-6-3)
jlescot	34	47	47	63
dsciamma				
gcannente				
lbigearde				

Graphs that slope up to the right indicate increasing activity by the committer. Those that slope down to the right indicate decreasing activity. Bars are nine, six and three month activity history scaled per committer.


## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emft.ecoretools>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
AnywareTechnologies	1 (100%)	2 (66.67%)	3 (75%)	33.33%	9 (100%)	34 (100%)	4
<b>Total</b>	<b>1</b>	<b>3</b>	<b>4</b>		<b>9</b>	<b>34</b>	


## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>

	2010	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<a href="#">modeling.emft.ecoretools</a>	 <a href="#">AnywareTechnologies</a>								100%	98%	100%
	<a href="#">individual</a>								1%		

## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>

	2010	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<a href="#">modeling.emft.ecoretools</a>	 <a href="#">AnywareTechnologies</a>								100%	75%	100%
	<a href="#">individual</a>								25%		

## User Community

N/A

## Downloads (Jul 1, 2008 - Mar 1, 2010)



## Adopter Community

TBD

## Learning

Documentation: [http://wiki.eclipse.org/Ecore\\_Tools](http://wiki.eclipse.org/Ecore_Tools)

## Training

N/A

## Support

Forum: <http://www.eclipse.org/forums/eclipse.technology.emft>

Bugs: <https://bugs.eclipse.org/bugs/buglist.cgi?product=EMFT&component=Ecore%20Tools>

## Consulting

N/A

## Customizability

N/A

## Extensibility

N/A

## Scalability

N/A

## Usability

N/A

## Interoperability

N/A

## Dependencies

<http://www.eclipse.org/modeling/emft/downloads/?project=ecoretools>

Eclipse  
EMF EMF (Core)  
EMF Query  
EMF Transaction  
EMF Validation  
GEF  
GMF  
MDT OCL

## Standards

[Meta Object Facility \(MOF\)](#)

# EMFT Edapt

Eclipse Modeling Framework Technology Edapt

## Overview

<http://eclipse.org/proposals/edapt/>

Edapt will provide an extensible framework for reducing the migration effort that results from the evolution of Ecore models. Since the number of existing instances of a successful modeling language typically outnumbers the number of editors, interpreters and transformations, instance migration effort dwarfs tool reconciliation effort. Consequently, Edapt clearly focuses on the migration of instances in the first step. However, we plan to make it extensible with respect to the migration of other artifacts like editors, interpreters and transformations. The basic idea behind Edapt is to obtain the changes between two versions of an Ecore model, and to enrich them with information about how to automatically migrate existing instances. Edapt will support a pluggable mechanism to obtain the changes between two Ecore model versions along with two examples: the operation-based and the difference-based approach.

## Licensing

N/A

## Platforms / Languages

N/A

**Home Page:** N/A

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.edapt](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.edapt)

**Wiki Page:** <http://eclipse.org/proposals/edapt/>

## Predictability

**Release Train?** No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** N/A

**New & Noteworthy:** N/A

**Release Notes:** N/A

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emft.edapt>

N/A

## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.edapt](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.edapt)

## Lead(s)

Moritz Eysholdt, itemis AG

Markus Herrmannsdoerfer

## Committers

Moritz Eysholdt, itemis AG  
Markus Herrmannsdoerfer

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/emft-dev/maillist.html>

## Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emft.edapt>

N/A

## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emft.edapt>

N/A

## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>

2010

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

N/A

## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>

2010

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

N/A

## User Community

N/A

## Adopter Community

N/A

## Learning

**Documentation:** N/A

### Training

<http://www.itemis.com/itemis-ag/language=en/2642/education-and-coaching>

## Support

**Forum:** <http://www.eclipse.org/forums/eclipse.technology.emft>

**Bugs:** <https://bugs.eclipse.org/bugs/buglist.cgi?product=EMFT&component=Edapt>

## **Consulting**

<http://www.itemis.com/itemis-ag/language=en/2621/portfolio>

## **Customizability**

N/A

## **Extensibility**

N/A

## **Scalability**

N/A

## **Usability**

N/A

## **Interoperability**

N/A

## **Dependencies**

N/A

## **Standards**

None.

# EMFT EEF

Eclipse Modeling Framework Technology Extended Editing Framework



## Overview

<http://www.eclipse.org/modeling/emft/?project=eef>

The **Extended Editing Framework** aims at giving another way to improve the EMF model creation phase by providing new services dedicated to editing and using more appealing editing elements. The way to obtain these services and elements is based on a generative approach similar to the EMF.Edit one. The framework provides advanced editing components for the properties of EMF elements and a default generation based on standard metamodels using these components. The generic generators create a standard architecture with advanced graphical components to edit EMF model objects. These components are meant to leverage every aspects of the Eclipse Platform as for instance the Eclipse Dynamic Help.

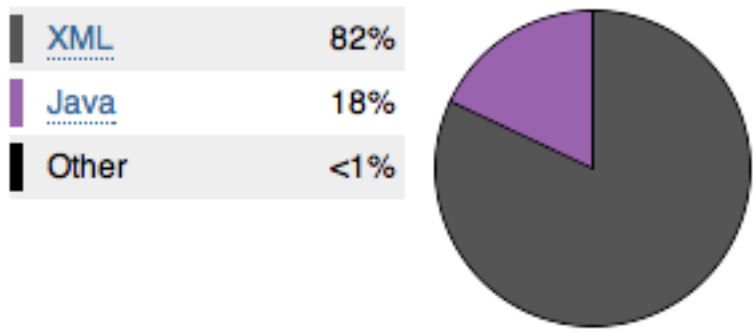
## Licensing

<http://www.ohloh.net/p/eef/analyses/latest>

Eclipse Public License 763 files

## Platforms / Languages

<http://www.ohloh.net/p/eef/analyses/latest>



Home Page: <http://www.eclipse.org/modeling/emft/?project=eef>

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.eef](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.eef)

Wiki Page: <http://wiki.eclipse.org/EEF>

## Predictability

Release Train? Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

Plan: <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.emft.eef>

**New & Noteworthy:** [http://wiki.eclipse.org/EEF\\_New\\_and\\_Noteworthy](http://wiki.eclipse.org/EEF_New_and_Noteworthy)

**Release Notes:** <http://www.eclipse.org/modeling/emft/news/relnotes.php?project=eef&version=HEAD>

## Release Timeline


<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emft.eef>



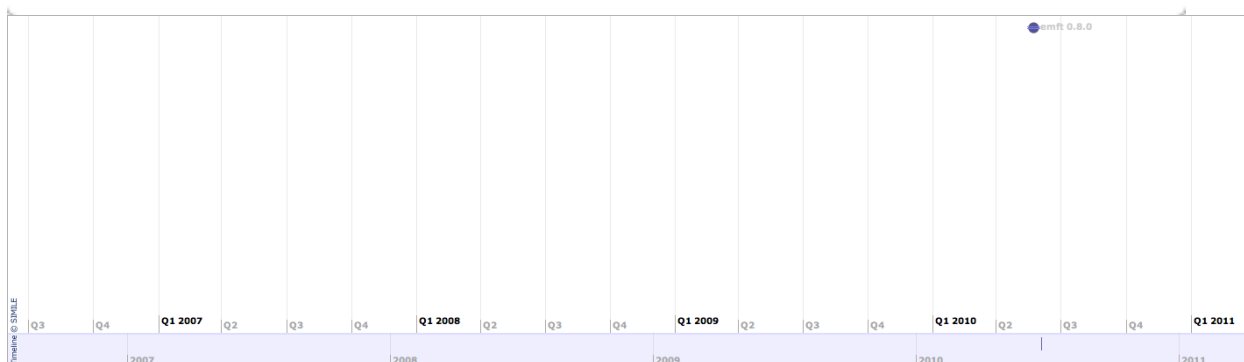
## Releases

The Eclipse update site for this project is

<http://download.eclipse.org/modeling/emft/eef/updates/releases/>.

**0.8.0:** 2010-06-23 tentative 

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.eef](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.eef)

### Lead(s)

Goulwen Le Fur, Obeo

### Committers

Stephane Bouchet, Obeo

Goulwen Le Fur, Obeo

Nathalie Lepine, Obeo

Patrick Tessier, CEA LIST

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/emft-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emft.eef>



	by login				by 3-6-9 month activity				
	one	three	six	nine	one	three	six	nine	(9-6-3)
glefur	542	7,584	13,649	39,076	glefur	542	7,584	13,649	39,076
nlepine	12,435	13,171	13,472	13,473	nlepine	12,435	13,171	13,472	13,473
ptessier			28	28	sbouchet	8,306	23,879	34,706	72,712
sbouchet	8,306	23,879	34,706	72,712	ptessier			28	28

Graphs that slope up to the right indicate increasing activity by the committer. Those that slope down to the right indicate decreasing activity. Bars are nine, six and three month activity history scaled per committer.

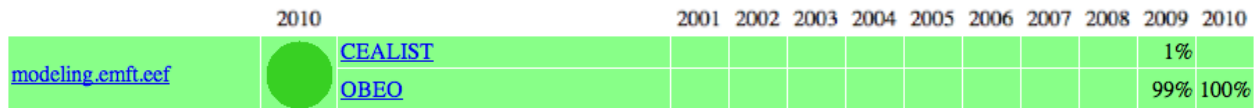
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emft.eef>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
OBEQ	3 (100%)	0 (0%)	3 (75%)	100%	1,211 (100%)	22,638 (100%)	19
<b>Total</b>	<b>3</b>	<b>1</b>	<b>4</b>		<b>1,211</b>	<b>22,638</b>	

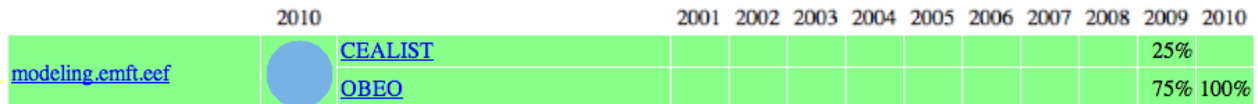
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

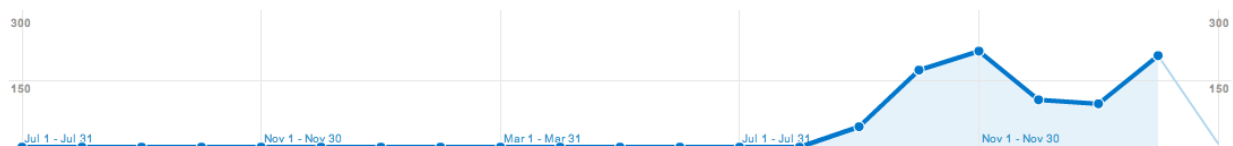
<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

The user community for EEF includes users of EMF as a modeling tool.

### Downloads (Jul 1, 2008 - Mar 1, 2010)



## Adopter Community

EEF has been adopted in Eclipse projects like Papyrus and AMP. EEF is mainly used to improve properties views generated by EMF. EEF is currently used by big industrial companies.

## Learning

**Documentation:** <http://wiki.eclipse.org/EEF>

## Training

<http://www.obeo.fr/pages/training/en>

## Support

**Forum:** <http://www.eclipse.org/forums/eclipse.technology.emft>

**Bugs:** [https://bugs.eclipse.org/bugs/enter\\_bug.cgi?product=EMFT&component=EEF](https://bugs.eclipse.org/bugs/enter_bug.cgi?product=EMFT&component=EEF)

## Consulting

<http://www.obeo.fr/pages/mda-and-productivity/en>

## Customizability

The result of the EEF generation can be customized with generated code and by using extension points like `IPropertiesEditionProvider`.

## Extensibility

EEF generation can be extended with the dynamic override Acceleo mechanism. The UML generation is defined this way.

## Scalability

N/A

## Usability

Once EEF is installed, an initializer can create default EEF models for a given EMF generation model (genmodel) by using the action "Initialize EEF models" in the popup menu of the genmodel file. Then, the EEF generation can be invoked by a right click on a EEFGen model with action "Generate EEF architecture".

## Interoperability

EEF is Interoperable with any EMF-based model.

## Dependencies

<http://www.eclipse.org/modeling/emft/downloads/?project=eef>

Eclipse  
EMF Compare  
EMF EMF (Core)  
EMF Validation  
M2T Acceleo  
MDT OCL

## Standards

None.

# EMFT EGF

Eclipse Modeling Framework Technology Eclipse Generation Factories



## Overview

<http://www.eclipse.org/proposals/egf/>

The purpose of EGF is to meet the need of mass-producing software with flexibility. EGF federates generation around the pivotal notion of **factory component**. A factory component is a generation unit with a clear objective of generation. It has a contract to declare the factory component parameters. Generation data are organized by **viewpoints**, such as generation pattern or model mapping declarations. The generation orchestration is defined in a **production plan**. A generation step of the production plan can either be a task, for instance implemented in Java, or, by assembly, a call to another factory component. A factory component can be **edited** and **executed**. A factory component encapsulates generation know-how. A **portfolio** is a consistent set of factory components with a common generation objective which is valuable for development teams or a user community. Finally and in practice, EGF implements a structure able to provide and execute customizable and off-the-shelf software factories.

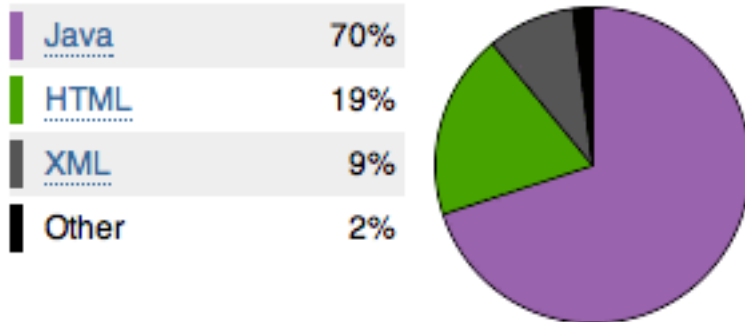
## Licensing

<https://www.ohloh.net/p/egf/analyses/latest>

Eclipse Public License	927 files
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## Platforms / Languages

<https://www.ohloh.net/p/egf/analyses/latest>



Home Page: <http://www.eclipse.org/egf/>

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.egf](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.egf)

Wiki Page: <http://wiki.eclipse.org/EGF>

## Predictability

Release Train? No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.emft.egf>

**New & Noteworthy:** N/A

**Release Notes:** N/A

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emft.egf>

### Releases

No Eclipse update site has been listed.

0.2.5: 2010-05-17 planned

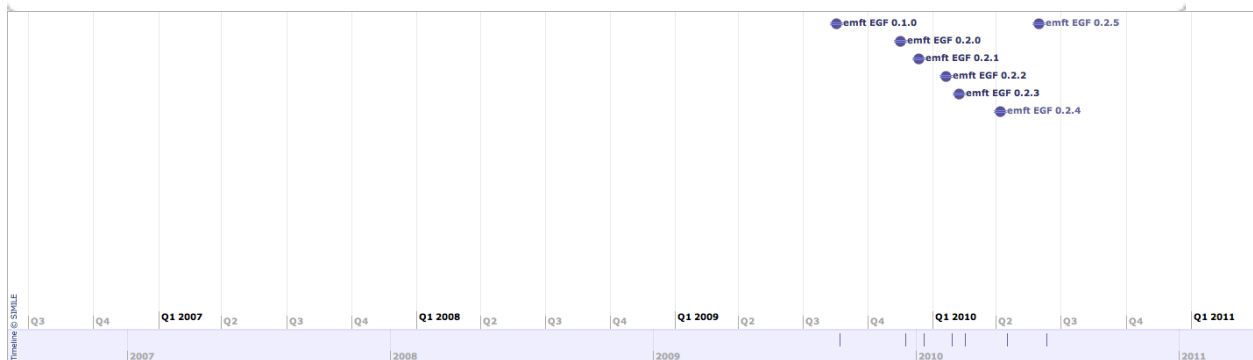
0.2.4: 2010-04-16 planned

0.2.3: 2010-03-15 planned

**0.2.2:** 2010-02-19 completed

**0.2.1:** 2010-01-11 completed

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.egf](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.egf)

### Lead(s)

Benoit Langlois, Thales

### Committers

Laurent Goubet, OBEO

Thomas Guiu, Soyatec

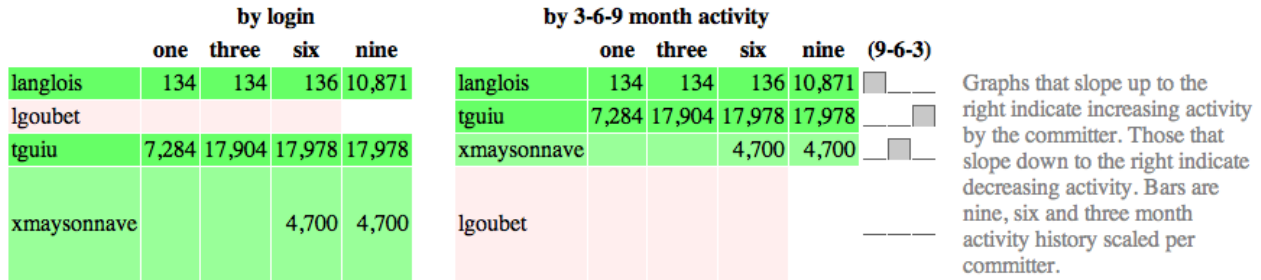
Benoit Langlois, Thales

Xavier Maysonave, Soyatec

Mailing List: <http://dev.eclipse.org/mhonarc/lists/egf-dev/maillist.html>

## Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emft.egf>



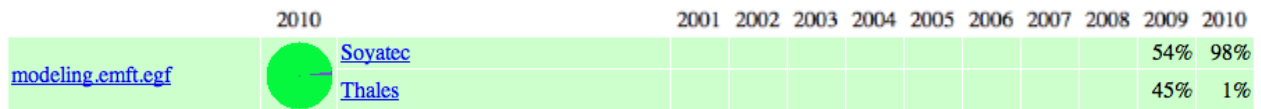
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emft.egf>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
Soyatec	1 (50%)	1 (100%)	2 (66.67%)	50%	9,569 (98.62%)	9,569 (98.62%)	1
Thales	1 (50%)	0 (0%)	1 (33.33%)	100%	134 (1.38%)	134 (1.38%)	1
<b>Total</b>	<b>2</b>	<b>1</b>	<b>3</b>		<b>9,703</b>	<b>9,703</b>	

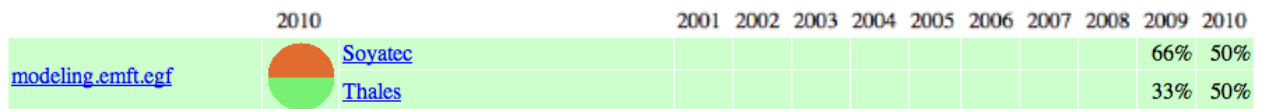
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

N/A

## Adopter Community

Soyatec is the first early adopter, with a PMF-to-XWT generation capability.

## Learning

Documentation: <http://wiki.eclipse.org/EGF>

## Training

N/A

## Support

Forum: <http://www.eclipse.org/forums/eclipse.technology.emft>

Bugs: <https://bugs.eclipse.org/bugs/buglist.cgi?product=EMFT&component=EGF>

## Consulting

N/A

## Customizability

In EGF, customizability covers the ability to define reusable factory component portfolios and patterns. A portfolio can be technical or business. One technical target of EGF is “to patternize” the EMF generation in order to enrich or customize it with more flexibility.

## Extensibility

- EGF is based on the model extension capability. Then, major EGF features can be enriched, such as:
  - *Definition of new activity type.* Factory component and task are the default EGF activities. New activity types, different from generation topics, can be added, e.g. process or testing activity.
  - *Definition of new viewpoint.* A viewpoint is a generation perspective. New viewpoints can be added, such as licensing or feature model.
  - *Definition of new orchestration type.* Generation orchestration is described by a production plan, which is just a sequential list of invoked activities. The target for EGF here is to have a more sophisticated orchestration, such as with BPMN.
- Pattern is a means to apply systematic behavior. A pattern has a pattern nature which determines the language used for implementation. EGF proposed two default natures: JET, for model-to-text transformation, and Java, for common usages. New pattern nature can be added. This implies to develop the associated language engine adapter and to contribute to the existing pattern user interface.

## Scalability

N/A

## Usability

The factory component and task editor is based on the EMF editor, enriched with facilities for the user, such as navigating between activities, guidance for the definition of activity invocation in a production plan, moving an activity from one file to another one, model checking for error diagnostic.

A pattern editor has been developed in order to encapsulate the pattern complexity, such as the pattern structure or for fragmenting pattern implementation in order to provide the ability to customize a pattern (e.g., with pattern inheritance or pattern call).

## Interoperability

N/A

## Dependencies

Eclipse  
EMF EMF (Core)  
M2T JET

**Standards**

None.

# EMFT EMF Feature Model

Eclipse Modeling Framework Technology EMF Feature Model

## Overview

<http://www.eclipse.org/proposals/feature-model/>

During the last years Feature Modeling has become the "standard" for variability management in the field of Software Product Lines. Feature Models are easy to understand and provide a generic way to represent variability information, independent of a specific application domain. Several independent projects using the Eclipse platform / EMF have each defined their own meta model for feature models. Although these meta models have considerable structural differences, their core semantics are similar. A brief description of feature models can be found at [Wikipedia](#) and this [article](#) describes a small feature modeling example. The EMF Feature Model project will define a standard representation of Feature Models inside the Eclipse platform. The intent is to provide a uniform representation for variability information for tools based on the Eclipse Modeling Framework. This will allow easy and consistent access to variability-related information, such as variation points and variant decisions, in DSLs, M2M transformations, and other contexts where variability information is produced or consumed.

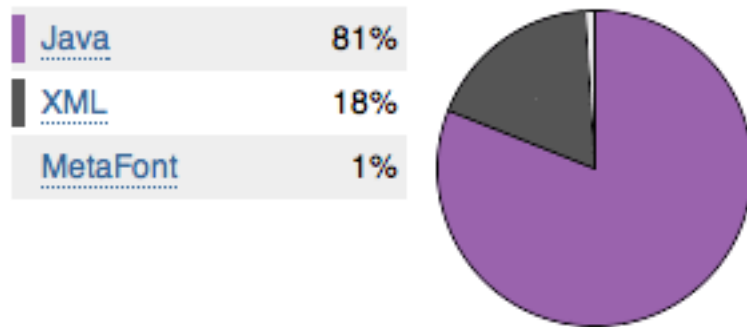
## Licensing

<https://www.ohloh.net/p/emf-feature-model/analyses/latest>

(Eclipse Public License)

## Platforms / Languages

<https://www.ohloh.net/p/emf-feature-model/analyses/latest>



Home Page: N/A

Portal Page:

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.featuremodel](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.featuremodel)

Wiki Page: N/A

## Predictability

Release Train? No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>



**Plan:** N/A  
**New & Noteworthy:** N/A  
**Release Notes:** N/A

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emft.featuremodel>

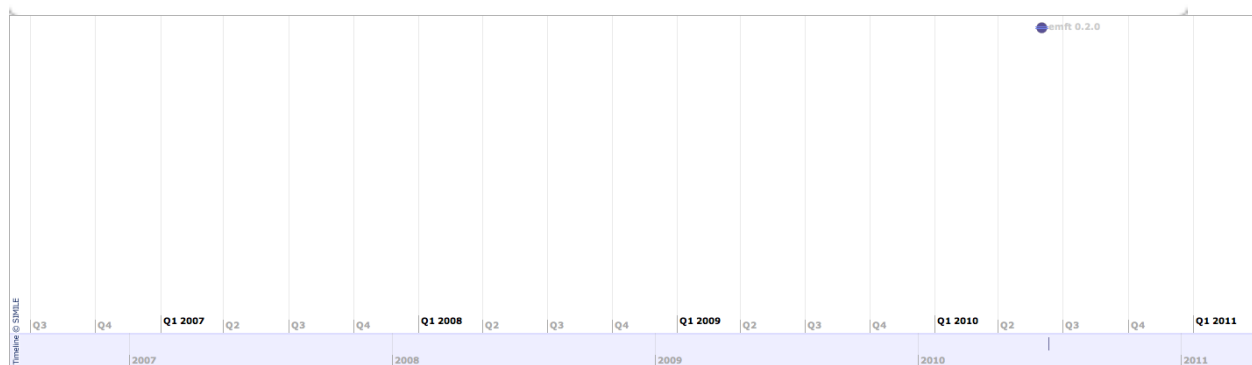


## Releases

No Eclipse update site has been listed.

0.2.0: 2010-07-01 tentative

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.featuremodel](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.featuremodel)

### Lead(s)

Holger Papajewski, individual

### Committers

Andre Maass, individual  
Holger Papajewski, individual  
Andreas Rytina  
Markus Voelter, itemis AG

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/featuremodel-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emft.featuremodel>

**by login**

	one	three	six	nine
amaass	559	559	559	559
arytina				
hpapajewski	14	14	14	14
mvoelter				
*shermann	1	1	1	1

**by 3-6-9 month activity**

	one	three	six	nine	(9-6-3)
amaass	559	559	559	559	_____■
hpapajewski	14	14	14	14	_____■
*shermann	1	1	1	1	_____■
arytina					_____
mvoelter					_____

Graphs that slope up to the right indicate increasing activity by the committer. Those that slope down to the right indicate decreasing activity. Bars are nine, six and three month activity history scaled per committer.

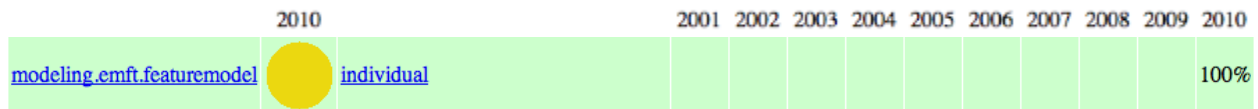
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emft.featuremodel>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
individual	3 (100%)	0 (0%)	3 (100%)	100%	574 (100%)	574 (100%)	1
<b>Total</b>	<b>3</b>	<b>0</b>	<b>3</b>		<b>574</b>	<b>574</b>	

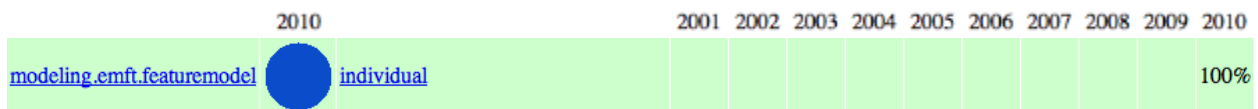
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

N/A

## Adopter Community

N/A

## Learning

Documentation: N/A

## Training

N/A

# Support

**Forum:** <http://www.eclipse.org/forums/eclipse.technology.emft>

**Bugs:** <https://bugs.eclipse.org/bugs/buglist.cgi?product=EMFT.Featuremodel>

## Consulting

N/A

## Customizability

N/A

## Extensibility

N/A

## Scalability

N/A

## Usability

N/A

## Interoperability

N/A

## Dependencies

N/A

## Standards

[MOF Support for Semantic Structures](#)

# EMFT EMF Refactor

Eclipse Modeling Framework Technology EMF Refactor

## Overview

<http://www.eclipse.org/proposals/emf-refactor/>

A basic intention of the proposed component is to provide a framework for developing refactorings for models that are based on EMF. Model refactorings can be seen as endogenous model transformations preserving the semantics of a model yet improving the internal structure. The idea is to provide an easy to use generator which relies on model transformations to build model refactorings. So in the proposed framework the development of individual model refactorings will be based on model transformations, whereas the specifications of these model refactorings should be done by means of several different model transformation approaches. This will lead to a framework which will be extensible in two ways: on the one hand it should be possible to develop new EMF model refactorings which will, on the other hand, be specified and executed by exchangeable model transformation engines.

## Licensing

N/A

## Platforms / Languages

N/A

**Home Page:** N/A

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.refactor](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.refactor)

**Wiki Page:** N/A

## Predictability

**Release Train?** No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** N/A

**New & Noteworthy:** N/A

**Release Notes:** N/A

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emft.refactor>

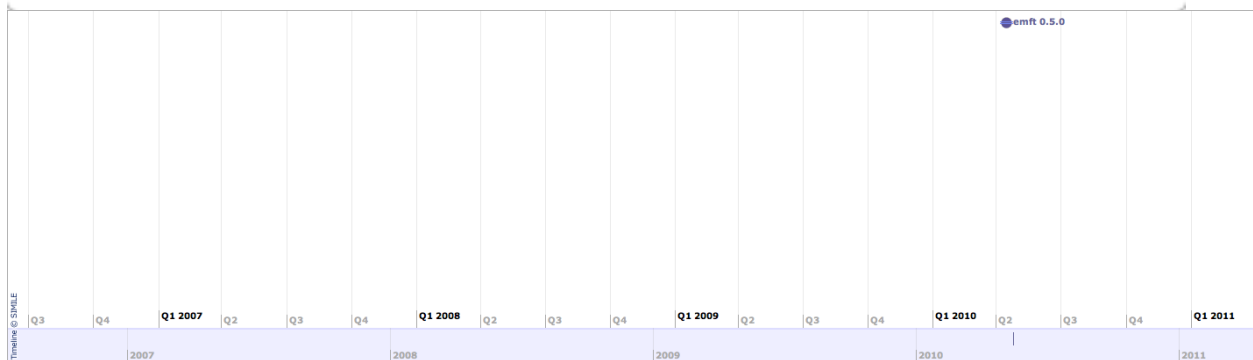


## Releases

No Eclipse update site has been listed.

**0.5.0:** 2010-05-15 planned

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.refactor](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.refactor)

### Lead(s)

Thorsten Arendt

### Committers

Thorsten Arendt

Florian Mantz

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/emfrefactor-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emft.refactor>

N/A

### Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emft.refactor>

N/A

### Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>

2010

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

N/A

## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>

2010

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

N/A

## User Community

N/A

## Adopter Community

N/A

## Learning

Documentation: N/A

## Training

N/A

## Support

Forum: <http://www.eclipse.org/forums/eclipse.technology.emft>

Bugs: <https://bugs.eclipse.org/bugs/buglist.cgi?product=EMFT.Refactor>

## Consulting

N/A

## Customizability

N/A

## Extensibility

N/A

## Scalability

N/A

## Usability

N/A

## Interoperability

N/A

**Dependencies**

N/A

**Standards**

None.

# EMFT Henshin

Eclipse Modeling Framework Technology Henshin

## Overview

<http://www.eclipse.org/modeling/emft/henshin/>

Henshin is an in-place model transformation language for the [Eclipse Modeling Framework \(EMF\)](#). It supports direct transformations of EMF model instances (endogenous transformations), as well as generating instances of a target language from given instances of a source language (exogenous transformations).

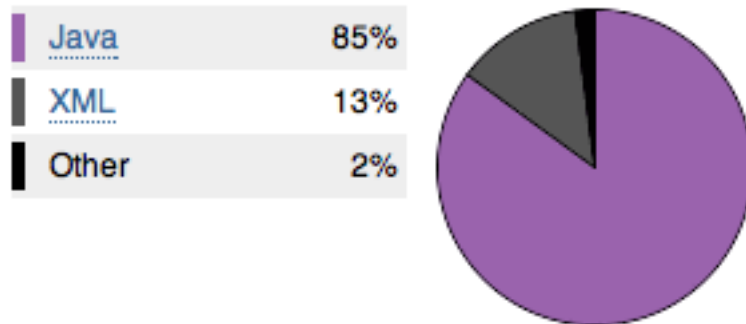
## Licensing

<https://www.ohloh.net/p/emf-henshin/analyses/latest>

(Eclipse Public License)

## Platforms / Languages

<https://www.ohloh.net/p/emf-henshin/analyses/latest>



**Home Page:** <http://www.eclipse.org/modeling/emft/henshin/>

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.henshin](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.henshin)

**Wiki Page:** <http://wiki.eclipse.org/Henshin>

## Predictability

**Release Train?** No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** N/A

**New & Noteworthy:** N/A

**Release Notes:** N/A

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emft.henshin>

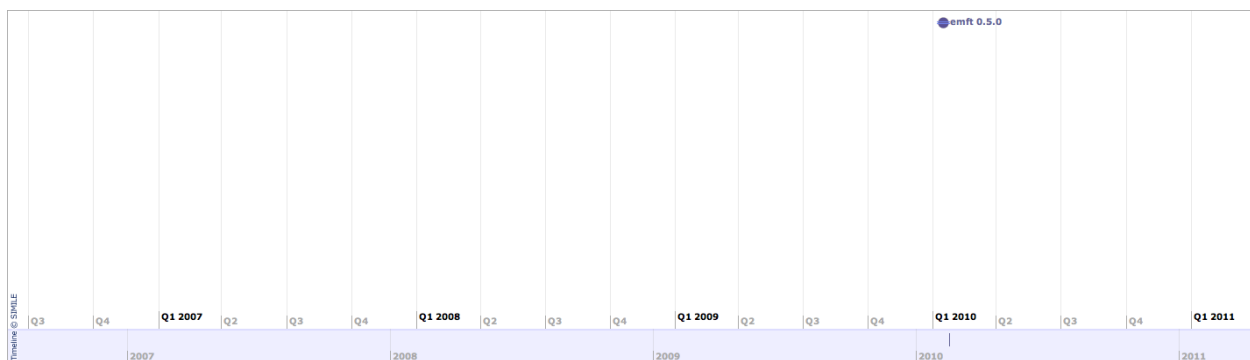


## Releases

No Eclipse update site has been listed.

0.5.0: 2010-02-15 planned

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.henshin](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.henshin)

### Lead(s)

Christian Krause, CWI

### Committers

Enrico Biermann, individual

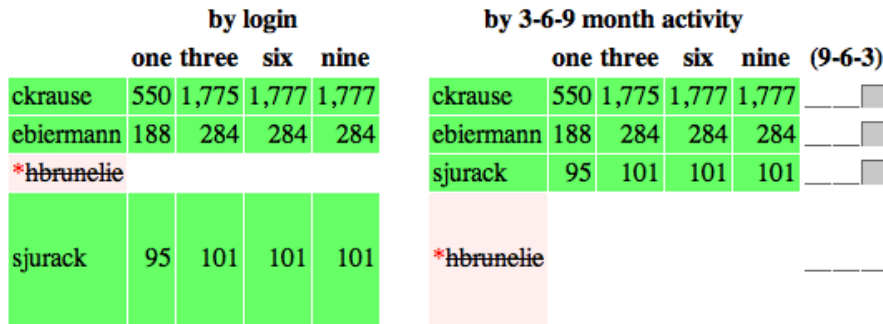
Stefan Jurack, individual

Christian Krause, CWI

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/henshin-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emft.henshin>



Graphs that slope up to the right indicate increasing activity by the committer. Those that slope down to the right indicate decreasing activity. Bars are nine, six and three month activity history scaled per committer.

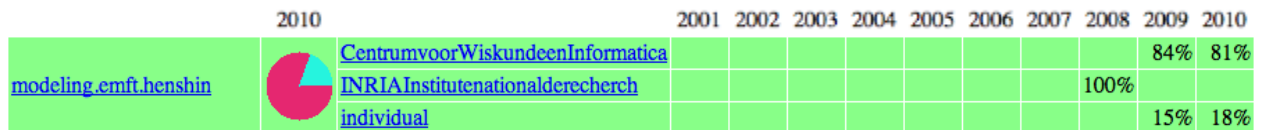
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emft.henshin>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
CentrumvoorWiskundeenInformatica	1 (33.33%)	0 (0%)	1 (25%)	100%	1,253 (81.26%)	1,253 (81.26%)	1
individual	2 (66.67%)	0 (0%)	2 (50%)	100%	289 (18.74%)	289 (18.74%)	1
<b>Total</b>	<b>3</b>	<b>1</b>	<b>4</b>		<b>1,542</b>	<b>1,542</b>	

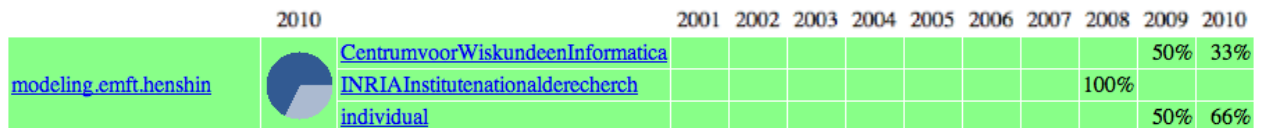
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

N/A

## Adopter Community

N/A

## Learning

Documentation: <http://wiki.eclipse.org/Henshin>

## Training

N/A

# Support

**Forum:** <http://www.eclipse.org/forums/eclipse.technology.emft>

**Bugs:** <https://bugs.eclipse.org/bugs/buglist.cgi?product=EMFT.Henshin>

## Consulting

N/A

## Customizability

N/A

## Extensibility

N/A

## Scalability

N/A

## Usability

N/A

## Interoperability

N/A

## Dependencies

N/A

## Standards

None.

# EMFT JCRM

Eclipse Modeling Framework Technology Java Content Repository Management

## Overview

<http://www.eclipse.org/modeling/emft/?project=jcrm>

With JCR Management (JCRM) you can back EMF with [JCR](#) implementations. This way you can combine the strength of the Eclipse modeling projects with the scalability, features and exchangeability of the JCR repositories.

Currently the project is in a prototyping phase and has completed about 85% of the planned prototypes before starting to work on promoting it.

## Licensing

<https://www.ohloh.net/p/jcrm/analyses/latest>

Eclipse Public License

66 files

## Platforms / Languages

<https://www.ohloh.net/p/jcrm/analyses/latest>

Java	63%
HTML	28%
Other	9%



**Home Page:** <http://www.eclipse.org/modeling/emft/?project=jcrm>

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.jcrm](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.jcrm)

**Wiki Page:** [http://wiki.eclipse.org/index.php/JCR\\_Management](http://wiki.eclipse.org/index.php/JCR_Management)

## Predictability

The first milestone is focused on finishing the repository plug-in framework prototype. That will be finished in a few months, at the latest. After that, the project lead will gather feedback on that milestone and align the roadmap with it. Depending on user demand and user feedback JCRM will start to create formal releases for its first milestone.

The second milestone is to create a prototype that generates JCR backend domain entities that are as simple and independent from frameworks as possible at runtime.

**Release Train?** No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>  
[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)  
<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.emft.jcrm>

**New & Noteworthy:** N/A

**Release Notes:** N/A

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emft.jcrm>

N/A

## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.jcrm](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.jcrm)

There are have been contributions to the project, but there is only one committer right now.

The documentation in the wiki makes the functionality and inner workings of JCRM as transparent as currently possible. Any feedback showing a lack of transparency is intended to lead to improvements of the JCRM wiki pages.

JCRM is mainly developed in spare time and vacation days. The activity is currently not transparent as the development happens in the private sandbox and not in CVS. After the completion of the first milestone, CVS branches will be used to change that.

### Lead(s)

Sandro Boehme, individual

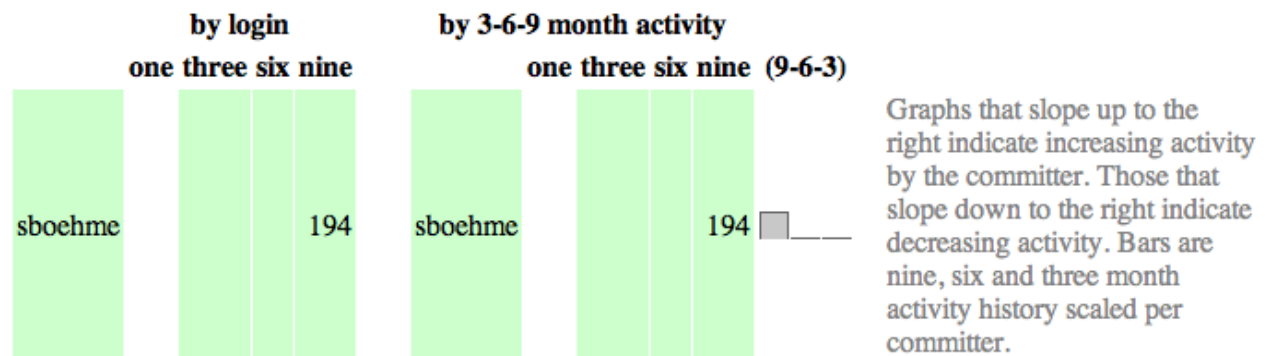
### Committers

Sandro Boehme, individual

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/emft-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emft.jcrm>



Currently the project lead is working on a larger repository plug-in framework prototype for JCRM in a private local sandbox. As soon as all use cases are working it will be checked in and documented on the wiki. Subsequent incompatible changes will not happen in the sandbox but will be branched out in CVS instead.

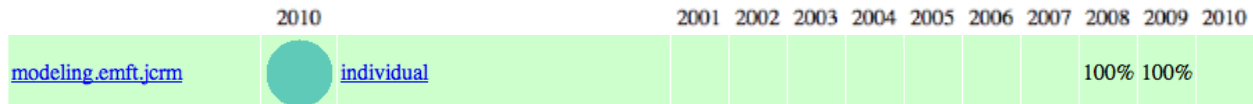
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emft.jcrm>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
Total	0	1	1		0	0	

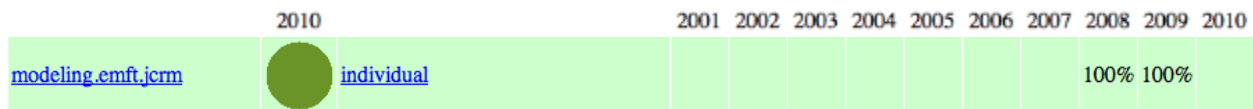
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

Currently the JCRM user community consists of people interested in the concept of JCRM and evaluating the project. But there is no further active community. JCRM is not working on building community right now other than setting value on transparency for the working functionality. This is archived with the documentation in the wiki. It shows an overview of the project as well as background information about the prototypes and tutorials for the use cases.

As soon as the repository plug-in framework prototype is available in the CVS and described in the Wiki it will be made public and described in blog entries within the JCRM blog at [www.planeteclipse.org](http://www.planeteclipse.org). It is expected that this will attract attention. The project lead plans to use these blog entries to gather feedback from an audience larger than the audience of people reading the wiki page and to align this feedback with the roadmap of JCRM.

The second milestone is to enhance the framework prototype to generate entities that are as simple as possible. Following that, the project lead will start to gather feedback from repository communities like Apache Jackrabbit.

Every user question asked so far (privately or in public) has been answered.

## Adopter Community

Currently there is no adopter community. The project lead is working on a repository plug-in framework prototype that enables JCR implementation vendors to create a JCRM connector for their product enabling adopter communities.

## Learning

**Documentation:** [http://wiki.eclipse.org/index.php/JCR\\_Management](http://wiki.eclipse.org/index.php/JCR_Management)

## Training

As there is no active user community there is no need for training right now.

## Support

JCRM has already been supported via the forum, private email, private telephone and screen sharing sessions. The preferred support channel is the forum, but support via telephone or screen sharing is also welcome if needed.

**Forum:** <http://www.eclipse.org/forums/eclipse.technology.emft>

**Bugs:** <https://bugs.eclipse.org/bugs/buglist.cgi?product=EMFT&component=JCR%20Management>

## Consulting

The project lead would be happy to work with customers, e.g., on JCRM evaluation issues or general JCR related work during professional working hours at inovex GmbH (<http://www.inovex.de/>).

## Customizability

JCRM will provide a repository plug-in framework prototype within the next few months. It also utilizes the EMF EStore and resource framework to back EMF objects with JCR content. This leaves much room for extending and customizing the UI and the framework.

Details can be found in the documentation at [http://wiki.eclipse.org/index.php/JCR\\_Management](http://wiki.eclipse.org/index.php/JCR_Management).

## Extensibility

See above.

## Scalability

JCRM is designed to scale with the size of Java Content Repositories. A prototype has shown that it is possible to create about 1.5 million EMF objects backed with JCR nodes at once. Java Content Repositories already provide multi user capabilities and address concurrency issues. It's the goal of Eclipse JCRM to scale with those JCR features.

## Usability

JCRM sees simplicity and usability as a key value right from the start. The steps needed to configure the environment already have been simplified and the repository plug-in prototype will further simplify it, making it easier to use.

## Interoperability

Right now JCRM needs to connect to a JCR implementation via RMI running on a server. The planned repository plug-in framework prototype will enhance this to allow writing more diverse connectors, e.g., to support other protocols.

## Dependencies

An important goal JCRM follows is to be independent of JCR implementations. JCRM has strong runtime dependencies to EMF and development time dependencies to EMFT MWE, EMFT Ecore Tools, and TMF Xtext.

The second milestone will be to generate domain entities that are as simple and independent from other frameworks as possible.

## **Standards**

[Content Repository for Java](#)



# EMFT MTF

Eclipse Modeling Framework Technology Modeling Team Framework

## Overview

<http://www.eclipse.org/proposals/mtf/>

The Modeling Team Framework will provide a mechanism like a meta repository on top of three repository types. It could be the base for software configuration management of Eclipse projects which uses the Eclipse Modeling Framework (EMF). The Modeling Team Framework will track the mapping between metamodel versions and editor plugins, and will automatically provide P2-based update sites.

## Licensing

(Eclipse Public License)

## Platforms / Languages

(Java)

**Home Page:** <http://www.eclipse.org/modeling/emft/mtf/>

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.mtf](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.mtf)

**Wiki Page:** <http://wiki.eclipse.org/MTF>

## Predictability

**Release Train?** No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** N/A

**New & Noteworthy:** N/A

**Release Notes:** N/A

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emft.mtf>

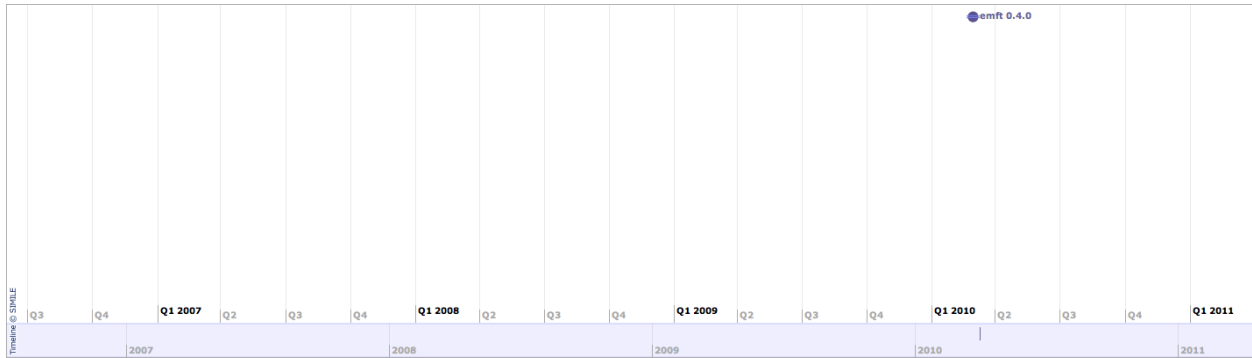


## Releases

No Eclipse update site has been listed.

**0.4.0:** 2010-03-31 planned

Here is the [Project Release Timeline](#).



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.mtf](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.mtf)

### Lead(s)

Steffen Stundzig, itemis AG

### Committers

Steffen Dienst  
 Sven Krause  
 Steffen Stundzig, itemis AG  
 Michael Willig  
 Robert Wloch

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/mtf-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emft.mtf>

N/A

### Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emft.mtf>

N/A

### Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>

2010 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

N/A

### Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>

2010 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

N/A

## User Community

The user community has to be built and moved from the flowr community, if the initial contribution is ready.

## Adopter Community

The project is currently in validation phase, the community must also be built inside the Modeling project scope. Adopters could be the other interested parties in the proposal, e.g., the following companies Oracle Consulting, Atos Origin, Polarion or Sopera.

## Learning

**Documentation:** N/A

### Training

<http://www.itemis.com/itemis-ag/language=en/2642/education-and-coaching>

## Support

**Forum:** <http://www.eclipse.org/forums/eclipse.technology.emft>

**Bugs:** <https://bugs.eclipse.org/bugs/buglist.cgi?product=EMFT.MTF>

### Consulting

<http://www.itemis.com/itemis-ag/language=en/2621/portfolio>

## Customizability

See below.

## Extensibility

MTF could be extended with other underlying SCM solutions, for which MTF works only as a delegate.

## Scalability

N/A

## Usability

Intuitive Team-API Implementation like other SCM solutions, e.g., Subversive, EGit, or CVS.

## Interoperability

All modeling projects (textual or graphical) could be managed and stored with MTF.

## Dependencies

Eclipse  
EMF CDO  
EMF EMF (Core)

## Standards

None.

# EMFT MXF

Eclipse Modeling Framework Technology Model Execution Framework

## Overview

<http://www.eclipse.org/proposals/mxf/>

The MXF will build extensible frameworks and exemplary tools for executable models, e.g. an editor to define metamodels and runtime models and their behavior in terms of an action language. An interpreter and debugger will support the execution and testing of these models as well as recording of simulation runs for further analysis. The language for operational semantics might have a graphical and textual syntax and shall integrate other languages by means of black-box operations, library implementations, and so on. The common execution infrastructure will define common concepts on top of the Eclipse debugging framework and will enable applications to share runtime models, adapters for specific editors and debuggers, tracing capabilities, and more. MXF will provide integration with GMF for building DSL simulators that are seamlessly integrated into a generated editor.

## Licensing

(Eclipse Public License)

## Platforms / Languages

(Java)

**Home Page:** N/A

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.mxf](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.mxf)

**Wiki Page:** [http://wiki.eclipse.org/Model\\_Execution\\_Framework\\_%28MXF%29](http://wiki.eclipse.org/Model_Execution_Framework_%28MXF%29)

## Predictability

**Release Train?** No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** N/A

**New & Noteworthy:** N/A

**Release Notes:** N/A

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emft.mxf>

N/A

## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.mxf](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.mxf)

## Lead(s)

Michael Soden

## Committers

Hajo Eichler

Markus Scheidgen  
Michael Soden

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/mxf-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emft.mxf>

N/A

### Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emft.mxf>

N/A

### Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>

2010 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

N/A

### Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>

2010 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

N/A

## User Community

The project is currently migrating from sourceforge to Eclipse (see <http://sourceforge.net/projects/m3actions/>). Known users of this predecessor project include only academic institutions, namely the Humboldt University Berlin and the Telematica Institute Enschede. The revised source code is not yet contributed, thus there is no real user community yet.

## Adopter Community

Since the project did not submit any code yet, there is no adopter community. However, there is still interest from academic institutions and commercial companies (cp. list of interested parties at <http://www.eclipse.org/proposals/mxf/>).

## Learning

**Documentation:** N/A

### Training

N/A

# Support

Forum: <http://www.eclipse.org/forums/eclipse.technology.emft>

Bugs: N/A

## Consulting

N/A

## Customizability

N/A

## Extensibility

N/A

## Scalability

N/A

## Usability

N/A

## Interoperability

The project is intended to fit seamlessly into the existing and well established Eclipse Modeling projects (EMF, GMF/GEF, OCL). No other interoperability discussions or considerations have taken place.

## Dependencies

N/A

## Standards

None.

# EMFT Texo

Eclipse Modeling Framework Technology Texo

## Overview

<http://wiki.eclipse.org/Texo>

The goal of the Texo project is to provide model and template driven development technology for web application development projects. Texo will be based on and use components currently present in the [Eclipse Modeling Framework \(EMF\)](#) and [Eclipse Modeling Framework Technology \(EMFT\)](#) projects.

## Licensing

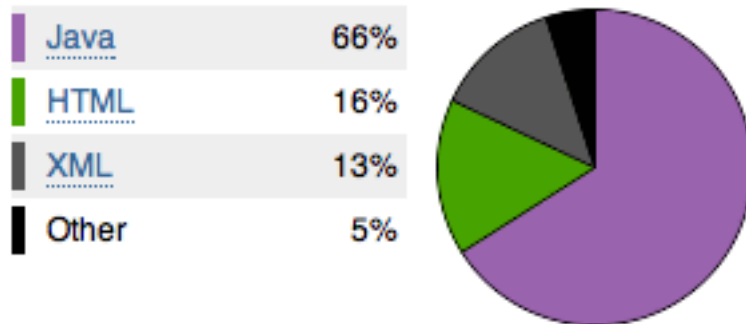
<https://www.ohloh.net/p/texo/analyses/latest>

Eclipse Public License

88 files

## Platforms / Languages

<https://www.ohloh.net/p/texo/analyses/latest>



**Home Page:** <http://www.eclipse.org/modeling/emft/texo/>

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.texo](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.texo)

**Wiki Page:** <http://wiki.eclipse.org/Texo>

## Predictability

**Release Train?** No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.emft.texo>

**New & Noteworthy:** N/A


**Release Notes:** N/A

## Release Timeline

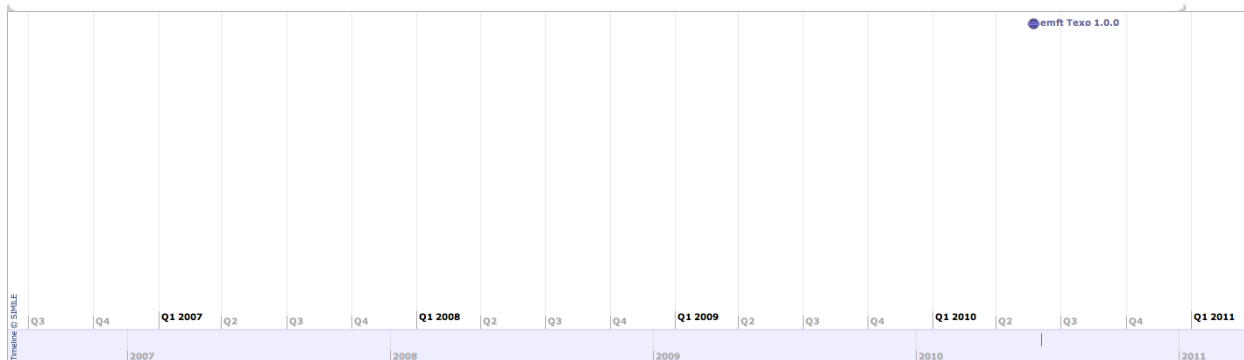
<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.emft.texo>

# Releases

The Eclipse update site for this project is  
<https://build.eclipse.org/hudson/job/emft-texo-nightly/lastSuccessfulBuild/artifact/build/result/p2site/>.

Texo 1.0.0: 2010-06-23 planned 

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.emft.texo](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.emft.texo)

### Lead(s)

Martin Taal, individual

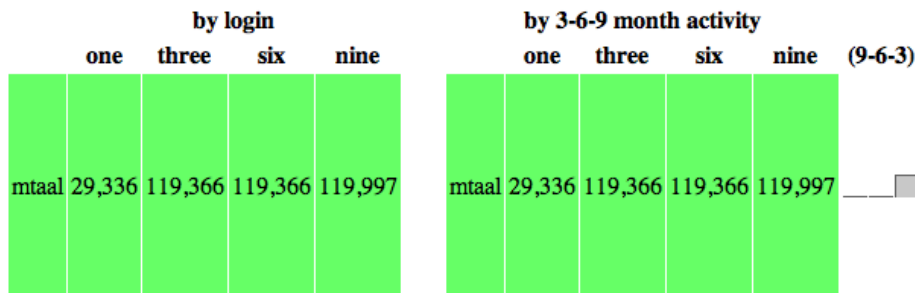
### Committers

Martin Taal, individual

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/emft-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.emft.texo>



Graphs that slope up to the right indicate increasing activity by the committer. Those that slope down to the right indicate decreasing activity. Bars are nine, six and three month activity history scaled per committer.



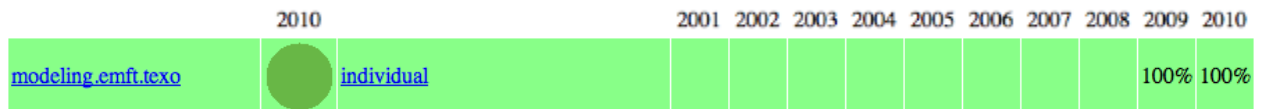
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.emft.texo>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
individual	1 (100%)	0 (0%)	1 (100%)	100%	2,292 (100%)	119,332 (100%)	52
<b>Total</b>	<b>1</b>	<b>0</b>	<b>1</b>		<b>2,292</b>	<b>119,332</b>	

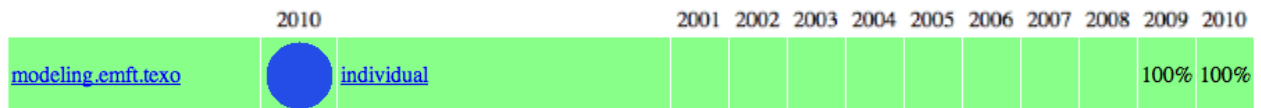
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

N/A

## Adopter Community

N/A

## Learning

Documentation: <http://wiki.eclipse.org/Texo>

### Training

<http://www.springsite.com>

## Support

Forum: <http://www.eclipse.org/forums/eclipse.technology.emft>

Bugs: <https://bugs.eclipse.org/bugs/buglist.cgi?product=EMFT&component=Texo>

### Consulting

<http://www.springsite.com>

## Customizability

Texo will support customizability in the following ways:

- Texo uses annotations on the model to drive software artifact generation. A developer can override this behavior by providing manual annotations in the model. In the artifact generation process, Texo will generate annotations while preserving manual annotations. The fully annotated model then drives code and artifact generation.
- Texo will make it possible to override templates used by the artifact generation by templates present in the development project itself.

## Extensibility

Texo will facilitate adding other annotation models/sets to the overall code generation. This makes it possible and also easy to generate additional annotations in the generated Java code.

Texo will make it possible to add generation of other code artifacts through extension points. The custom artifact generation has access to the same fully annotated models as Texo code artifact generation.

## Scalability

Texo has two parts: a development component used to generate software artifacts and a runtime component providing access to the model at runtime and providing XML/XMI/JSON de-serialization.

The development component are part of the Eclipse IDE and can be used by small and large teams. There is no expected limitation on the size of the models which can be handled by the development component.

The Texo generated code is standard Java code so there is no specific Texo scalability characteristic here.

The Texo runtime components have modest system resource demands, there is some relation between the size of the model and the system requirement but overall memory requirements are modest and not more than standard EMF core.

## Usability

Texo works from any Ecore/XSD model directly without manual changes to the model. The artifact generation is done by selecting models in the IDE and generating code directly from those models.

A developer who wants to dive deeper and control the code generation can do so by providing manual annotations in the model itself.

Texo is documented through a growing wiki (<http://wiki.eclipse.org/Texo>) providing detailed information on supported concepts and API's.

## Interoperability

It is a central goal of Texo to generate code artifacts which are not more (and not less) than standard Java pojo code. This facilitates usage of generated artifacts in other (web) frameworks.

Texo will make it possible to generate Java annotations which are important for integration or usage with other frameworks (JPA, Hibernate Search/Lucene, etc.)

The code generation works from Ecore or XSD models (i.e., de-facto Eclipse/industry standards).

## Dependencies

EMF EMF (Core)

## **Standards**

[Enterprise Java Beans \(EJB\) 3.0 Java Persistence API \(JPA\)](#)

[Meta Object Facility \(MOF\)](#)

[XML Metadata Interchange \(XMI\)](#)

[XML Schema Definition \(XSD\)](#)

# GMP GMF

Graphical Modeling Project Graphical Modeling Framework

## Overview

<http://www.eclipse.org/modeling/gmf/>

The Eclipse Graphical Modeling Framework (GMF) provides a generative component and runtime infrastructure for developing graphical editors based on [EMF](#) and [GEF](#). The project aims to provide these components, in addition to exemplary tools for select domain models which illustrate its capabilities.

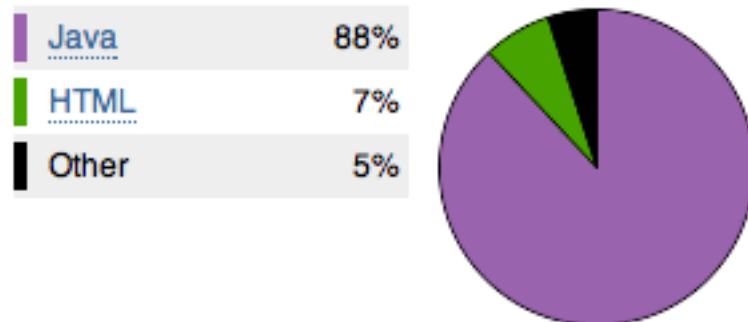
## Licensing

<http://www.ohloh.net/p/5020/analyses/latest>

<a href="#">Eclipse Public License</a>	5374 files
<a href="#">Common Public License 1.0</a>	2 files

## Platforms / Languages

<http://www.ohloh.net/p/5020/analyses/latest>



**Home Page:** <http://www.eclipse.org/modeling/gmf/>

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.gmf](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.gmf)

**Wiki Page:** [http://wiki.eclipse.org/Graphical\\_Modeling\\_Framework](http://wiki.eclipse.org/Graphical_Modeling_Framework)

## Predictability

**Release Train?** Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.gmf>

**New & Noteworthy:** [http://wiki.eclipse.org/GMF\\_2.3\\_New\\_and\\_Noteworthy](http://wiki.eclipse.org/GMF_2.3_New_and_Noteworthy)

**Release Notes:** <http://www.eclipse.org/modeling/gmf/news/relnotes.php?project=&version=HEAD>

## Release Timeline



<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.gmf>



## Releases



The Eclipse update site for this project is



<http://download.eclipse.org/modeling/gmf/update-site/releases/site.xml>.

**2.3.0:** 2010-06-23 planned  

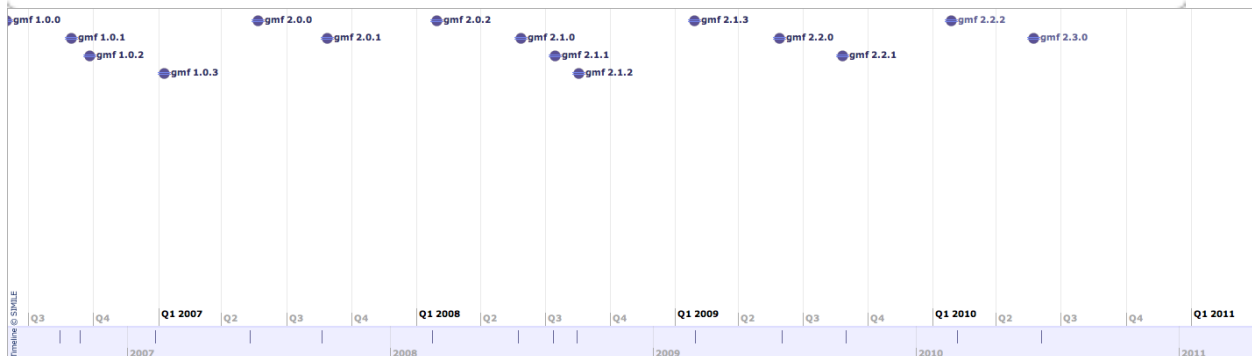
**2.2.2:** 2010-02-26 planned

**2.2.1:** 2009-09-25 completed

**2.2.0:** 2009-06-28 completed  

**2.1.3:** 2009-02-28 completed  

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.gmf](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.gmf)

### Lead(s)

Artem Tikhomirov, individual

### Committers

Boris Blajer (Golubev), Borland Software

Nick Boldt, Red Hat Inc.

Alex Boyko, IBM

James Bruck, IBM

Mariot Chauvin, Obeo

Linda Damus, IBM

Radomil Dvorak, Borland Software

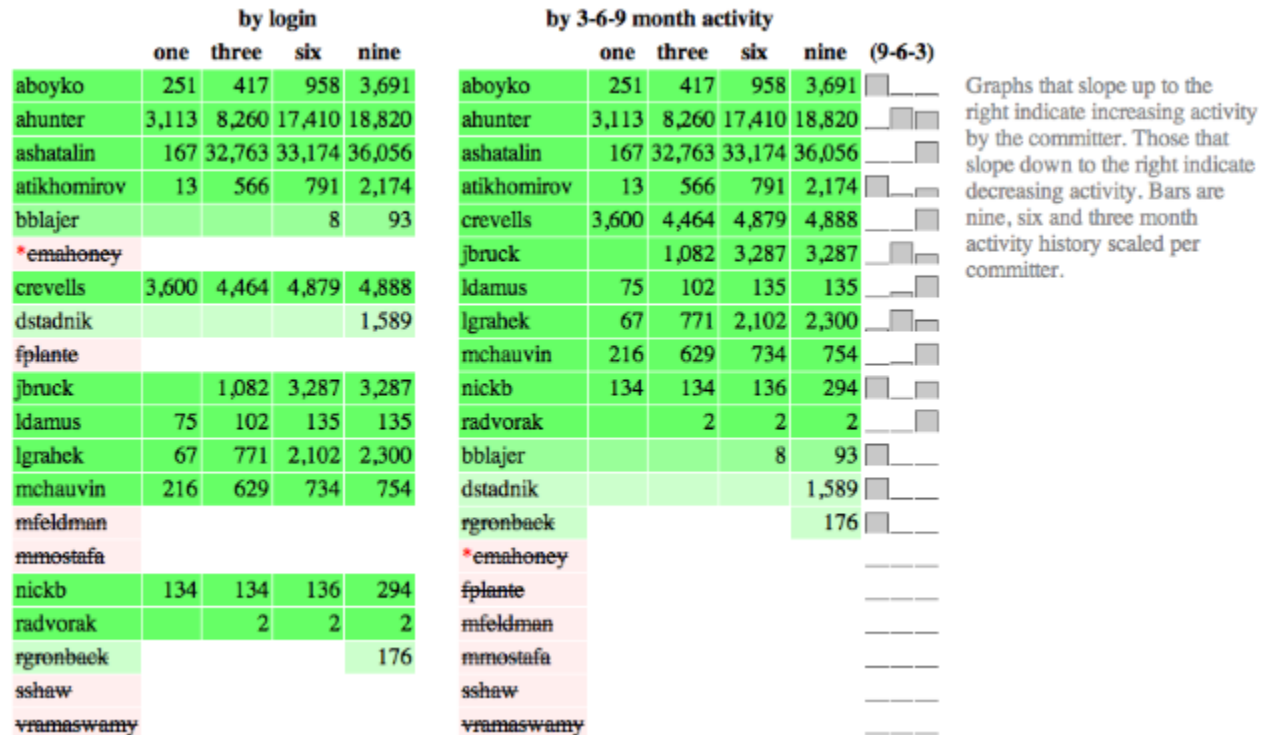
Lidija Grahek, IBM

Anthony Hunter, IBM  
 Cheri Revells, IBM  
 Alexander Shatalin, individual  
 Dmitry Stadnik, Borland Software  
 Artem Tikhomirov, individual

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/gmf-dev/maillist.html>

## Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.gmf>



## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.gmf>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
IBM	5 (55.56%)	3 (27.27%)	8 (40%)	62.5%	110 (61.45%)	7,106 (93.06%)	65
individual	2 (22.22%)	4 (36.36%)	6 (30%)	33.33%	23 (12.85%)	180 (2.36%)	8
OBE0	1 (11.11%)	0 (0%)	1 (5%)	100%	19 (10.61%)	216 (2.83%)	11
RedHatInc.	1 (11.11%)	0 (0%)	1 (5%)	100%	27 (15.08%)	134 (1.75%)	5
<b>Total</b>	<b>9</b>	<b>11</b>	<b>20</b>		<b>179</b>	<b>7,636</b>	

## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>

2010

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
modeling_gmf	BorlandSoftwareCorp.	9%	24%	34%	6%	2%					
	IBM	43%	19%	20%	17%	22%	93%				
	OBEQ									1%	2%
	RedHatInc.								1%	1%	1%
	individual	43%	52%	45%	75%	73%	2%				
	unknown	2%	3%								

## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
modeling_gmf	BorlandSoftwareCorp.	9%	20%	25%	25%	21%					
	IBM	36%	33%	41%	33%	42%	55%				
	OBEQ					7%	11%				
	RedHatInc.					8%	7%	11%			
	individual	45%	40%	33%	33%	21%	22%				
	unknown	9%	6%								

## User Community

Users are moderately active in submitting bugs, and rarely take part in resolving them by submitting patches (although this can be justified by complexity of the project sources, installation and testing procedures). Bugs come in a rate about 20+ a month, quite a lot of them are submitted either by developers themselves (sometimes based on description from the newsgroup/forum) or respective testing teams from sponsoring companies.

Judging by the newsgroup/forum posts in, a lot of users trying to utilize GMF are modeling/diagramming novices, with an intention to build a UML-like complex diagram right away. Of course, complexity of the diagramming domain and the GMF project often becomes an obstacle hard to overcome.

## Downloads (Jul 1, 2008 - Mar 1, 2010)



## Adopter Community

The nature of project doesn't allow reasonable use of the project deliverables without further extension/customization, hence user community in a certain sense is also adopter one.

Few commercial companies utilize the GMF project in their products, further extending it (primary contributors, Borland and IBM do). I believe runtime part of the GMF project is actively extended by users of IBM products but I don't possess any specific data.

List of IBM products that have adopted UML2:

- ⌚ IBM Data Studio 1.1
- ⌚ WebSphere Classic Federation Server for z/OS v9.5
- ⌚ WebSphere Classic Replication Server for z/OS v9.5
- ⌚ Optim Data Privacy Solution 1.2
- ⌚ Rational Application Developer for Websphere Software 7.0.0.8
- ⌚ Rational Software Architect
- ⌚ Rational Method Composer 7.2

- ① IBM Rational Developer for System z 7.5
- ① Rational Software Modeler 7.5
- ① Rational Data Architect 7.5
- ① Rational Application Developer for WebSphere Software 7.5.1
- ① Rational Software Architect for WebSphere Software 7.5.1
- ① IBM InfoSphere Warehouse for DB2 for z/OS 9.5.2
- ① Warehouse Tooling 2.2
- ① IBM InfoSphere Classic Federation Server for z/OS V10.1
- ① Rational Software Architect Standard Edition 7.5.2
- ① InfoSphere Data Architect 7.5.2.1
- ① WebSphere Service Registry and Repository v6.3
- ① IBM Rational Developer for System z 7.6
- ① InfoSphere Data Architect 7.5.2
- ① Rational Software Architect Standard Edition 7.5.3
- ① Rational Software Architect RealTime Edition 7.5.3
- ① Cognos Diagnostic Tools 1
- ① Rational EGL Community Edition 1.0
- ① Rational Software Architect for WebSphere Software 7.5.4
- ① IBM Data Discovery and Query Builder 3.2
- ① Resources Dependencies Analyzer 2.x.x

## Learning

**Documentation:** [http://wiki.eclipse.org/GMF\\_Documentation](http://wiki.eclipse.org/GMF_Documentation)

### Training

[http://www.opcoach.com/en/Training\\_Courses.html](http://www.opcoach.com/en/Training_Courses.html)  
<http://www.tclsoftware.com.br/>  
<http://www.itemis.com/itemis-ag/language=en/2642/education-and-coaching>  
<http://www.jeffreyricker.com/training.html>  
<http://www.obeo.fr/pages/training/en>  
<http://www.eclipse-training.net/>  
<http://www.inferdata.com/training/eclipse.html>  
<http://eclipsegang.com/>  
<http://www.ancitconsulting.com/elearning.htm>  
<http://www.eclipseuniversity.org/>  
<http://www.sierrawireless.com/productsandservices/AirVantage.aspx>  
<http://www.industrial-tsi.com/index.php?id=139>

## Support

**Forum:** <http://www.eclipse.org/forums/eclipse.modeling.gmf>  
**Bugs:** <https://bugs.eclipse.org/bugs/buglist.cgi?product=GMF>

### Consulting

<http://www.opcoach.com/en/Consulting.html>  
<http://www.tclsoftware.com.br/>  
<http://www.itemis.com/itemis-ag/language=en/2621/portfolio>  
<http://www.jeffreyricker.com/consulting.html>  
<http://www.obeo.fr/pages/mda-and-productivity/en>  
<http://www.inferdata.com/consult/index.html>  
<http://eclipsegang.com/>  
<http://www.ancitconsulting.com/project.htm>  
<http://www.eclipseuniversity.org/services/eclipse.htm>



<http://www.sierrawireless.com/productsandservices/AirVantage.aspx>  
<http://www.industrial-tsi.com/index.php?id=139>

## Customizability

The customizability of the GMF runtime is described in detail in the SDK documentation at <http://help.eclipse.org/galileo/topic/org.eclipse.gmf.doc/prog-guide/runtime/index.html>.

Tools provided by the GMF project are quite elementary and are not capable to support great variety of user intentions. For example, experience suggests that quite a lot of diagrams users try to create are similar to UML class diagrams, and hence this use-case is handled much better than e.g. Interaction-kind diagrams. Creation of any diagram editor requires decent knowledge of the GEF framework and Java programming skills to produce a reasonable product that uses GMF facilities.

## Extensibility

Extensibility of the GMF runtime is described in the Programmer's Guide at <http://help.eclipse.org/galileo/topic/org.eclipse.gmf.doc/prog-guide/runtime/Developer%20Guide%20to%20Diagram%20Runtime.html>.

The project, and its Tooling part in particular, promotes Model-Driven Software Development (MDS) approach, giving educated user a high degree of control over the development process. Provided tools, if not suitable for the task at hand, may serve as a starting point to build tailored toolkit – e.g., augmented models and custom templates allow clients to patch open(uncovered) areas or to override any aspect of the final diagram editor.

Adopters of the GMF project are not however forced to use provided tools altogether, old-fashioned handcoding techniques are always an option.

Runtime aspect heavily relies on the underlying GEF framework, adding regular Eclipse extension mechanism (extension points) and a lot of reusable components most of GEF users can benefit from. That is, as long as user intentions do not conflict with the GEF's approach to diagramming, GMF is quite flexible to accommodate to almost any desire.

## Scalability

The primary scalability issue (as for almost any other modeling product) is scalability of models, and this holds true both for execution and design time of a diagram editor.

GMF Runtime is known to be used in a great variety of applications, and the team pays a lot of attention to performance and scalability issues. The GMF Runtime does not address the scalability of the files its generated, this is handled by EMF. The scalability of GMF graphical diagrams are limited only by what the GEF feature set provides.

## Usability

The GMF project allows the creation of graphical diagrams with significant out of the box diagramming capabilities.

GMF based diagrams are fully keyboard accessible  
<http://help.eclipse.org/galileo/topic/org.eclipse.gmf.doc/prog-guide/runtime/Developer%20Guide%20to%20Keyboard%20Accessibility.html>.

## Interoperability

GMF relies on EMF, de-facto standard in the Modeling world.

## **Dependencies**

<http://www.eclipse.org/modeling/gmf/downloads/>

Eclipse  
EMF EMF (Core)  
EMF Query  
EMF Transaction  
EMF Validation  
GEF  
MDT OCL  
MDT UML2  
Orbit  
M2M QVT-o

## **Standards**

[Diagram Definition](#)

# GMT Epsilon

Generative Modeling Technologies Epsilon

## Overview

<http://www.eclipse.org/gmt/epsilon/>

Epsilon provides a family of metamodel-agnostic languages for creating, querying and modifying EMF ([and other types of](#)) models in various ways. At the core of Epsilon is the [Epsilon Object Language \(EOL\)](#), an imperative model-oriented language that combines the procedural style of Javascript with the powerful model querying capabilities of OCL. Epsilon also provides several task-specific languages, which use EOL as an expression language. Each task-specific language provides constructs and syntax that are tailored to the specific task.

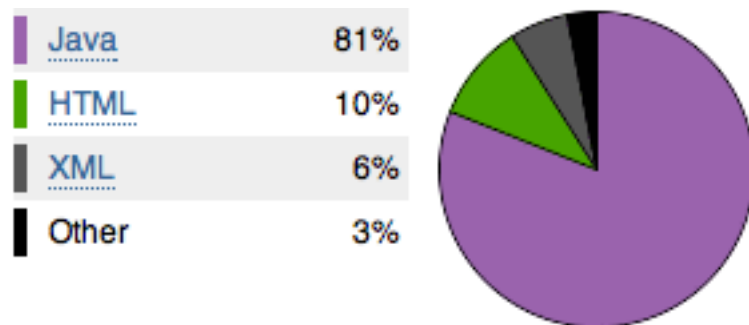
## Licensing

<http://www.ohloh.net/p/8615/analyses/latest>

Eclipse Public License	1659 files
New BSD License	43 files
BSD Copyright	1 files

## Platforms / Languages

<http://www.ohloh.net/p/8615/analyses/latest>



Home Page: <http://www.eclipse.org/gmt/epsilon/>

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.gmt.epsilon](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.gmt.epsilon)

Wiki Page: <http://wiki.eclipse.org/Epsilon>

## Predictability

Release Train? No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.gmt.epsilon>

**New & Noteworthy:** N/A

**Release Notes:** N/A

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.gmt.epsilon>



## Releases

The Eclipse update site for this project is

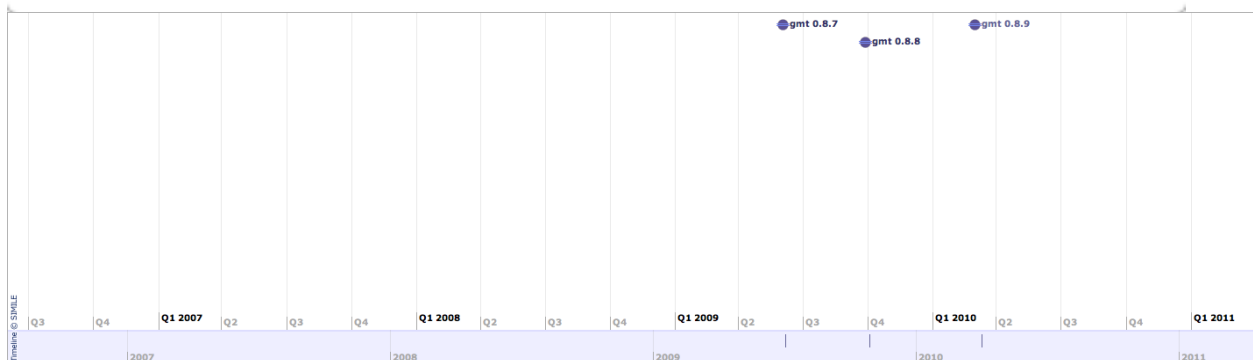
<http://download.eclipse.org/modeling/gmt/epsilon/updates/>.

0.8.9: 2010-04-01 planned

0.8.8: 2009-10-28 completed

0.8.7: 2009-07-03 completed

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.gmt.epsilon](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.gmt.epsilon)

### Lead(s)

Dimitris Kolovos, individual

### Committers

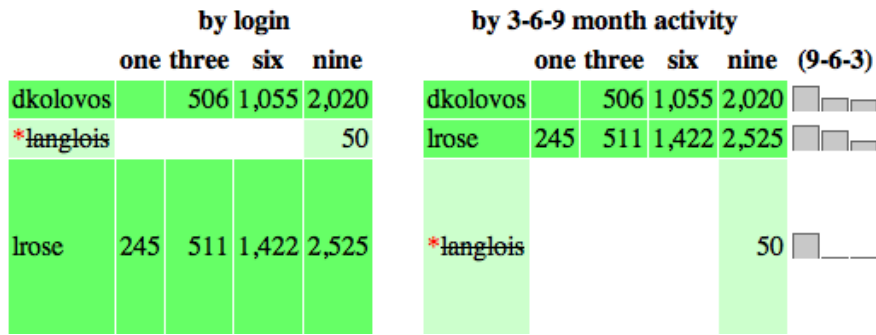
Dimitris Kolovos, individual

Louis Rose, individual

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/gmt-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.gmt.epsilon>



Graphs that slope up to the right indicate increasing activity by the committer. Those that slope down to the right indicate decreasing activity. Bars are nine, six and three month activity history scaled per committer.

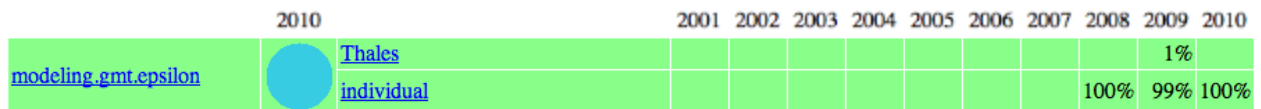
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.gmt.epsilon>

	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
individual	2 (100%)	0 (0%)	2 (66.67%)	100%	247 (100%)	247 (100%)	1
<b>Total</b>	<b>2</b>	<b>1</b>	<b>3</b>		<b>247</b>	<b>247</b>	

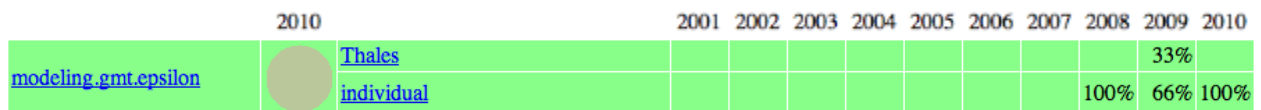
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

There are currently 1161 posts in the eclipse.epsilon newsgroup. Also, there are at least 200 more posts about Epsilon in the old eclipse.modeling.gmt newsgroup. In February 2010, the Epsilon web-site had 2,263 unique and 836 returning visitors who generated a total of 6,551 page loads (source: statcounter.com).

## Adopter Community

Epsilon has been reused in the context of the GenGMF project (<http://gengmf.randomice.net>) and the Symphony model editor (<http://stephaneerard.wordpress.com/2009/06/09/symfony-model-editor/>).

Correspondence in the newsgroup indicates further adoption in additional projects for which however there is no tangible evidence.

# Learning

**Documentation:** <http://www.eclipse.org/gmt/epsilon/doc/>

## Training

The committers of the project are providing training on request. Parts of Epsilon are also taught/used in the context of graduate/postgraduate courses:

[http://seblog.cs.uni-kassel.de/wp-content/uploads/2009/11/SE2\\_Uebung4.pdf](http://seblog.cs.uni-kassel.de/wp-content/uploads/2009/11/SE2_Uebung4.pdf)  
<http://www.uio.no/studier/emner/matnat/ifi/INF5120/v10/undervisningsplan.xml>  
<http://cs.ubbcluj.ro/~ilazar/bm/>

# Support

**Forum:** <http://www.eclipse.org/forums/eclipse.epsilon>

**Bugs:** <https://bugs.eclipse.org/bugs/buglist.cgi?product=GMT&component=Epsilon>

## Consulting

The committers of the project are providing consulting services on request.

# Customizability

The languages provided by Epsilon can be used both within and outside Eclipse and can be integrated with each other as well as with non-MDE languages and tools through ANT tasks.

# Extensibility

Extensibility has been one of the main architectural attributes in Epsilon. The platform provides a core language (EOL) on top of which other task-specific languages can be built. Also, it provides EMC, an abstraction layer (<http://www.eclipse.org/gmt/epsilon/doc/emc>) that allows developers to extend Epsilon with support for additional modelling technologies.

# Scalability

Epsilon has been tested with EMF models (provided by industrial partners) up to ~100MB. Improved support for large models is currently being investigated in two different research strands (integration with CDO / use of embedded databases).

# Usability

Epsilon provides editors with syntax highlighting and error reporting, dedicated launch configurations for configuring models and executing Epsilon programs within Eclipse and a number of additional views/editors to simplify common MDE tasks.

# Interoperability

Epsilon can work with any EMF-based tool. Also, all languages within Epsilon are interoperable with each other and can be combined through their respective ANT tasks into complex workflows (that can also involve normal, non-MDE ANT tasks).

## Dependencies

<http://www.eclipse.org/gmt/epsilon/download/>

Eclipse  
EMF EMF (Core)

GMF

**Standards**

None.

# GMT MoDisco

Generative Modeling Technologies Model Discovery

## Overview

<http://www.eclipse.org/gmt/modisco/>

Legacy systems embrace a large number of technologies, making the development of tools to cope with legacy systems evolution a tedious and time consuming task. As modernization projects face with both technologies combination and various modernization situations, model-driven approaches and tools offer the requisite abstraction level to build up mature and flexible modernization solutions. MoDisco provides an extensible framework to develop **model-driven tools** to support use-cases of **existing software modernization**.

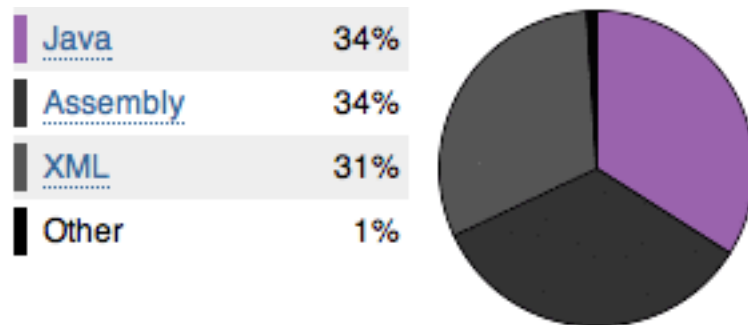
## Licensing

<http://www.ohloh.net/p/MoDisco/analyses/latest>

Eclipse Public License 2484 files

## Platforms / Languages

<http://www.ohloh.net/p/MoDisco/analyses/latest>



Home Page: <http://www.eclipse.org/gmt/modisco/>

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.gmt.modisco](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.gmt.modisco)

Wiki Page: <http://wiki.eclipse.org/MoDisco>

## Predictability

Release Train? Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

Plan: <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.gmt.modisco>

New & Noteworthy: [http://wiki.eclipse.org/MoDisco/New\\_And\\_Noteworthy](http://wiki.eclipse.org/MoDisco/New_And_Noteworthy)

Release Notes: N/A



## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.gmt.modisco>



## Releases

The Eclipse update site for this project is

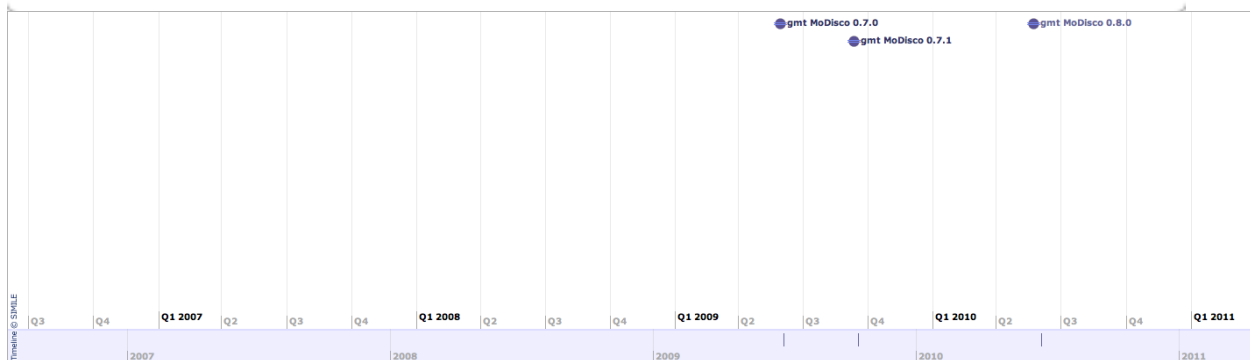
<http://download.eclipse.org/modeling/gmt/modisco/updates/release/>.

**MoDisco 0.8.0:** 2010-06-23 planned

**MoDisco 0.7.1:** 2009-10-12 completed

**MoDisco 0.7.0:** 2009-06-30 completed

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.gmt.modisco](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.gmt.modisco)

### Lead(s)

Hugo Bruneliere, INRIA

### Committers

Gabriel Barbier, Mia Software

Nicolas Bros, Mia Software

Hugo Bruneliere, INRIA

Gregoire Dupe, Mia Software

Fabien Giquel, Mia Software

Frederic Madiot, Mia Software

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/gmt-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.gmt.modisco>

by login					by 3-6-9 month activity					
	one	three	six	nine	one	three	six	nine	(9-6-3)	
*dford					fgiquel	193	1,311	1,311	1,311	_____█
*fallilaire					gbarbier	260	779	2,111	16,674	█_____
fgiquel	193	1,311	1,311	1,311	gdupe	686	1,599	1,607	1,607	_____█
fmadiot					hbrunelie	31	31	9,170	9,260	_____█
gbarbier	260	779	2,111	16,674	nbros	542	1,163	2,405	2,405	_____█
gdupe	686	1,599	1,607	1,607	*dford					_____
hbrunelie	31	31	9,170	9,260	*fallilaire					_____
nbros	542	1,163	2,405	2,405	fmadiot					_____

Graphs that slope up to the right indicate increasing activity by the committer. Those that slope down to the right indicate decreasing activity. Bars are nine, six and three month activity history scaled per committer.

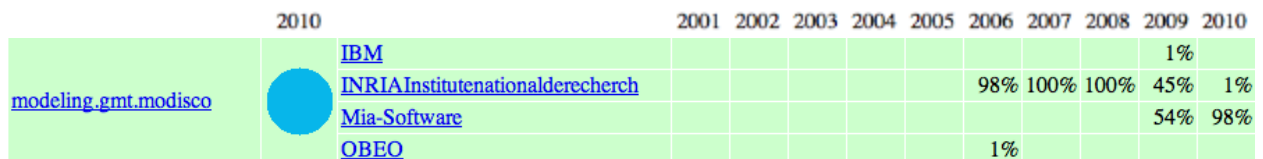
### Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.gmt.modisco>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
INRIA Institut national de recherche	1 (20%)	0 (0%)	1 (14.29%)	100%	2 (0.11%)	31 (1.68%)	16
Mia-Software	4 (80%)	0 (0%)	4 (57.14%)	100%	1,784 (99.89%)	1,813 (98.32%)	1
<b>Total</b>	<b>5</b>	<b>2</b>	<b>7</b>		<b>1,786</b>	<b>1,844</b>	

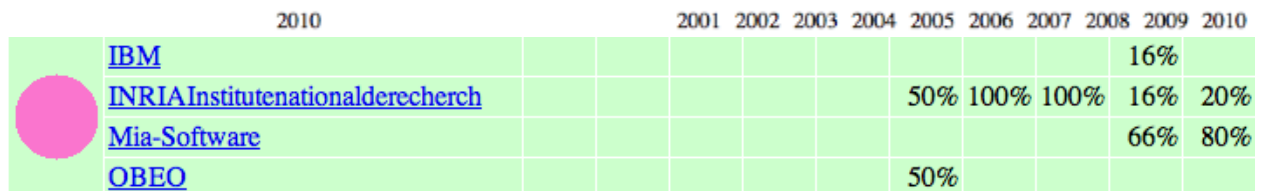
### Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



### Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

MoDisco is a relatively new project and the project team is still in the process of developing its community. For instance, MoDisco is going to migrate in the coming months from GMT to EMFT in order to get more visibility. Other Eclipse projects, such as B3, are also currently evaluating several MoDisco components for future use (cf. this EclipseCon 2010 talk

<http://www.eclipsecon.org/2010/sessions/sessions?id=1175>).

Public communication with users is done in the forum:

<http://www.eclipse.org/forums/eclipse.modisco>

Metrics:

i. Downloads

- a. Number of update sites (since available: July 2009) – 164
- b. Number of builds (since the Releng Process has been set in MoDisco: end of October 2009) – 228

ii. Involvement. Number of bugs opened over time (and, if possible, by whom). Number of newsgroup/forum posts over time (and, if possible, by whom).

Year	Opened bugs	Newsgroup posts
2008	4	5
2009	71	67
2010 (until the 5 <sup>th</sup> of March)	49	24

## Adopter Community

Several MoDisco components have already been concretely deployed and used internally in both INRIA and Mia-Software (which provide all current MoDisco committers) for various projects and purposes. MoDisco is also directly referenced from the OMG ADM (Architecture Driven Modernization) task force web page as the source for concrete implementations of their KDM and SMM standards.

In addition to this, here is a list of some organization/companies which have already expressed their interest in MoDisco: <http://www.eclipse.org/gmt/modisco/interestedParties.php>

## Learning

*The documentation available for GMT MoDisco is rather lacking and thus it would probably have a very steep learning curve.*

**Documentation:** <http://wiki.eclipse.org/MoDisco#Documentation>

### Training

<http://www.mia-software.com/en/services/>

## Support

**Forum:** <http://www.eclipse.org/forums/eclipse.modisco>

**Bugs:** <https://bugs.eclipse.org/bugs/buglist.cgi?product=GMT&component=MoDisco>

### Consulting

<http://www.mia-software.com/en/services/>

## Customizability

MoDisco, and more particularly its infrastructure, has been clearly designed to be highly customizable. The MoDisco browser, query manager, and discovery manager are examples of generic components whose main intent is to be customized for concrete applications on specific technologies and corresponding reverse engineering scenarios.

## Extensibility

MoDisco has a three-layer architecture which is focused on extensibility:

- “Infrastructure” provides a set of generic tools which can be easily extended.
- “Technologies” provides some support, based on customizations of the generic infrastructure, for specific technologies such as Java or XML. Of course, the team plans to have many other contributions, in the future, on different technologies (C++, C#, etc).
- “Use cases” provides a set of concrete applications of the MoDisco components on various reverse engineering scenarios. For demonstrability purposes, the team also wants to increase the number of available use cases in the future.

## Scalability

Scalability is an issue directly related to the reverse engineering field, for instance when dealing with models of huge legacy systems. MoDisco is making significant progresses in this direction by using all the capabilities from EMF and by currently experimenting on what could be done with other related projects such as CDO.

*While MoDisco aims to employ EMF CDO to help with scalability issues in its reverse engineering support, it's uncertain how viable this will be. The real issue of dealing with complexity and proper abstraction are not likely something that CDO can help with, rather it is something that the MoDisco project would have to provide as part of its own functionality.*

## Usability

Usability is also an important issue in reverse engineering. The project team is trying as much as possible to facilitate the building and execution of the MoDisco solutions by providing a set of browsers, managers, wizards, etc., as part of a complete IDE.

## Interoperability

MoDisco, as a technology-independent reverse engineering platform, is really focused on addressing the interoperability problem. This is primarily supported by the use of models, conforming to explicit metamodels (in EMF), which are highly exchangeable and transformable. Moreover, the project team is working in strong collaboration with the OMG ADM (Architecture Driven Modernization) task force by using several of their metamodel specifications for which MoDisco provides concrete open source EMF implementations.

## Dependencies

<http://www.eclipse.org/gmt/modisco/download/>

BIRT  
Eclipse  
EMF CDO  
EMF Compare  
EMF EMF (Core)  
EMF Validation  
JDT  
M2M ATL  
M2T Acceleo  
M2T JET  
MDT UML2  
Orbit (org.apache.commons.jxpath, org.apache.derby)  
PDE

## **Standards**

[Knowledge Discovery Metamodel \(KDM\)](#)

[Software Metrics Metamodel \(SMM\)](#)

# GMT UMLX

Generative Modeling Technologies UMLX

## Overview

<http://www.eclipse.org/gmt/umlx/>

UMLX is a concrete graphical syntax to complement the [OMG QVT](#) model transformation language. UMLX will conform to at least one of the QVT Export/XML-Export Core/Relations conformance points, so that UMLX originated transformations can be used in any QVT execution environment. Much of UMLX corresponds closely to QVT relational, so the first releases will subset UMLX towards the shared capabilities. The more extensive UMLX concepts, particularly regarding multiplicity will require careful consideration of whether they can sensibly extend QVT relational, or whether it is necessary to go direct to QVT core, or to prototype an extended QVT relational for consideration by a future QVT. Conversely, QVT relational and possibly QVT core concepts that are useful may merit extension of UMLX.

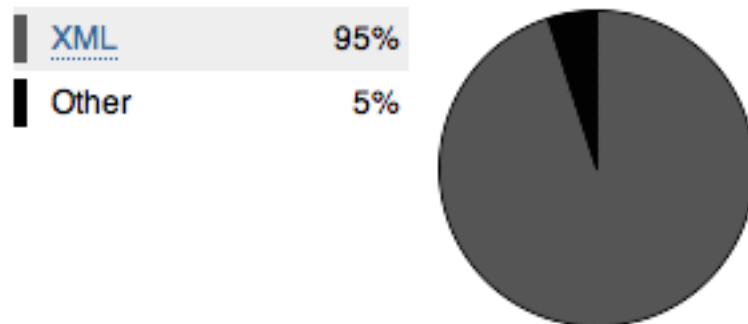
## Licensing

<http://www.ohloh.net/p/umlx/analyses/latest>

(Eclipse Public License)

## Platforms / Languages

<http://www.ohloh.net/p/umlx/analyses/latest>



**Home Page:** <http://www.eclipse.org/gmt/umlx/>

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.gmt.umlx](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.gmt.umlx)

**Wiki Page:** N/A

## Predictability

**Release Train?** No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** N/A

**New & Noteworthy:** N/A

Release Notes: N/A

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.gmt.uml>

N/A

## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.gmt.uml](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.gmt.uml)

### Lead(s)

Ed Willink, Thales

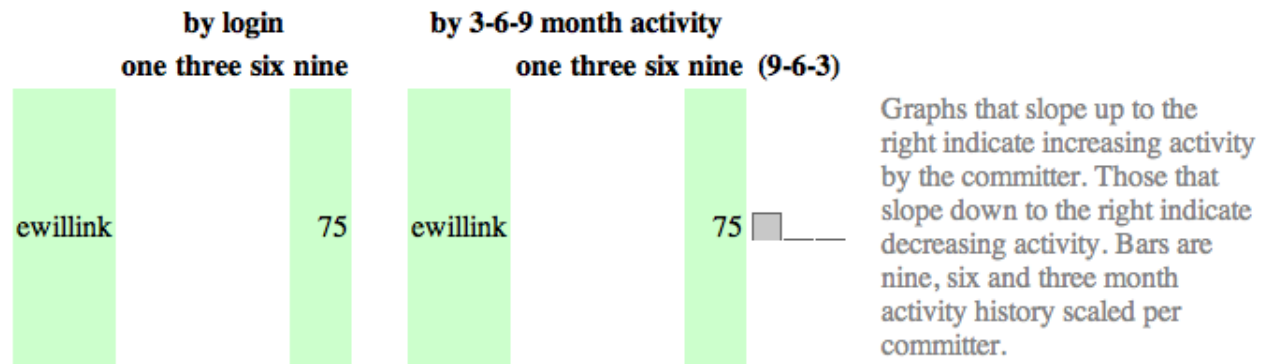
### Committers

Ed Willink, Thales

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/gmt-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.gmt.uml>



### Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.gmt.uml>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
Total	0	1	1		0	0	

### Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2010
<a href="#">modeling.gmt.uml</a>	<a href="#">Thales</a>								100%	100%	

### Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>

	2010		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<a href="#">modeling.gmt.uml</a>		<a href="#">Thales</a>								100%	100%	

## User Community

N/A

## Adopter Community

N/A

## Learning

Documentation: <http://www.eclipse.org/gmt/umlx/doc/index.html>

## Training

N/A

## Support

Forum: <http://www.eclipse.org/forums/eclipse.uml>

Bugs: <https://bugs.eclipse.org/bugs/buglist.cgi?product=GMT&component=UMLX>

## Consulting

N/A

## Customizability

N/A

## Extensibility

N/A

## Scalability

N/A

## Usability

N/A

## Interoperability

N/A

## Dependencies

<http://www.eclipse.org/gmt/umlx/download/>

N/A



## **Standards**

[MOF Query/View/Transformation \(QVT\)](#)

# M2M ATL

Model to Model ATLAS Transformation Language

## Overview

<http://www.eclipse.org/m2m/at/>

ATL (ATLAS Transformation Language) is a model transformation language and toolkit. In the field of Model-Driven Engineering (MDE), ATL provides ways to produce a set of target models from a set of source models. Developed on top of the Eclipse platform, the ATL Integrated Environment (IDE) provides a number of standard development tools (syntax highlighting, debugger, etc.) that aims to ease development of ATL transformations. The ATL project includes also a library of ATL transformations.

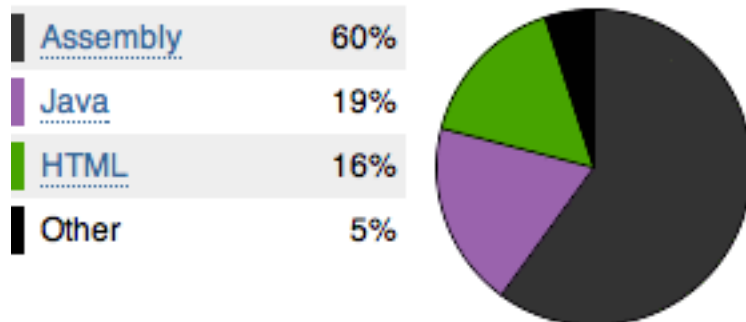
## Licensing

<http://www.ohloh.net/p/at/analyses/latest>



## Platforms / Languages

<http://www.ohloh.net/p/at/analyses/latest>



**Home Page:** <http://www.eclipse.org/m2m/at/>

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.m2m.atl](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.m2m.atl)

**Wiki Page:** <http://wiki.eclipse.org/ATL>

## Predictability

**Release Train?** Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.m2m.atl>

**New & Noteworthy:** [http://wiki.eclipse.org/ATL\\_3.0.0\\_New\\_and\\_Noteworthy](http://wiki.eclipse.org/ATL_3.0.0_New_and_Noteworthy)

**Release Notes:** N/A

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.m2m.atl>



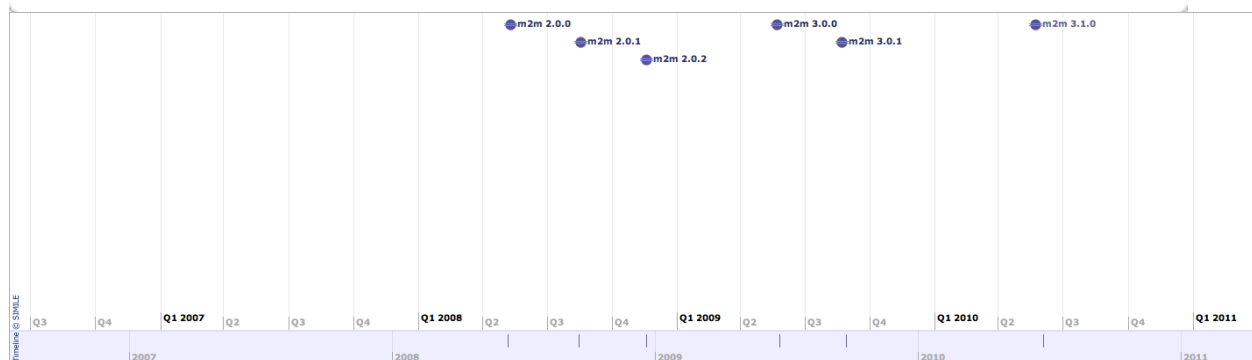
## Releases

The Eclipse update site for this project is

<http://www.eclipse.org/modeling/m2m/updates/>.

- 3.1.0: 2010-06-23 planned
- 3.0.1: 2009-09-22 completed
- 3.0.0: 2009-06-22 completed
- 2.0.2: 2008-12-19 completed
- 2.0.1: 2008-09-17 completed

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.m2m.atl](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.m2m.atl)

### Lead(s)

Frédéric Jouault, INRIA

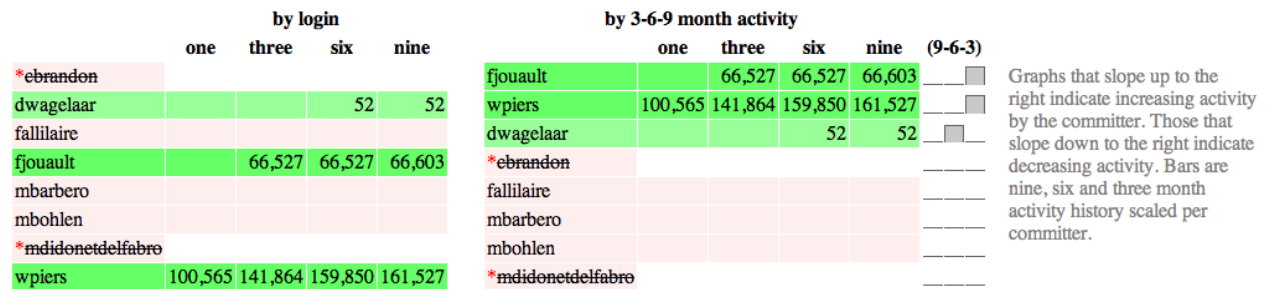
### Committers

Freddy Allilaire, Obeo  
Mikaël Barbero, Obeo  
Matthias Bohlen, individual  
Frédéric Jouault, INRIA  
William Piers, Obeo  
Dennis Wagelaar, individual

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/m2m-atl-dev/maillist.html>

## Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.m2m.atl>



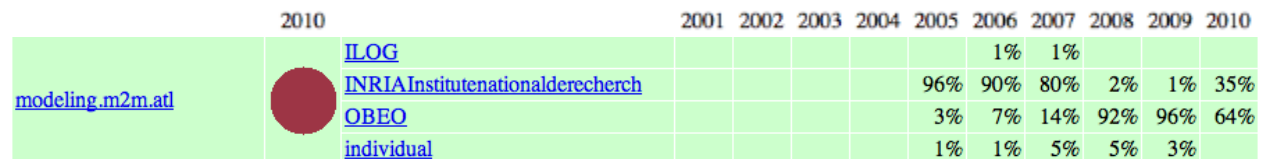
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.m2m.atl>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
INRIA Institut national de recherche	1 (50%)	0 (0%)	1 (12.5%)	100%	22 (7.91%)	66,511 (35.03%)	3023
OBEQ	1 (50%)	2 (33.33%)	3 (37.5%)	33.33%	256 (92.09%)	123,334 (64.97%)	482
<b>Total</b>	<b>2</b>	<b>6</b>	<b>8</b>		<b>278</b>	<b>189,845</b>	

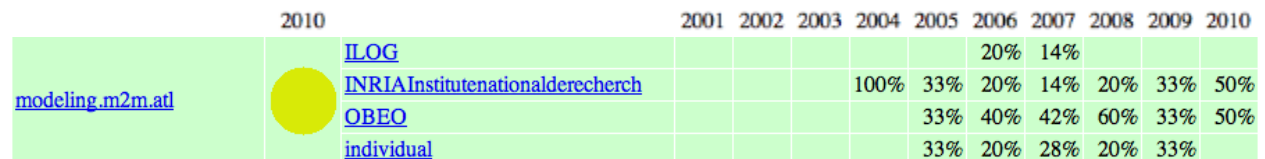
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

ATL was on Eclipse GMT for 2004 to 2006 then it moved to M2M, attracting more and more research and industrial users. The ATL community is very active on the newsgroup (more than 2000 messages from its creation).

## Downloads (Jul 1, 2008 - Mar 1, 2010)



## Adopter Community

The ATL project was initiated by big IT companies and is always used in such context, as well as in research projects. Various use cases have been achieved using ATL: interoperability, high-order transformations, PIM to PSM approach, model measurement... Some of them are public and available on the ATL website: <http://www.eclipse.org/m2m/atl/usecases/>.

## Learning

ATL appears in the Eclipse Help contents accessible through either the “Help” menu or the “F1” shortcut. The ATL documentation is managed in a community way, as it is hosted on Eclipse wiki pages. The ATL Eclipse help is generated from these.

**Documentation:** <http://www.eclipse.org/m2m/atl/doc/>

### Training

<http://www.atl-pro.com/pages/training/en>

## Support

**Forum:** <http://www.eclipse.org/forums/eclipse.modeling.m2m>

**Bugs:** <https://bugs.eclipse.org/bugs/buglist.cgi?product=M2M&component=ATL-Engine>

### Consulting

<http://www.obeo.fr/pages/mda-and-productivity/en>

## Customizability

ATL development tools allow the customization of ATL editor basic parameters, such as syntax colors, code assist.

## Extensibility

ATL provide extensibility to manage specific cases of transformations, at three levels:

- **Model management:** Users can redefine, through a set of extension points, the way the models are loaded and saved. For instance it can be used to support a specific model extraction.
- **Execution:** The current ATL virtual machine can be extended to support custom types and to add specific operations.
- **Platform:** In a larger scope, the ATL virtual machine is defined by a specification which explains the minimal set of instructions to implement, so it could be rewritten in another language in order to allow execution of ATL transformation on another platform.

More details about ATL architecture and extensibility can be found in the ATL Developer documentation:

[http://wiki.eclipse.org/ATL/Developer\\_Guide](http://wiki.eclipse.org/ATL/Developer_Guide).

## Scalability

For two years, ATL performance issues have been strongly reduced by the implementation of a new ATL virtual machine - the core of ATL execution - which divided execution times from 10 to 60 (mainly depending of the model size).

A regular performance check is done by ATL non-regression tests: some tests are considered as benchmarks as they take much more time than the average of transformations. Those test have been used to measure the latest performance improvements.

## Usability

ATL provides several ways to launch transformations:

- ① a specific Launch configuration, initialized from the content of ATL files allow to directly launch the transformation in Eclipse
- ② a set of specific Ant tasks allow to chain transformations with each other and provides an accurate management of loading/saving of models
- ③ a wizard allow to generate a plugin embedding the transformation, synchronized with Java code dedicated to a programmatic launch. The generated plugin can be exported as a standalone application

The ATL development tools provides an Editor, a Debugger, a Profiler, and a set of wizards to ease ATL development. The ATL editor offers advanced functionalities like code folding, syntax highlighting, smart completion, navigation to definitions and references, error highlighting, outline.

The ATL editor has been strongly enhanced in the ATL 3.1 (Helios) release, especially about completion and navigation.

ATL execution errors are displayed into the Eclipse console, enhanced with hyperlinks allowing to navigate through errors to the guilty code inside of the ATL editor.

## Interoperability

ATL is interoperable with any EMF-based model. An optional support for MDR models is provided. ATL can be used on any eclipse from 3.2 to the latest (Helios - 3.6 at the time of writing).

An in-place transformation mode also allow modifications without any desynchronization between the model and the associated diagrams.

## Dependencies

<http://www.eclipse.org/modeling/m2m/downloads/index.php?project=atl>

Eclipse  
EMF EMF (Core)  
Orbit

## Standards

None.

# M2M QVTd

Model to Model Declarative Query/View/Transformation

## Overview

[http://wiki.eclipse.org/M2M/Relational\\_QVT\\_Language\\_%28QVTR%29](http://wiki.eclipse.org/M2M/Relational_QVT_Language_%28QVTR%29)

The QVT Declarative (QVTd) component aims to provide a complete Eclipse based IDE for the Core (QVTc) and Relations (QVTr) Languages defined by the OMG [QVT](#) Relations (QVTR) language. This goal includes all development components necessary for development of QVTc and QVTr programs and APIs to facilitate extension and reuse.

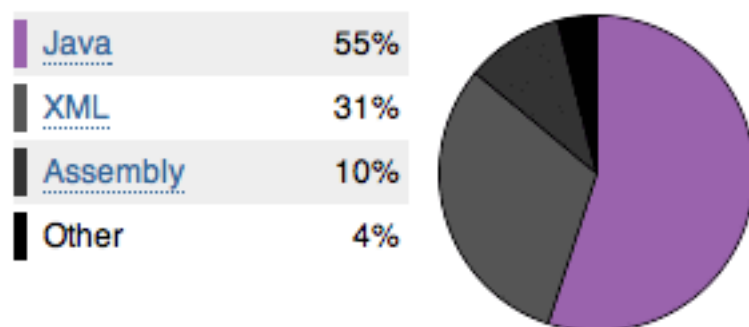
## Licensing

<https://www.ohloh.net/p/m2m-qvtd/analyses/latest>



## Platforms / Languages

<https://www.ohloh.net/p/m2m-qvtd/analyses/latest>



Home Page: N/A

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.m2m.qvt-relations](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.m2m.qvt-relations)

Wiki Page: [http://wiki.eclipse.org/M2M/QVT\\_Declarative\\_\(QVTd\)](http://wiki.eclipse.org/M2M/QVT_Declarative_(QVTd))

## Predictability

Release Train? No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

Plan: <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.m2m.qvt-relations>

New & Noteworthy: N/A

Release Notes: N/A



## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.m2m.qvt-relations>

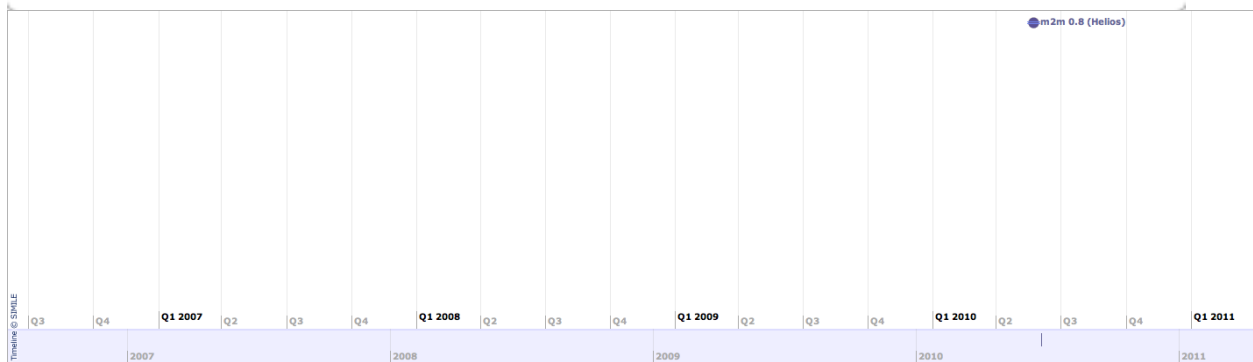


## Releases

The Eclipse update site for this project is </modeling/m2m/updates/>.

**0.8 (Hellos):** 2010-06-23 planned  

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.m2m.qvt-relations](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.m2m.qvt-relations)

### Lead(s)

Ed Willink, Thales

### Committers

Frederic Jouault, INRIA

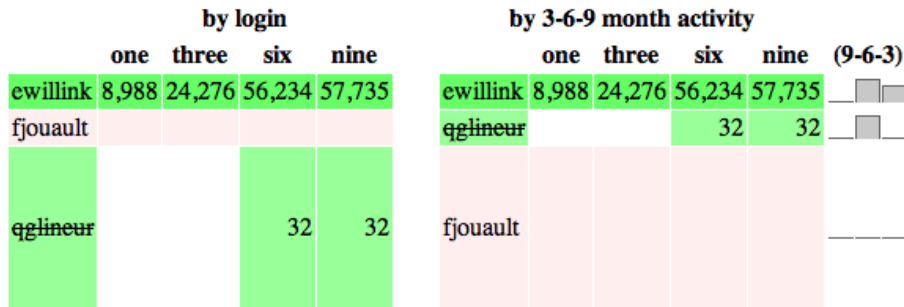
Ed Willink, Thales

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/m2m-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.m2m.qvt-relations>





Graphs that slope up to the right indicate increasing activity by the committer. Those that slope down to the right indicate decreasing activity. Bars are nine, six and three month activity history scaled per committer.

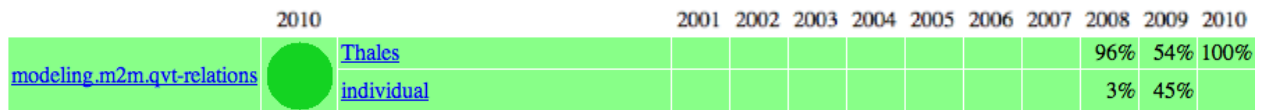
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.m2m.qvt-relations>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit	
Thales	1 (100%)	0 (0%)	1	(50%)	100%	97 (100%)	11,797 (100%)	122
<b>Total</b>	<b>1</b>	<b>1</b>	<b>2</b>		<b>97</b>	<b>11,797</b>		

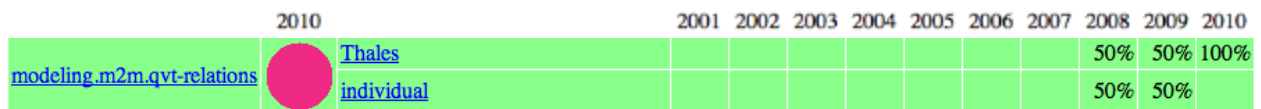
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

N/A

## Adopter Community

N/A

## Learning

Documentation: [http://wiki.eclipse.org/M2M/QVT\\_Declarative\\_\(QVTd\)](http://wiki.eclipse.org/M2M/QVT_Declarative_(QVTd))

## Training

N/A

## Support

**Forum:** <http://www.eclipse.org/forums/eclipse.modeling.m2m>

**Bugs:** [https://bugs.eclipse.org/bugs/buglist.cgi?product=M2M&component=QVT\\_Relations-Engine](https://bugs.eclipse.org/bugs/buglist.cgi?product=M2M&component=QVT_Relations-Engine)

## **Consulting**

N/A

## **Customizability**

N/A

## **Extensibility**

N/A

## **Scalability**

N/A

## **Usability**

N/A

## **Interoperability**

N/A

## **Dependencies**

N/A

## **Standards**

[OMG MOF Query/View/Transformation \(QVT\)](#)

# M2M QVTo

Model to Model Operational Query/View/Transformation

## Overview

[http://wiki.eclipse.org/M2M/Operational\\_QVT\\_Language\\_%28QVTO%29](http://wiki.eclipse.org/M2M/Operational_QVT_Language_%28QVTO%29)

QVT Operational component provides an implementation of the QVT Operational Mapping language defined by the OMG Query/View/Transformation Specification (QVT).

The component provides the following capabilities:

- Semantically sensitive editor for QVT Operational language
- QVT Operational project nature, builder
- Support for black-box libraries (Java code accessible from QVT)
- Transformation invocation Java API
- Execution engine & debugger

## Licensing

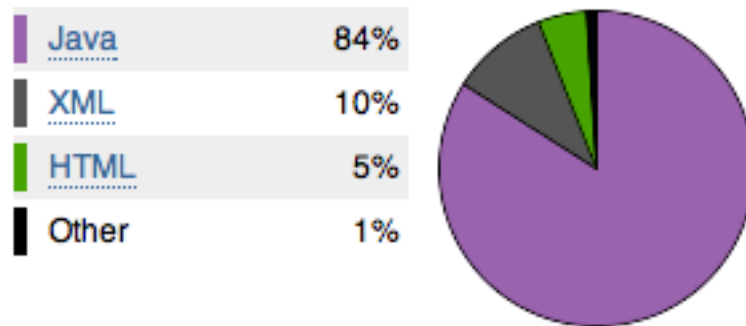
<http://www.ohloh.net/p/10145/analyses/latest>

Eclipse Public License

1541 files

## Platforms / Languages

<http://www.ohloh.net/p/10145/analyses/latest>



Home Page: N/A

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.m2m.qvt-oml](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.m2m.qvt-oml)

Wiki Page: [http://wiki.eclipse.org/M2M/Operational\\_QVT\\_Language\\_%28QVTO%29](http://wiki.eclipse.org/M2M/Operational_QVT_Language_%28QVTO%29)

## Predictability

Release Train? Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

Plan: N/A

New & Noteworthy: [http://wiki.eclipse.org/M2M/QVTO/New\\_and\\_Noteworthy/Galileo](http://wiki.eclipse.org/M2M/QVTO/New_and_Noteworthy/Galileo)

Release Notes: N/A

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.m2m.qvt-oml>



## Releases

The Eclipse update site for this project is

<http://download.eclipse.org/modeling/m2m/qvtoml/updates/milestones/site.x>

**3.0.0:** 2010-06-23 planned

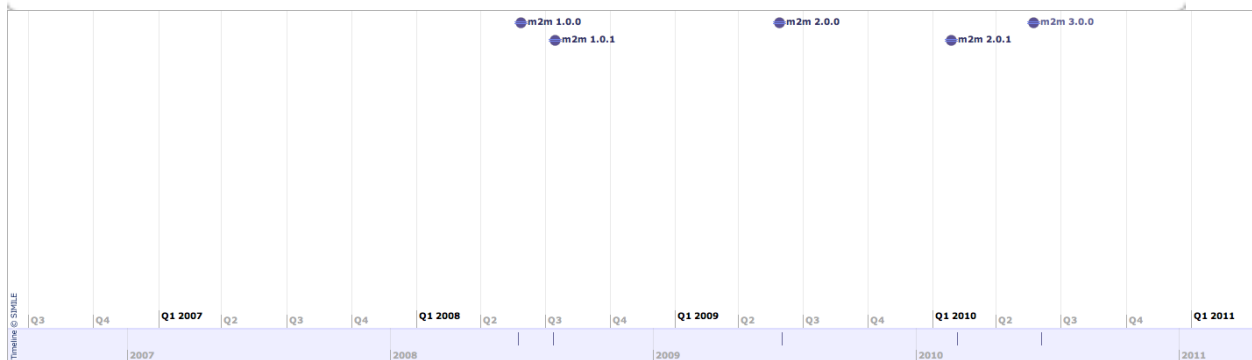
**2.0.1:** 2010-02-26 completed

**2.0.0:** 2009-06-28 completed

**1.0.1:** 2008-08-15 completed

**1.0.0:** 2008-06-27 completed

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.m2m.qvt-oml](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.m2m.qvt-oml)

### Lead(s)

Radomil Dvorak, Borland Software

### Committers

Sergey Boyko, Borland Software

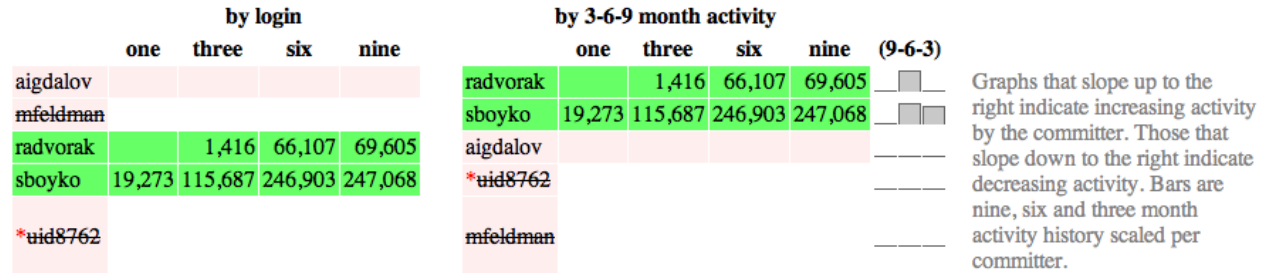
Radomil Dvorak, Borland Software

Aleksandr Igdalov, Borland Software

Mailing List: <http://dev.eclipse.org/mhonarc/lists/m2m-dev/maillist.html>

## Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.m2m.qvt-oml>



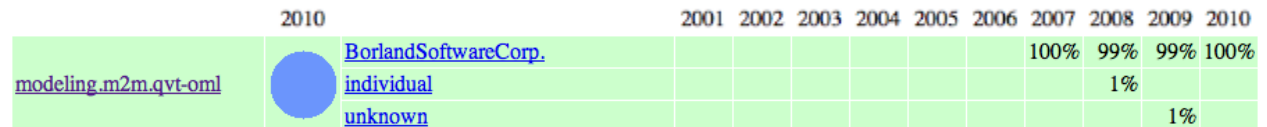
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.m2m.qvt-oml>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
BorlandSoftwareCorp.	2 (100%)	1 (33.33%)	3 (60%)	66.67%	495 (100%)	115,628 (100%)	234
<b>Total</b>	<b>2</b>	<b>3</b>	<b>5</b>		<b>495</b>	<b>115,628</b>	

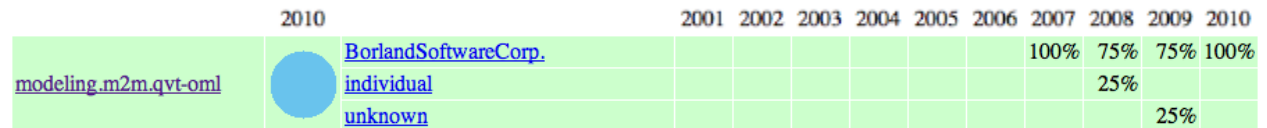
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

N/A

## Downloads (Jul 1, 2008 - Mar 1, 2010)



## Adopter Community

Commercial add-on plugins: <http://www.borland.com/us/products/together/index.html> .

Query language in code generation templates: <http://www.eclipse.org/modeling/gmf/>.

## Learning

**Documentation:** [http://wiki.eclipse.org/M2M/Operational\\_QVT\\_Language\\_%28QVTO%29](http://wiki.eclipse.org/M2M/Operational_QVT_Language_%28QVTO%29)

### Training

N/A

## Support

**Forum:** <http://www.eclipse.org/forums/eclipse.modeling.m2m>

**Bugs:** [https://bugs.eclipse.org/bugs/buglist.cgi?product=M2M&component=QVT\\_OML-Engine](https://bugs.eclipse.org/bugs/buglist.cgi?product=M2M&component=QVT_OML-Engine)

### Consulting

[dvorak.radek@gmail.com](mailto:dvorak.radek@gmail.com)

## Customizability

QVT Operational provides transformation invocation Java API enabling the user to integrate his transformation logic to a specific application at deployment time.

*It is fairly straightforward to customize M2M QVTo (e.g., by creating a workflow component with RSA RT through MWE).*

## Extensibility

QVT Operational mapping language including the Standard Library is defined by OMG specification. Functionality not available by default can be integrated via black-box libraries, supported as regular Java implementation classes.

*Extension is possible, however, it is not as easy to do as with languages like Xtend (which comes with Xpand). A much simpler way of doing so would have to be provided so that the average transformation implementer could make use of it.*

## Scalability

N/A

*One of the issues with QVTo when it comes to very large models is the book keeping that it does. This book keeping (e.g. traceability) is useful, however, it is also very resource intensive.*

## Usability

QVT Operational component adopts common UI elements and approaches introduced in Eclipse IDE by JDT and other projects. It provides semantically sensitive editor with code assist, syntax & semantical highlighting, outlines, hyperlinks. The QVT project builder produces problem markers for syntax and validation errors. Dedicated launch configurations can be used to start QVT transformations in Run/Debug mode.

*A common complaint with QVTo is its lack of debugging facilities. To develop complex transformations, a debugger is essential and what is provided in QVTo is not sufficient. In terms of the language and support provided by transformation engine, however, this project is very good.*

## **Interoperability**

The implementation supports the Syntax Executable interoperability dimension specified by OMG.

### **Dependencies**

<http://www.eclipse.org/modeling/m2m/downloads/index.php?project=qvto>

Eclipse  
EMF EMF (Core)  
MDT OCL  
MDT UML2

### **Standards**

[OMG MOF Query/View/Transformation \(QVT\)](#)

# M2T Acceleo

Model to Text Acceleo

## Overview

<http://www.eclipse.org/modeling/m2t/?project=acceleo>

**Acceleo** is a pragmatic implementation of the Object Management Group (OMG) MOF Model to Text Language (MTL) standard. You do not need to be an expert to start using the plug-ins and create your first code generator: using the provided example projects and the powerful completion feature of the Acceleo editor, it is very easy to get started once you understand the basic principles.

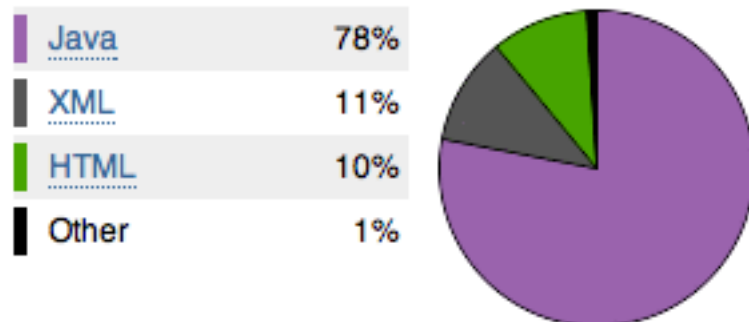
## Licensing

<http://www.ohloh.net/p/acceleo-eclipse/analyses/latest>

Eclipse Public License 641 files

## Platforms / Languages

<http://www.ohloh.net/p/acceleo-eclipse/analyses/latest>



Home Page: <http://www.eclipse.org/modeling/m2t/?project=acceleo>

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.m2t.acceleo](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.m2t.acceleo)

Wiki Page: <http://wiki.eclipse.org/Acceleo>

## Predictability

Release Train? Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

Plan: <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.m2t.acceleo>

New & Noteworthy: [http://wiki.eclipse.org/Acceleo/New\\_And\\_Noteworthy](http://wiki.eclipse.org/Acceleo/New_And_Noteworthy)

Release Notes: <http://www.eclipse.org/modeling/m2t/news/relnotes.php?project=acceleo&version=HEAD>





## Release Timeline



<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.m2t.acceleo>

## Releases

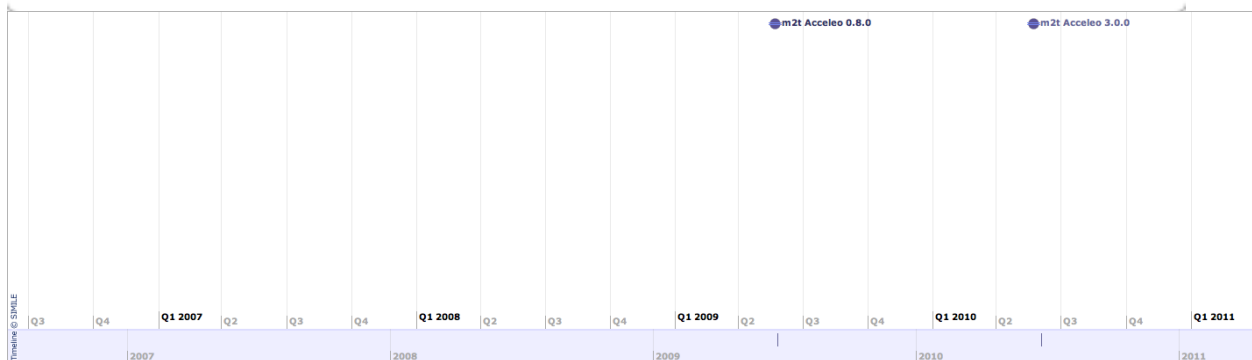
The Eclipse update site for this project is

<http://download.eclipse.org/modeling/m2t/updates/site.xml>.

**Acceleo 3.0.0:** 2010-06-23 planned  

**Acceleo 0.8.0:** 2009-06-22 completed  

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.m2t.acceleo](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.m2t.acceleo)

### Lead(s)

Jonathan Musset, Obeo

### Committers

Wim Bast  
Cedric Brun, Obeo  
Laurent Goubet, Obeo  
Arjan Kok  
Yvan Lussaud, Obeo  
Jonathan Musset, Obeo

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/m2t-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.m2t.acceleo>

**by login**

	one	three	six	nine
akok				
cbrun				
jmusset	862	1,656	6,164	17,506
lgoubet	756	11,472	23,308	29,818
wibast				
ylussaud		36	1,082	1,082

**by 3-6-9 month activity**

	one	three	six	nine	(9-6-3)
jmusset	862	1,656	6,164	17,506	
lgoubet	756	11,472	23,308	29,818	
ylussaud		36	1,082	1,082	
akok					
cbrun					
wibast					

Graphs that slope up to the right indicate increasing activity by the committer. Those that slope down to the right indicate decreasing activity. Bars are nine, six and three month activity history scaled per committer.

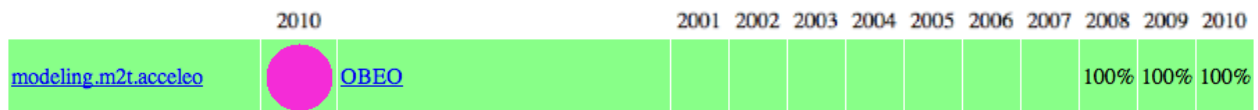
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.m2t.acceleo>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
OBEO	2 (100%)	2 (100%)	4 (100%)	50%	136 (100%)	1,676 (100%)	12
<b>Total</b>	<b>2</b>	<b>2</b>	<b>4</b>		<b>136</b>	<b>1,676</b>	

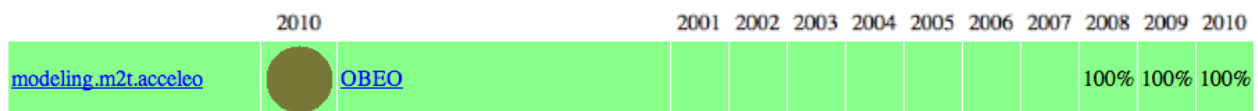
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>

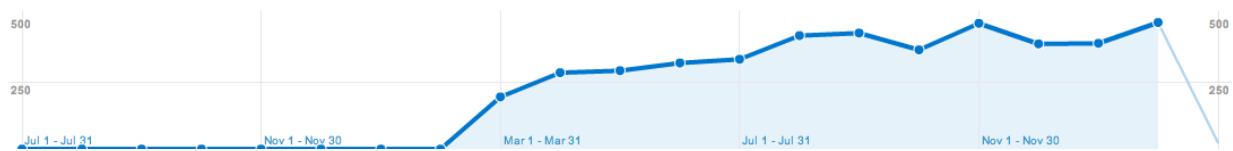


## User Community

Acceleo.org was created 4 years ago, and as time passed, the project team has been more and more convinced that the MOF Model To Text OMG specification was the way to go for the project.

The project team is confident that the Acceleo community gains value by moving from a self-hosted project to an Eclipse one, and that end users will follow the transfer from Acceleo.org to Eclipse.org since they'll provide the same level of functionality and insure an interoperability between the old syntax and the new standard syntax.

## Downloads (Jul 1, 2008 - Mar 1, 2010)



# Adopter Community

Acceleo has been used by big IT and industrial companies as their main generation tool for a while now, with EMFT / EEF being one of the first large project to start up with the new Acceleo as its main generation engine.

## Learning

Acceleo appears in the Eclipse Help contents accessible through either the “Help” menu or the “F1” shortcut.

**Documentation:** <http://wiki.eclipse.org/Acceleo>

### Training

<http://www.obeo.fr/pages/training/en>

## Support

**Forum:** <http://www.eclipse.org/forums/eclipse.modeling.m2t>

**Bugs:** <https://bugs.eclipse.org/bugs/buglist.cgi?product=M2T&component=Acceleo>

### Consulting

<http://www.obeo.fr/pages/mda-and-productivity/en>

## Customizability

The extension point `org.eclipse.acceleo.ide.ui.proposal` allows clients to add whatever “code template” they need to the completion proposal list. These code templates work pretty much the same as do Java “template” proposals in that they allow for the insertion of any text in the module file, be it static text or dynamic template element such as OCL expressions.

## Extensibility

Acceleo offers much in terms of language extensibility, yet it also provides some means for the users to add additional behavior to the wizards. In no particular order:

- ① **Dynamic templates** (through the extension point `org.eclipse.acceleo.engine.dynamic.templates`). This allows users of a given generation module to dynamically extend it and override its templates. The author of the original module does not need to be aware of dynamic extensions: they'll be resolved at runtime if present and automatically called instead of the original.
- ① **Evaluation engine replacement** (through the extension point `org.eclipse.acceleo.engine.creator`). This allows clients to totally swap implementations of the evaluation engines, or decorate the provided generic implementation. This is only intended to be used by advanced users.
- ① **Module file initialization templates** (through the extension point `org.eclipse.acceleo.ide.ui.example`). This extension point allows clients to define new examples for the initialization of new module files created through the “new->module file” wizard. Selection of examples is made in the advanced options tab.
- ① **Language interoperability**. The conjunction of extension points `org.eclipse.acceleo.common.library.connectors` and `org.eclipse.acceleo.common.libraries` allows clients to add interoperability possibilities between Acceleo and other languages. Planned additions of the sort are ways to call ATL and QVTo helpers from Acceleo templates.

## Scalability

The project team has yet to stress test Acceleo for scalability purposes. Community feedback is globally positive and enthusiastic about the generation performance.

## Usability

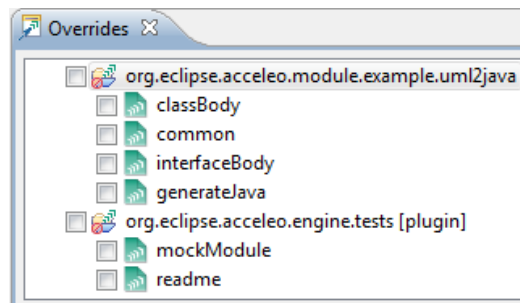
Acceleo can automatically generate a Java class alongside the MTL modules so as to allow for an easy launch of that module's generation. The only necessary step for this is to add this specific comment inside the main template(s) of the module(s): `[comment @main/]`.

Once this Java class generated, it is quite easy to launch the generation from Eclipse through the specific "Acceleo" launch configuration. These launch configurations allow for either "plugin" launch or "application" launch.

Acceleo also provides the possibility to create a new "UI module" which automatically generates all necessary code to launch a generation module through a popup menu action. This is done by contributing an "Acceleo => generate code" menu action against all models having the required file extension.

Acceleo can be used either from within Eclipse or in standalone. RCP and headless mode are then supported as well.

The tooling provides a fair number of views and actions to help users in creating their generation modules. An example of this would be the "overrides" view that allow users to create module files extending the selected existing modules:



The provided editor also offers all functionalities one could expect from modern code editors: code folding, syntax highlighting, smart completion, navigation to definitions and references, error highlighting, dynamic outline, quick outline, etc..

## Interoperability

Acceleo can be used on any EMF based model; it can be used on any eclipse from 3.4 (Ganymede) to the latest (Helios - 3.6 at the time of writing). Take note though that behavioral changes can be observed, these are described on the Eclipse wiki at [http://wiki.eclipse.org/Acceleo#Behavioral\\_changes\\_between\\_versions](http://wiki.eclipse.org/Acceleo#Behavioral_changes_between_versions) .

In terms of language interoperability, Acceleo is planned to natively be able to call for QVTo and ATL helpers ; more can be added at will through the extension point `org.eclipse.acceleo.common.libraries` (see above).

Acceleo also allows clients to utilize Java methods from within module files. Complex computations that would be too convoluted in OCL can then be delegated to Java code without hassle.

## **Dependencies**

<http://www.eclipse.org/modeling/m2t/downloads/?project=acceleo>

Eclipse  
EMF EMF (Core)  
MDT OCL

## **Standards**

[MOF Model to Text \(M2T\) Transformation Language](#)

# M2T JET

Model to Text Java Emitter Templates

## Overview

<http://www.eclipse.org/modeling/m2t/?project=jet>

JET is typically used in the implementation of a "code generator". A code-generator is an important component of Model Driven Development (MDD). The goal of MDD is to describe a software system using abstract models (such as EMF/ECORE models or UML models), and then refine and transform these models into code. Although it is possible to create abstract models, and manually transform them into code, the real power of MDD comes from automating this process. Such **transformations** accelerate the MDD process, and result in better code quality. The transformations can capture the "best practices" of experts, and can ensure that a project consistently employs these practices.

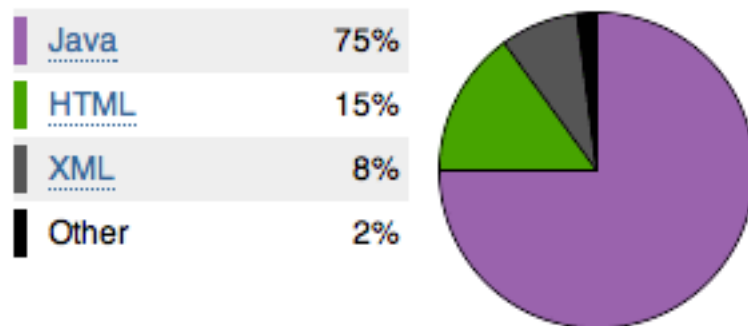
## Licensing

<https://www.ohloh.net/p/m2t-jet/analyses/latest>

Eclipse Public License	691 files
Apache Software License	1 files

## Platforms / Languages

<https://www.ohloh.net/p/m2t-jet/analyses/latest>



Home Page: <http://www.eclipse.org/modeling/m2t/?project=jet>

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.m2t.jet](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.m2t.jet)

Wiki Page: <http://wiki.eclipse.org/M2T-JET>

## Predictability

Release Train? Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

Plan: <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.m2t.jet>

New & Noteworthy: N/A

Release Notes:

<http://www.eclipse.org/modeling/m2t/news/reInotes.php?project=jet&version=HEAD&types=>

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.m2t.jet>



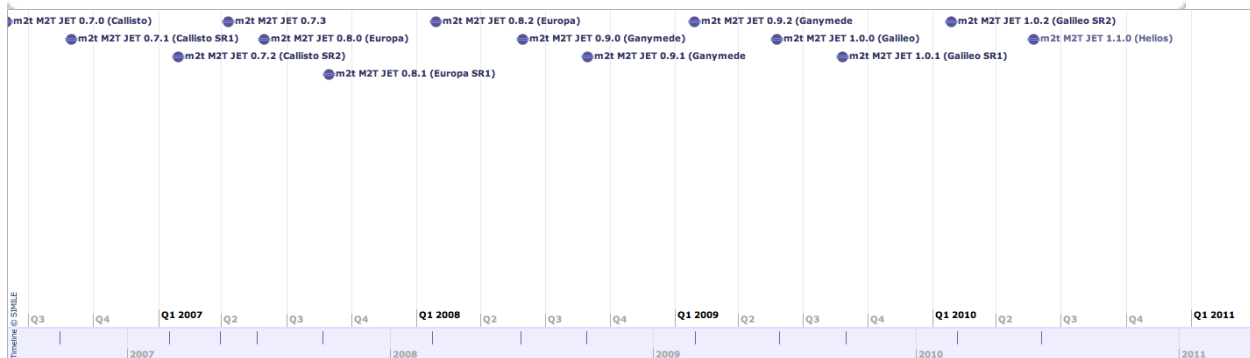
## Releases

The Eclipse update site for this project is

<http://download.eclipse.org/modeling/m2t/updates/releases/>.

M2T JET 1.1.0 (Helios):	2010-06-23	planned	 
M2T JET 1.0.2 (Galileo SR2):	2010-02-26	completed	
M2T JET 1.0.1 (Galileo SR1):	2009-09-25	completed	
<b>M2T JET 1.0.0 (Galileo):</b>	2009-06-24	completed	 
<b>M2T JET 0.9.2 (Ganymede SR2):</b>	2009-02-28	completed	

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.m2t.jet](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.m2t.jet)

### Lead(s)

Paul Elder, IBM

### Committers

Chris Aniszczyk, EclipseSource

Nick Boldt, Red Hat Inc.

Joel Cheoua, individual

Paul Elder, IBM

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/m2t-dev/maillist.html>

## Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.m2t.jet>



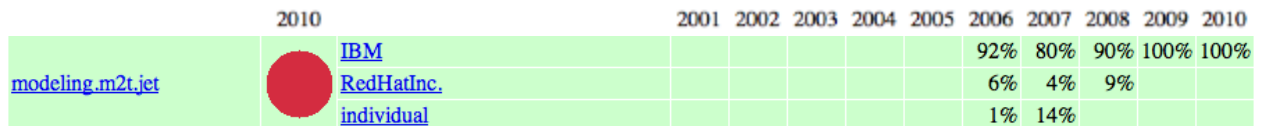
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.m2t.jet>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
IBM	1 (100%)	0 (0%)	1 (33.33%)	100%	3 (100%)	16 (100%)	5
<b>Total</b>	<b>1</b>	<b>2</b>	<b>3</b>		<b>3</b>	<b>16</b>	

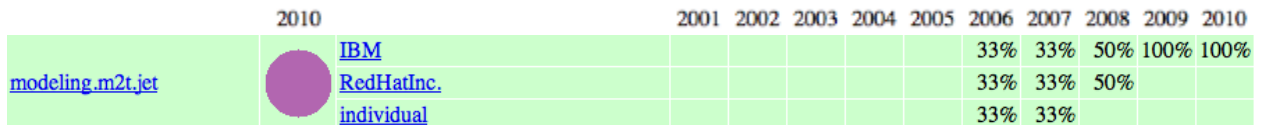
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

N/A

## Downloads (Jul 1, 2008 - Mar 1, 2010)





## Adopter Community

JET is the primary template engine used in IBM software products.

## Learning

Documentation: <http://wiki.eclipse.org/M2T-JET>

## Training

N/A

## Support

Forum: <http://www.eclipse.org/forums/eclipse.modeling.m2t>

Bugs: <https://bugs.eclipse.org/bugs/buglist.cgi?product=M2T&component=JET>

## Consulting

N/A

## Customizability

See Extensibility below.

## Extensibility

API and extension points are provided for the following:

- Custom tag libraries (JET relies primarily on tag libraries for functionality)
- Custom XPath functions (JET navigates models primarily with XPath expressions)
- Custom loading of models
- Adapting models the the JET XPath information model

## Scalability

Scalability tests have been done to up to 50,000 file writes.

## Usability

JET is a template engine. There is not much in the way of UI.

## Interoperability

JET depends on the Eclipse runtime and OSGi. Current releases with versions of Eclipse back to 3.2, versions of EMF back to 2.2 and Java 1.4 or later.

## Dependencies

<http://www.eclipse.org/modeling/m2t/downloads/?project=jet>

Eclipse

EMF EMF (Core)  
MDT UML2 (optional)

**Standards**

None.

# M2T Xpand

Model to Text Xpand

## Overview

<http://www.eclipse.org/modeling/m2t/?project=xpand>

Xpand is language specialized on code generation based on EMF models. It supports the following main language features:

- Pluggable Type System
- Dynamic Dispatch of Functions
- AOP
- Rich Expressions (OCL-like but with Java-like syntax)

Xpand comes with two sublanguages. Xtend is a functional language used to define extensions for existing meta models. Xtend also supports model to model transformation with automatic identity preservation. Check is a validation languages similar to OCL.

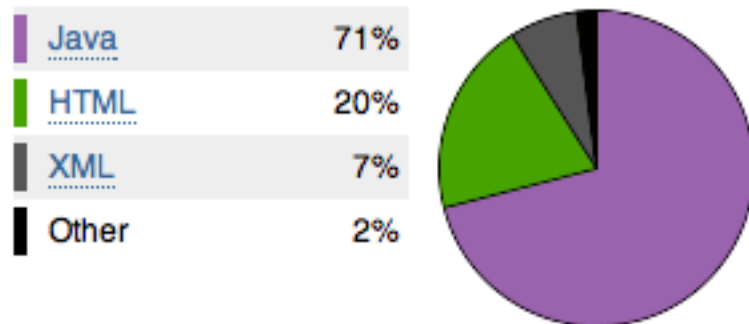
## Licensing

<https://www.ohloh.net/p/xpand/analyses/latest>



## Platforms / Languages

<https://www.ohloh.net/p/xpand/analyses/latest>



Home Page: <http://www.eclipse.org/modeling/m2t/?project=xpand>

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.m2t.xpand](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.m2t.xpand)

Wiki Page: <http://wiki.eclipse.org/Xpand>

## Predictability

Release Train? Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.m2t.xpand>

**New & Noteworthy:** [http://wiki.eclipse.org/Xpand\\_New\\_And\\_Noteworthy](http://wiki.eclipse.org/Xpand_New_And_Noteworthy)

**Release Notes:**

<http://www.eclipse.org/modeling/m2t/news/reInotes.php?project=xpand&version=0.7.x&types=>

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.m2t.xpand>



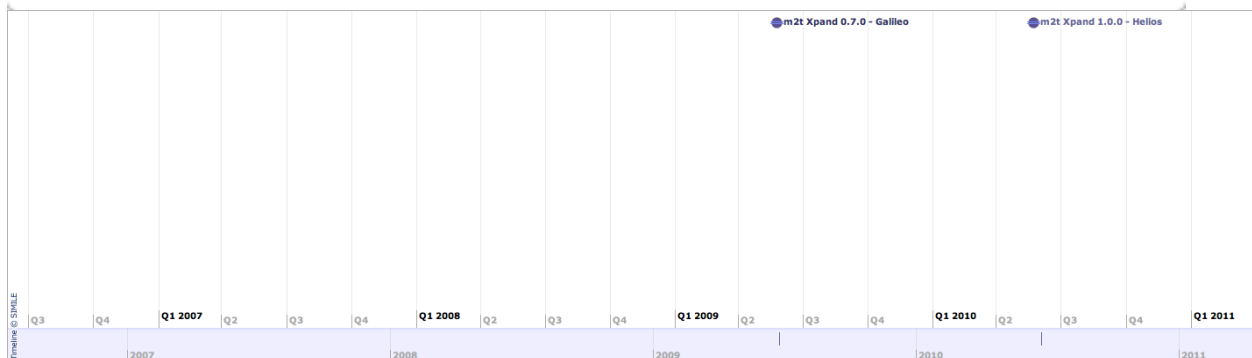
The Eclipse update site for this project is

<http://download.eclipse.org/modeling/m2t/xpand/updates/milestones/>.

Xpand 1.0.0 - Helios: 2010-06-23 planned

Xpand 0.7.0 - Galileo: 2009-06-24 completed

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.m2t.xpand](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.m2t.xpand)

### Lead(s)

Sven Efftinge, itemis AG

### Committers

Andre Arnold, individual  
Heiko Behrens, items AG  
Achim Demelt, individual  
Sven Efftinge, itemis AG  
Moritz Eysholdt, itemis AG  
Peter Friese, itemis AG  
Arno Haase, individual  
Dennis Hübner, itemis AG

Jan Koehnlein, itemis AG  
 Bernd Kolb, SAP AG  
 Patrick Schoenbach, itemis AG  
 Karsten Thoms, itemis AG  
 Markus Voelter, itemis AG  
 Sebastian Zarnekow, itemis AG

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/m2t-dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.m2t.xpand>

	by login				by 3-6-9 month activity				
	one	three	six	nine	one	three	six	nine	(9-6-3)
aarnold	174	174	1,639	2,326	174	174	1,639	2,326	
ademelt			233	233					
ahaase									
bkolb				36					
dhubner		9	611	1,151					
djockel	135	135	135	135	135	135	135	135	
hbehrens		22	13,813	13,876					
jkohnlein			27	28					
kthoms		7,748	7,839	8,200					
meysholdt			2	139					
mvoelter									
pfriese	6	6	6	359	6	6	6	359	
pschonbac				40,706					
sefftinge	1,257	1,376	2,529	3,087	1,257	1,376	2,529	3,087	
szarnekow		246	532	668					
ademelt			233	233					
jkohnlein			27	28					
meysholdt			2	139					
bkolb				36					
pschonbac				40,706					
ahaase									
mvoelter									

Graphs that slope up to the right indicate increasing activity by the committer. Those that slope down to the right indicate decreasing activity. Bars are nine, six and three month activity history scaled per committer.

### Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.m2t.xpand>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
individual	1 (14.29%)	2 (28.57%)	3 (21.43%)	33.33%	98 (39.52%)	174 (8.29%)	2
itemisAG	6 (85.71%)	4 (57.14%)	10 (71.43%)	60%	150 (60.48%)	1,925 (91.71%)	13
<b>Total</b>	<b>7</b>	<b>7</b>	<b>14</b>		<b>248</b>	<b>2,099</b>	

### Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>

	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
modeling.m2t.xpand										
	SAPAG									
	individual	99%	1%	1%						
	itemisAG	5%	2%	8%						
		1%	94%	96%	91%					

### Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>

	2010	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
modeling.m2t.xpand								50%	14%	8%	
	SAPAG										
	individual								14%	16%	14%
	itemisAG							50%	71%	75%	85%

## User Community

Xpand is widely used for code generation and model to model transformation. It is the default M2T language of choice for any Xtext based DSL.

The newsgroup contains about 10 messages per day.

### Downloads (Jul 1, 2008 - Mar 1, 2010)



## Adopter Community

Xpand is integrated with Xtext as well as GMF (and hence any products based on those).

## Learning

Documentation: <http://help.eclipse.org/galileo/topic/org.eclipse.xpand.doc/help/ch01.html>

### Training

[http://www.opcoach.com/en/Training\\_Courses.html](http://www.opcoach.com/en/Training_Courses.html)

<http://www.itemis.com/itemis-ag/language=en/2642/education-and-coaching>

## Support

Forum: <http://www.eclipse.org/forums/eclipse.modeling.m2t>

Bugs: <https://bugs.eclipse.org/bugs/buglist.cgi?product=M2T&component=Xpand>

### Consulting

<http://www.opcoach.com/en/Consulting.html>

<http://www.itemis.com/itemis-ag/language=en/2621/portfolio>

## Customizability

Most of the internal concepts can be exchanged in order to make Xpand work well in different scenarios. *Xpand is by far the most customizable of the code generation technologies at Eclipse. The primary mechanism is the extensible type system.*

## Extensibility

Xpand provides an extensible type system, which allows the integration of different type systems (e.g. XSD, UML2, EMF, JavaBeans). Also, the runtime can be run in any Java process.

*Xpand is also very extensible in terms of working with models (adding to the standard library) which can be done through the Xtend language or even with Java. Adding these extensions that greatly simplify the Xpand templates is very straightforward and easy to do and does not require extensive Eclipse knowledge.*

## Scalability

Xpand is an interpreted language.

*Xpand suffers greatly on large models because it is interpreted so some thought has to be put into the architecture and organization of the code generator. There are efforts to have an intermediate language that both Xpand and Xtend are compiled into in order to improve the scalability (performance and resource usage) and ultimately there are efforts to compile Xpand to Java (much like JET) in order to get even better performance. That being said, they do have profiling capabilities that allow you to identify the bottlenecks in your generator.*

## Usability

Xpand is shipped with an Eclipse editor supporting syntax coloring, code completion, navigation, static analyses, outline, etc..

*The biggest downfall of Xpand is its lack of a debugger and a very weak debugger for Xtend. Through the profiling capabilities, it is possible to capture the call graph of the generator execution and debug that way.*

## Interoperability

Xpand provides an extensible type system, which allows the integration of different type systems (e.g. XSD, UML2, EMF, JavaBeans). Also, the runtime can be run in any Java process.

## Dependencies

<http://www.eclipse.org/modeling/m2t/downloads/?project=xpand>

Eclipse  
EMF EMF (Core)  
EMFT MWE  
MDT UML2  
Orbit

## Standards

None.

# MDT BPMN2

Model Development Tools Business Process Model and Notation 2.x

## Overview

<http://www.eclipse.org/modeling/mdt/?project=bpmn2>

BPMN2 is an open source component of the Model Development Tools (MDT) subproject to provide a metamodel implementation based on the forthcoming [Business Process Model and Notation \(BPMN\) 2.0](#) OMG specification.

The objectives of the BPMN2 component are to provide

- an open source "reference" implementation of the BPMN 2.0 specification
- an EMF-based foundation on which business process modeling tools can be built
- a basis for integrating and interchanging artifacts between business process modeling tools
- a forum for engaging the community in validation of the BPMN 2.0 specification
- an opportunity for increased collaboration between Eclipse and the OMG

## Licensing

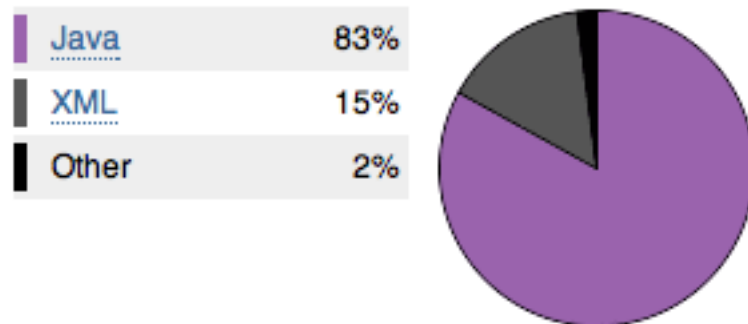
<https://www.ohloh.net/p/mdt-bpmn2/analyses/latest>

Eclipse Public License

466 files

## Platforms / Languages

<https://www.ohloh.net/p/mdt-bpmn2/analyses/latest>



Home Page: <http://www.eclipse.org/modeling/mdt/?project=bpmn2>

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.mdt.bpmn2](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.mdt.bpmn2)

Wiki Page: <http://wiki.eclipse.org/MDT/BPMN2>

## Predictability

Release Train? No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>



**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.mdt.bpmn2>  
**New & Noteworthy:** [http://wiki.eclipse.org/MDT\\_Helios\\_New\\_and\\_Noteworthy](http://wiki.eclipse.org/MDT_Helios_New_and_Noteworthy)  
**Release Notes:** N/A



## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.mdt.bpmn2>

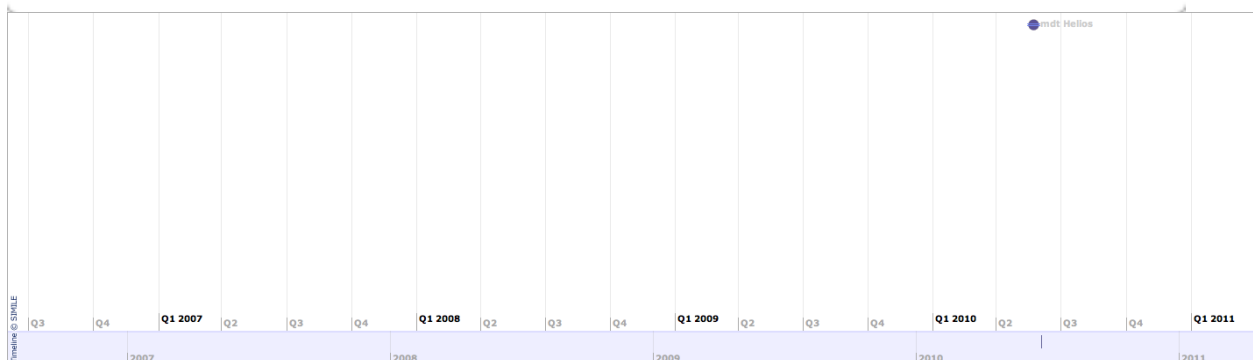
### Releases

The Eclipse update site for this project is

<http://download.eclipse.org/modeling/mdt/updates/releases/>.

**Helios:** 2010-06-23 tentative  

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.mdt.bpmn2](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.mdt.bpmn2)

### Lead(s)

Kenn Hussey, individual

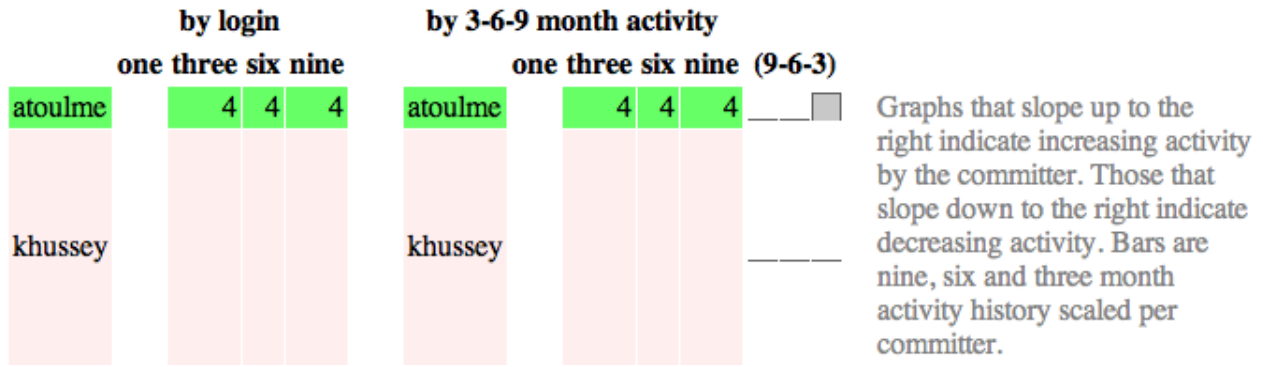
### Committers

Kenn Hussey, individual  
Antoine Toulme, Intalio Inc.

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/mdt-bpmn2.dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.mdt.bpmn2>



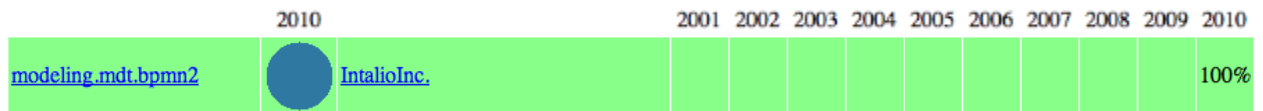
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.mdt.bpmn2>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
IntalioInc.	1 (100%)	0 (0%)	1 (100%)	100%	1,596 (100%)	4 (100%)	0
<b>Total</b>	<b>1</b>	<b>0</b>	<b>1</b>		<b>1,596</b>	<b>4</b>	

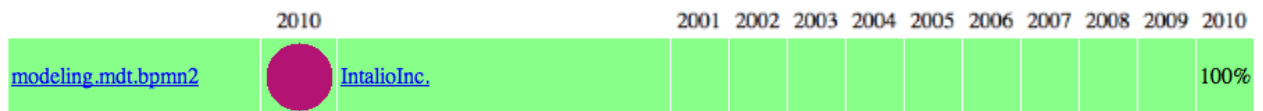
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

TBD

### Downloads (Jul 1, 2008 - Mar 1, 2010)



## Adopter Community

The adopter community inside Eclipse ranges from the BPMN Modeler and the JWT project to the new eBPM project. Outside Eclipse, vendors interested in an open source implementation of the BPMN 2.0 metamodel will be sure to take notice once it is available.

# Learning

Documentation: <http://wiki.eclipse.org/MDT/BPMN2>

## Training

N/A

# Support

Forum: <http://www.eclipse.org/forums/eclipse.modeling.mdt>

Bugs: <https://bugs.eclipse.org/bugs/buglist.cgi?product=MDT&component=BPMN2>

## Consulting

N/A

# Customizability

No particular customization is support, although it would be possible to take the Ecore model and tailor it for other purposes.

# Extensibility

The project is extensible via the EMF APIs.

# Scalability

N/A

# Usability

N/A

# Interoperability

Interoperability should be possible based on the BPMN 2.0 metamodel, whereas no particular effort will be made to be interoperable with previous versions of the specification (out of scope).

## Dependencies

Eclipse  
EMF EMF (Core)

## Standards

[Business Process Model and Notation \(BPMN\)](#)

# MDT MST

Model Development Tools Metamodel Specification Tools

## Overview

<http://www.eclipse.org/modeling/mdt/?project=mst>

MST is an open source sub-project of the Model Development Tools (MDT) project to provide tooling for the development of MOFTM-compliant metamodels and specifications based on them.

The goals of the MST project are to

- leverage the CMOF (de)serialization support that was introduced in the UML2 project as part of the Ganymede release
- customize and/or extend the existing (or forthcoming) UMLTM editors (primarily for class and package/profile diagrams) to expose CMOF concepts which are missing in UML (like identifiers, namespace URIs, and XMITM tags)
- provide a mechanism for generating a specification document (or at least a decent boiler plate for one) directly from a metamodel using BIRT
- automate the mapping between a metamodel and its profile representation (if there is one)
- make use of the Eclipse Process Framework (EPF) to document and coordinate the specification development process
- provide a proof of concept for changes and/or extensions to EMF and/or UML2 to better support richer and evolving metamodels, as per the MOF Support for Semantic Structures RFP

## Licensing

(Eclipse Public License)

## Platforms / Languages

(Java)

**Home Page:** <http://www.eclipse.org/modeling/mdt/?project=mst>

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.mdt.mst](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.mdt.mst)

**Wiki Page:** <http://wiki.eclipse.org/MDT/MST>

## Predictability

**Release Train?** No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.mdt.mst>

**New & Noteworthy:** [http://wiki.eclipse.org/MDT\\_Helios\\_New\\_and\\_Noteworthy](http://wiki.eclipse.org/MDT_Helios_New_and_Noteworthy)

**Release Notes:** N/A

## Release Timeline



<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.mdt.mst>



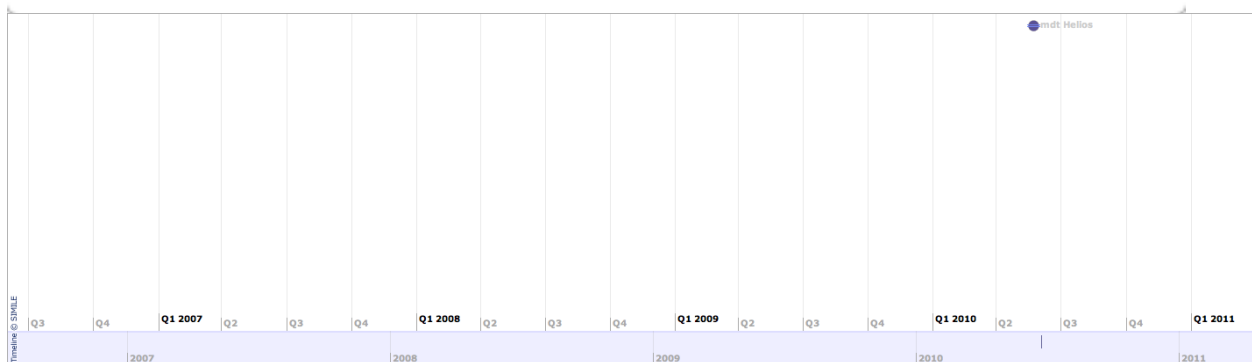
## Releases

The Eclipse update site for this project is

<http://download.eclipse.org/modeling/mdt/updates/releases/>.

Hellos: 2010-06-23 tentative  

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.mdt.mst](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.mdt.mst)

### Lead(s)

Kenn Hussey, individual

### Committers

Chris Armstrong

Tom Digre

Kenn Hussey, individual

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/mdt-mst.dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.mdt.mst>

N/A

### Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.mdt.mst>

N/A

## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>

2010

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

N/A

## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>

2010

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

N/A

## User Community

N/A

## Adopter Community

N/A

## Learning

Documentation: <http://wiki.eclipse.org/MDT/MST>

## Training

N/A

## Support

Forum: <http://www.eclipse.org/forums/eclipse.mst>

Bugs: <https://bugs.eclipse.org/bugs/buglist.cgi?product=MDT&component=MST>

## Consulting

N/A

## Customizability

N/A

## Extensibility

N/A

## Scalability

N/A

## Usability

N/A

# Interoperability

MST will support interoperability based on its conformance to various OMG specifications (see below), in particular MOF and XMI.

## Dependencies

Eclipse  
EMF EMF (Core)  
MDT Papyrus  
MDT UML2

## Standards

[Meta Object Facility \(MOF\)](#)  
[MOF Support for Semantic Structures](#)  
[XML Metadata Interchange \(XMI\)](#)

# MDT OCL

Model Development Tools Object Constraint Language

## Overview

<http://www.eclipse.org/modeling/mdt/?project=ocl>

OCL is an implementation of the **Object Constraint Language (OCL)** OMG standard for EMF-based models.

The OCL component provides the following capabilities to support OCL integration:

- Defines APIs for parsing and evaluating OCL constraints and queries on EMF models.
- Defines an Ecore implementation of the OCL abstract syntax model, including support for serialization of parsed OCL expressions.
- Provides a Visitor API for analyzing/transforming the AST model of OCL expressions.
- Provides an extensibility API for clients to customize the parsing and evaluation environments used by the parser.

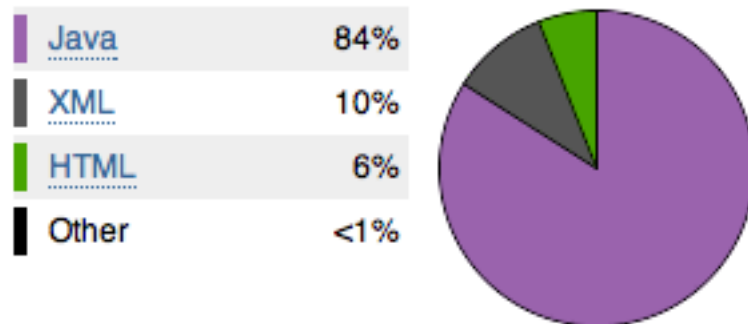
## Licensing

[http://www.ohloh.net/p/mdt\\_ocl/analyses/latest](http://www.ohloh.net/p/mdt_ocl/analyses/latest)

Eclipse Public License 999 files

## Platforms / Languages

[http://www.ohloh.net/p/mdt\\_ocl/analyses/latest](http://www.ohloh.net/p/mdt_ocl/analyses/latest)



Home Page: <http://www.eclipse.org/modeling/mdt/?project=ocl>

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.mdt.ocl](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.mdt.ocl)

Wiki Page: <http://wiki.eclipse.org/index.php/MDT/OCL>

## Predictability

Release Train? Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>



**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.mdt.ocl>  
**New & Noteworthy:** [http://wiki.eclipse.org/MDT\\_Helios\\_New\\_and\\_Noteworthy](http://wiki.eclipse.org/MDT_Helios_New_and_Noteworthy)  
**Release Notes:** N/A

## Release Timeline





<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.mdt.ocl>



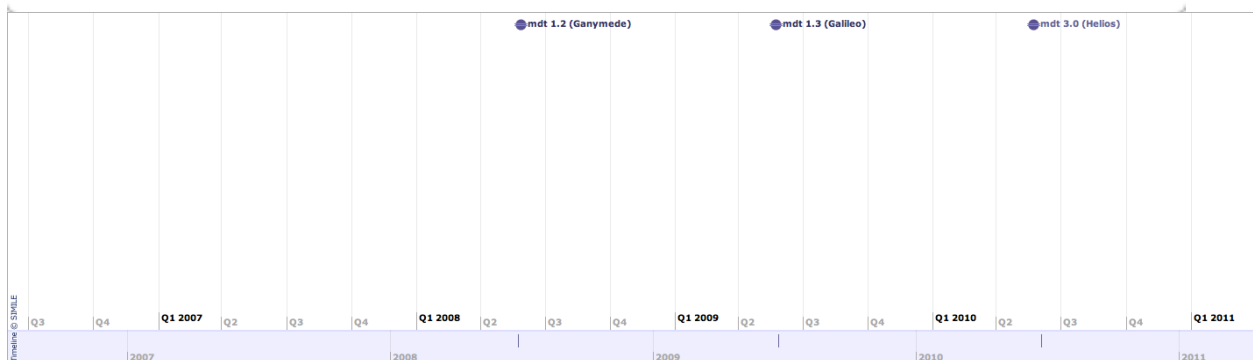
## Releases

The Eclipse update site for this project is

[http://download.eclipse.org/modeling/mdt/ocl/3\\_0/updates/milestones/](http://download.eclipse.org/modeling/mdt/ocl/3_0/updates/milestones/).

- 3.0 (Helios):** 2010-06-23 planned 
- 1.3 (Galileo):** 2009-06-23 completed  
- 1.2 (Ganymede):** 2008-06-27 completed 

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.mdt.ocl](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.mdt.ocl)

### Lead(s)

Aleksandr Igdalov, Borland Software

### Committers

Laurent Goubet, OBEO

Aleksandr Igdalov, Borland Software

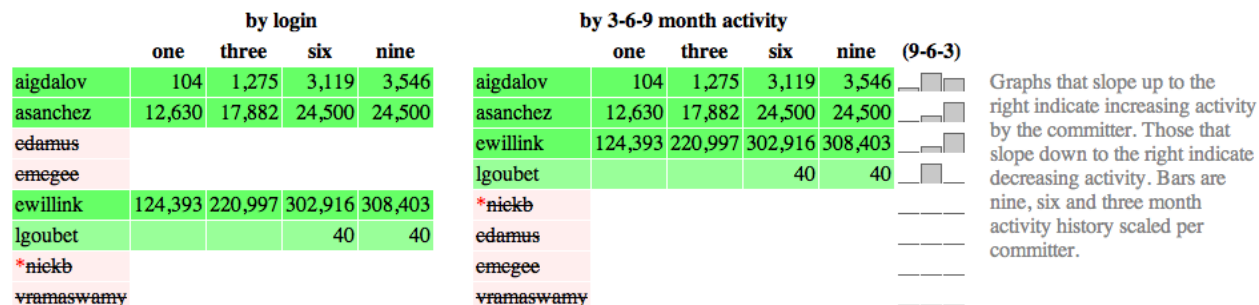
Adolfo Saez-Barbudo Herrera, individual

Ed Willink, Thales

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/mdt-ocl.dev/maillist.html>

## Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.mdt.ocl>



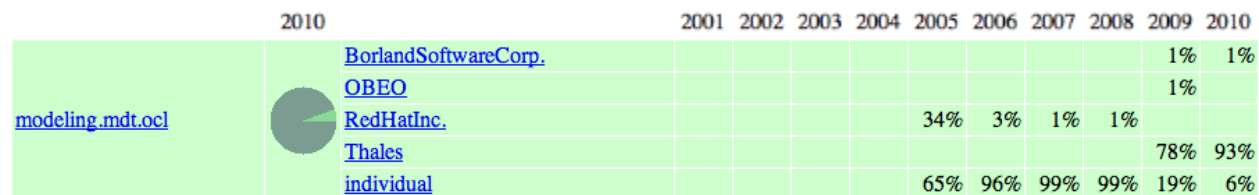
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.mdt.ocl>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
BorlandSoftwareCorp.	1 (33.33%)	0 (0%)	1 (12.5%)	100%	28 (0.67%)	112 (0.06%)	4
individual	1 (33.33%)	3 (60%)	4 (50%)	25%	108 (2.58%)	12,701 (6.93%)	118
Thales	1 (33.33%)	0 (0%)	1 (12.5%)	100%	4,058 (96.76%)	170,540 (93.01%)	42
<b>Total</b>	<b>3</b>	<b>5</b>	<b>8</b>		<b>4,194</b>	<b>183,353</b>	

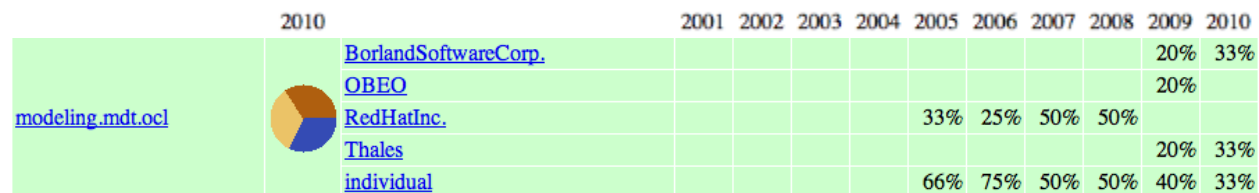
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

MDT OCL is widely used by the modeling community, in particular in downstream projects at Eclipse such as M2M QVTo, M2M QVTr, M2T Acceleo, GMF and a range of commercial projects such as Borland Together for Eclipse.

Public communication with users is done in the forum:

[http://www.eclipse.org/forums/index.php?t=thread&frm\\_id=26](http://www.eclipse.org/forums/index.php?t=thread&frm_id=26)

## Metrics

- i. Downloads. Number of downloads over time – N/A
- ii. Involvement. Number of bugs opened over time (and, if possible, by whom). Number of newsgroup/forum posts over time (and, if possible, by whom).

Year	Opened bugs	Newsgroup posts
2005	18	N/A
2006	106	N/A
2007	125	957
2008	105	682
2009	135	575
2010 (1 March)	26	24

### Downloads (Jul 1, 2008 - Mar 1, 2010)



## Adopter Community

MDT OCL is widely used by the modeling community, in particular in downstream projects at Eclipse such as M2M QVTo, M2M QVTr, M2T Acceleo, GMF and a range of commercial projects such as Borland Together for Eclipse.

### Metrics

- i. Internal. Number (or percentage) of committers/contributors that have reused the framework/tool.

This number is hard to estimate. I know about 15 committers/contributors who have reused or contributed to MDT OCL.

- ii. External. Number of external adopters (if/where possible to determine).

This number is even harder to estimate. I know about 50 IT professionals who have used MDT OCL in practice.

## Learning

Documentation: <http://wiki.eclipse.org/MDT/OCL>

### Training

<http://eclipsegang.com/>

## Support

**Forum:** <http://www.eclipse.org/forums/eclipse.modeling.mdt.ocl>

**Bugs:** <https://bugs.eclipse.org/bugs/buglist.cgi?product=MDT&component=OCL>

## Consulting

<http://eclipsegang.com/>

## Customizability

a. Tools. The existing OCL console for evaluation of OCL expression can be found in the OCL examples. It can serve as a base for more complex editors. MDT OCL provides useful syntax helper support which can be used in third-party editors.

b. Processes. OCL has different levels of customization: customization of the compilation and evaluation environments such as defining additional user-defined variables and operations and other additions to the standard library.

c. Languages. MDT OCL is aimed to be an implementation of an OMG language standard. However, for some reasons it might be useful to perform some deviations from the language specification. MDT OCL allows them through a flexible mechanism of parsing and evaluation options.

d. Methods. Although the choice of analysis, design, testing and other methods is by default pre-ordained by the implementations the individual projects and users have the possibility to override many fragments of the code and customize the project according to their needs.

## Extensibility

a. Tools. OCL parsing/evaluation engine can be integrated with arbitrary text editors, meanwhile, the work on specialized OCL editors is now in progress.

b. Processes. OCL is a model query language which is not allowed to change models. However, its QVT extension allows to perform model creation and modifications. This is a completely different scenario beyond the scope of pure OCL which proves that OCL applicability is highly extensible. Another example is the ability to plug-in different types of models such as EMF or UML2. Users are welcome to implement their own metamodel framework, e.g. EMOF, and plug it into OCL.

c. Languages. Although MDT OCL is aimed to be an implementation of an OMG language standard, it allows grammar extensibility and conceptual changes of compilation/evaluation environment. Operational QVT based on OCL is a good example of a project which reuses, extends and overrides OCL behaviour in many aspects.

d. Methods. Although the choice of analysis, design, testing and other methods is by default pre-ordained by the implementations, individual projects and users have the possibility to extend the framework and perform the activity by themselves.

## Scalability

Since currently MDT OCL is mostly an expression-evaluation engine team support is not required here. Upon the development of OCL editors, the standard means of scalability such as Eclipse team support will be used.

## Usability

The current state of MDT OCL implies significant knowledge of underlying technologies and standards such as EMF, MOF, OCL standard and UML2 (optional). To minimize the cognitive load on users the committers provide examples, tutorials, wikis and respond in newsgroups.

# Interoperability

MDT OCL is highly integrated with modeling standards such as EMF and UML2. Proprietary approaches such as hardcoded standard library are being eliminated. In particular the standard library is being upgraded to become fully EMF-based and model-driven.

## Dependencies

<http://www.eclipse.org/modeling/mdt/downloads/?project=ocl>

Eclipse  
EMF EMF (Core)  
MDT UML2  
Orbit

## Standards

[Object Constraint Language](#)

# MDT Papyrus

Model Development Tools Papyrus



## Overview

<http://www.eclipse.org/modeling/mdt/?project=papyrus>

Papyrus is a graphical editing tool that provides UML2 editors and environment to create and combine any graphical editor (domain-specific modeling language) defined from Ecore metamodel or from UML2 profile. It is Eclipse-based and it uses the Eclipse Graphical Modeling Framework.

The initial version of the tool, which is at release 1.12, is in maintenance mode but is still being used by numerous industrial organizations for their model-based development, including notably Airbus, Thales, ST Microelectronics, and Continental. This version is being replaced by new Papyrus component of the official Eclipse MDT project, and which utilizes other components of the project, such as GEF, GMF, UML2, etc. The initial public release of this version is planned for July, 2010. (NB: Henceforth, we shall use "Papyrus" to refer to the new version and "Papyrus 1" for the older version.)

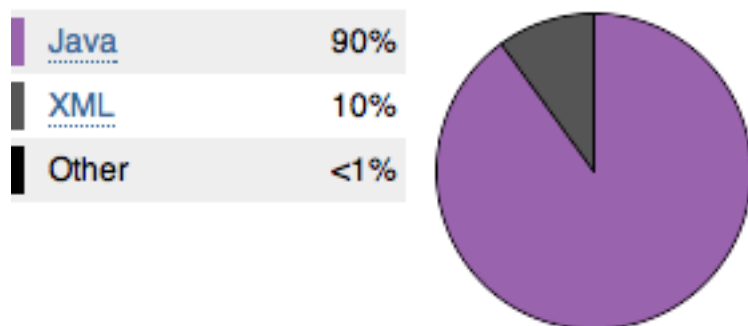
## Licensing

<https://www.ohloh.net/p/mdt-papyrus/analyses/latest>

Eclipse Public License	5990 files
GNU Lesser General Public License 3	102 files

## Platforms / Languages

<https://www.ohloh.net/p/mdt-papyrus/analyses/latest>



Home Page: <http://www.eclipse.org/modeling/mdt/?project=papyrus> (<http://papyrusuml.org> for Papyrus 1)

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.mdt.papyrus](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.mdt.papyrus)

Wiki Page: <http://wiki.eclipse.org/MDT/Papyrus>

## Predictability

Release Train? No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)  
<http://www.eclipse.org/callisto/callistoprojects.php>

Note that the project plans to join the Eclipse train, immediately following the new Papyrus version 0.7 release in July 2010. In the meantime, development is tracking the Helios schedule, although not it is not formally registered as part of the Helios release.

**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.mdt.papyrus>  
**New & Noteworthy:** [http://wiki.eclipse.org/MDT\\_Helios\\_New\\_and\\_Noteworthy](http://wiki.eclipse.org/MDT_Helios_New_and_Noteworthy)  
**Release Notes:** N/A

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.mdt.papyrus>

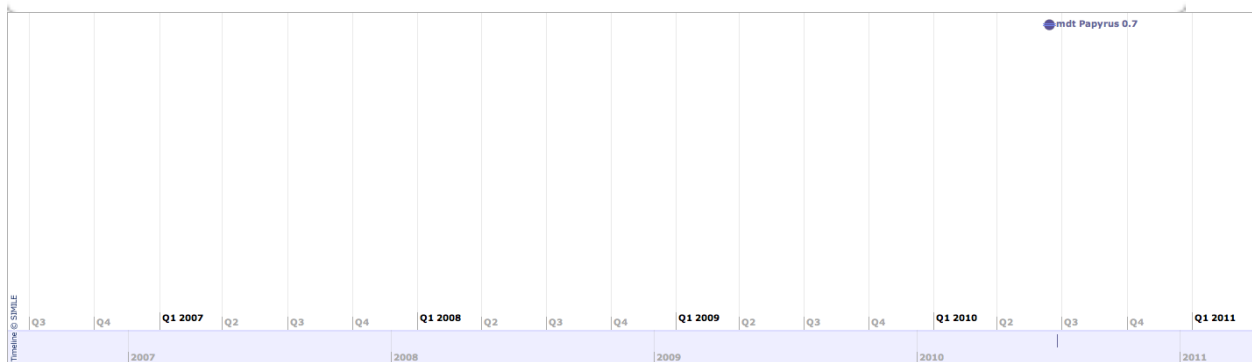


## Releases

No Eclipse update site has been listed.

Papyrus 0.7: 2010-07-14 planned

Here is the **Project Release Timeline**.



Release milestones occurring at roughly 6 week intervals and follow the Platform milestone releases by approximately 1 week; that is, until the final 3.6 release of the Platform, upon which MDT Papyrus and other projects will release simultaneously. It is anticipated that MDT Papyrus will synchronize its milestones with the Helios milestone schedule.

- M1** 08/17/2009
- M2** 09/28/2009
- M3** 11/09/2009
- M4** 12/14/2009
- M5** 02/01/2010
- M6** 03/15/2010 (API freeze)
- M7** 05/03/2010 (Feature Freeze)
- RC1** 05/17/2010
- RC2** 05/24/2010

RC3 05/31/2010  
 RC4 06/07/2010  
 RC5 06/14/2010  
 Helios 06/23/2010

## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.mdt.papyrus](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.mdt.papyrus)

### Lead(s)

Sebastien Gerard, CEA LIST

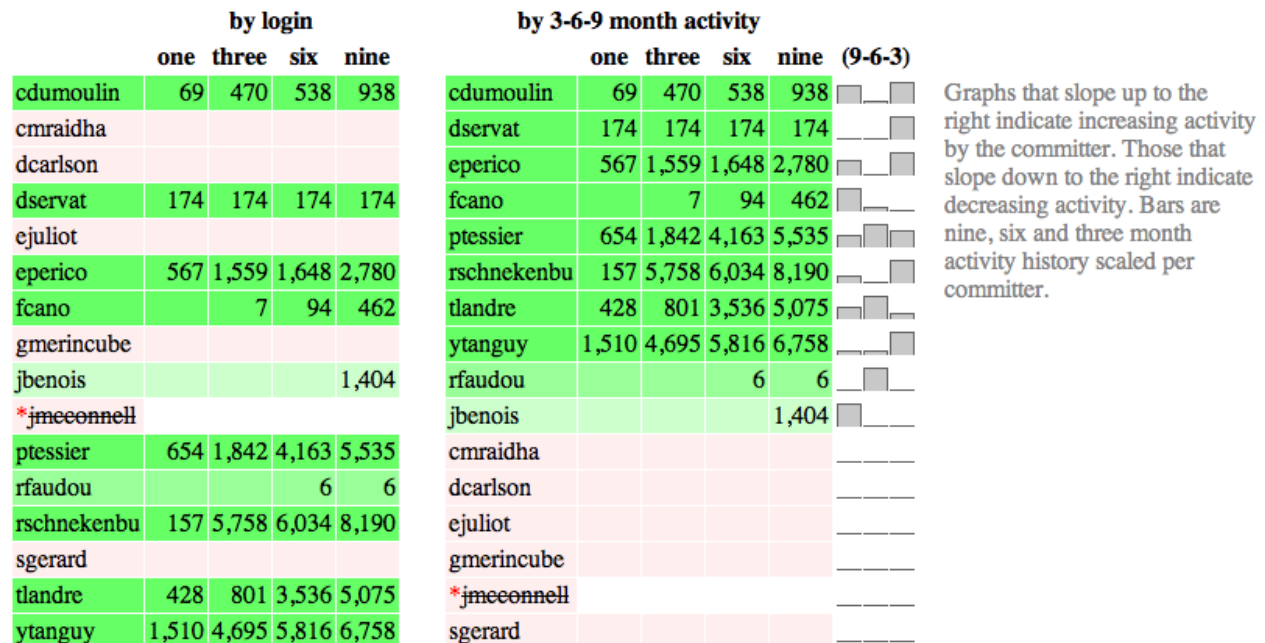
### Committers

Jerome Benoit, OBEO  
 Francisco Javier Cano, individual  
 David Carlson, individual  
 Cedric Dumoulin, individual  
 Raphael Faudou, individual  
 Sebastien Gerard, CEA LIST  
 Etienne Juliot, OBEO  
 Thibault Landre, individual  
 Gabriel Merin Cubero, individual  
 Chokri Mraidha, CEA LIST  
 Emilien Perico, individual  
 Remi Schnekenburger, CEA LIST  
 David Servat, CEA LIST  
 Yann Tanguy, CEA LIST  
 Patrick Tessier, CEA LIST

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/mdt-papyrus.dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.mdt.papyrus>





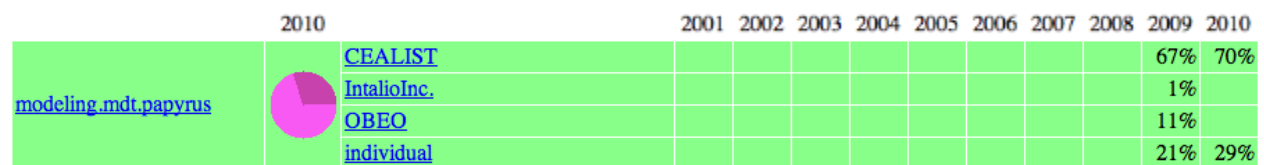
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.mdt.papyrus>

	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
CEALIST	4 (57.14%)	2 (28.57%)	6 (42.86%)	66.67%	3,475 (70.5%)	3,475 (70.5%)	1
individual	3 (42.86%)	3 (42.86%)	6 (42.86%)	50%	1,454 (29.5%)	1,454 (29.5%)	1
<b>Total</b>	<b>7</b>	<b>7</b>	<b>14</b>		<b>4,929</b>	<b>4,929</b>	

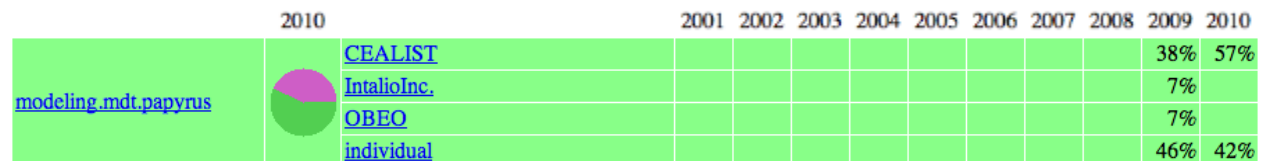
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

Papyrus 1, along with its 4 standard profiles (MARTE, SysML, CCM, and EAST-ADL), is currently used by several large industrial enterprises (e.g., Continental, Airbus Industrie, ST Microelectronics, Thales) as well as a number of European Community projects (e.g., EDONA, Sophia, ATESSST 2, CESAR, e-DIANA, INTERESTED, VERDE, PROTEUS, OPEES, Lambda, RT-Describe, IMOFIS, SIRSEC, Nano2012/SHARE, MAENAD, IDM++, and others).

To date, there have been around 480,000 downloads of Papyrus 1. The upcoming new Papyrus version will be an integral components of the TOPCASED tools suite for safety-critical system design. It will replace the native UML 2 tool. The team that built the TOPCASED UML 2 tool as well as the team from the [Valencian Regional Ministry of Infrastructure and Transport](#) responsible for the MOSKitt UML tool have been merged into the New Papyrus development team. Papyrus will be used to provide the public implementation of the EAST-ADL 2 modeler for automotive domain supporter by the consortium built from the ATESSST, ATESSST 2 and MAENAD projects.

## Downloads (Jul 1, 2008 - Mar 1, 2010)



## Adopter Community

As noted, the new Papyrus will be incorporated as a primary model authoring tool within the TOPCASED tools suite and OPEES.

## Learning

**Documentation:** <http://wiki.eclipse.org/MDT/Papyrus>

### Training

On-line tutorials available on documentation sites.

## Support

**Forum:** <http://www.eclipse.org/forums/eclipse.papyrus>

**Bugs:** <https://bugs.eclipse.org/bugs/buglist.cgi?product=MDT&component=Papyrus>

### Consulting

N/A

## Customizability

The new Papyrus has an extensive customization capability on top of the customization features available from its base components (Eclipse platform EMF, GMF, etc.). The Papyrus specific customizations include: choice of text editors for model commenting, layout tools and algorithms, tool palette content and look, domain-specific graphical editors, methodology-specific design templates. Furthermore, the architecture was designed to allow easy replacement of implementation components and services, such as GMF.

## Extensibility

A key capability of Papyrus is the ability to define domain-specific profiles, thereby extending and specializing (and, where desired, restricting) the capabilities of standard UML. Once defined, Papyrus can then be customized and used as a custom editor for the newly-defined language, offering all the capabilities that it normally provides for standard UML.

Furthermore, The new Papyrus is designed to allow the addition of new UML metamodels and model libraries. It also allows extension of its basic tool capabilities through new user-specific menu items and corresponding functionality. Finally, it includes an "event" port, which can be used by other tools to detect and react to changes in Papyrus models.

## Scalability

At present, preliminary stress testing has been performed on the new Papyrus by two commercial users with encouraging results. However, there has, as yet, been no systematic study of this aspect, although preliminary studies are being conducted to exploit Eclipse-based technologies such as EMF CDO to deal with such issues, if necessary.

## Usability

Papyrus fits within the user paradigm of Eclipse. Its numerous customization and extension capabilities listed above are intended to facilitate usability, by allowing the tool to be adjusted to a particular domain and mode of use.

## Interoperability

Papyrus supports standard XMI, allowing interchange with other tools supporting the same standard. In addition, as noted above, it allows coupling to other tools through its event port capability. In the past, Papyrus 1 has been successfully integrated with a number external tools, most notably tools supporting formal schedulability analysis.

### Dependencies

As noted earlier, the new Papyrus has been architected to allow relatively easy replacement of many of its internal components; for example, replacing a component like GMF, by a different but semantically equivalent component.

Eclipse  
EMF EMF (Core)  
EMF Query  
EMF Transaction  
EMF Validation  
GEF  
GMF (runtime)  
M2M QVTo  
MDT OCL  
MDT UML2

Optional dependencies:

Orbit (ANTLR runtime, for Property/Port/Parameters direct editors)  
EPF (Eclipse Process Framework sub-feature; Ulto edit comments using a subset of HTML – only on Windows 32 platforms)  
GMF (tooling, for GMF-based diagram editors, developers only)

### Standards

[Unified Modeling Language](#)  
[OMG Systems Modeling Language \(SysML\)](#)  
[Object Constraint Language](#)  
OMG MARTE profile  
OMG CCM and LwCCM profiles (Papyrus 1)  
EAST-ADL profile (Papyrus 1)

# MDT UML2

Model Development Tools Unified Modeling Language 2.x

## Overview

<http://www.eclipse.org/modeling/mdt/?project=uml2>

UML2 is an EMF-based implementation of the [Unified Modeling Language \(UMLTM\) 2.x](#) OMG metamodel for the Eclipse platform.

The objectives of the UML2 component are to provide

- a useable implementation of the UML metamodel to support the development of modeling tools
- a common XMI schema to facilitate interchange of semantic models
- test cases as a means of validating the specification
- validation rules as a means of defining and enforcing levels of compliance

## Licensing

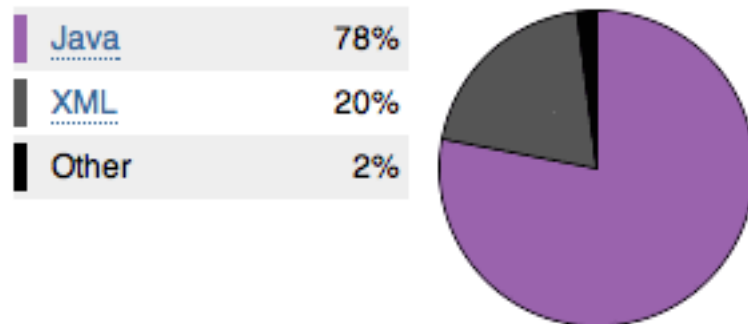
<https://www.ohloh.net/p/mdt-uml2/analyses/latest>

Eclipse Public License

2720 files

## Platforms / Languages

<https://www.ohloh.net/p/mdt-uml2/analyses/latest>



**Home Page:** <http://www.eclipse.org/modeling/mdt/?project=uml2>

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.mdt.uml2](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.mdt.uml2)

**Wiki Page:** <http://wiki.eclipse.org/MDT/UML2>

## Predictability

The UML2 project has met all deadlines for all releases.

**Release Train?** Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>


**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.mdt.uml2>  
**New & Noteworthy:** [http://wiki.eclipse.org/MDT\\_Helios\\_New\\_and\\_Noteworthy](http://wiki.eclipse.org/MDT_Helios_New_and_Noteworthy)  
**Release Notes:** <http://www.eclipse.org/modeling/mdt/news/relnotes.php?project=uml2&version=HEAD>

## Release Timeline



<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.mdt.uml2>

### Releases

The Eclipse update site for this project is  
<http://download.eclipse.org/modeling/mdt/updates/releases/>.

**UML2 3.1.0:** 2010-06-23 planned 

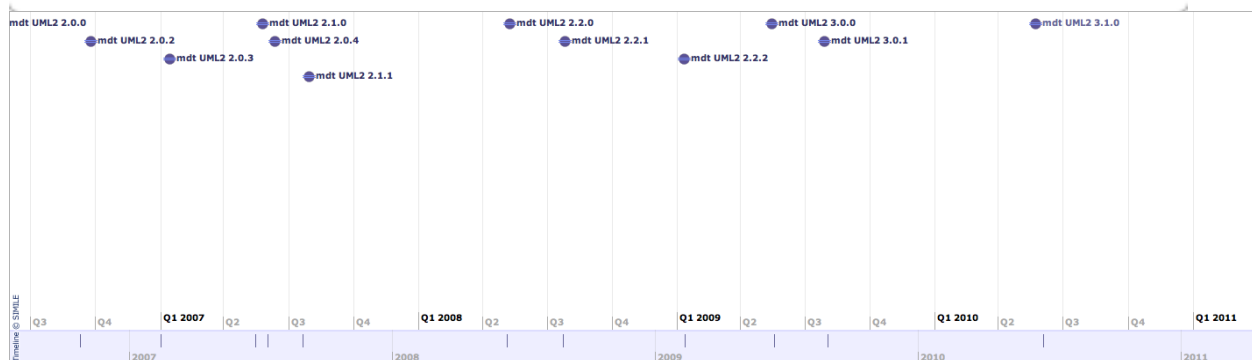
**UML2 3.0.1:** 2009-08-28 completed

**UML2 3.0.0:** 2009-06-15 completed  

**UML2 2.2.2:** 2009-02-10 completed

**UML2 2.2.1:** 2008-08-26 completed

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.mdt.uml2](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.mdt.uml2)

### Lead(s)

James Bruck, IBM

### Committers

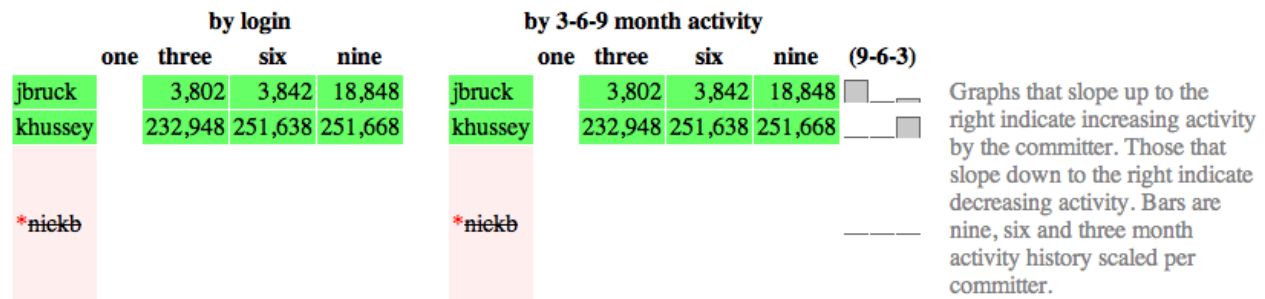
James Bruck, IBM

Kenn Hussey, individual

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/mdt-uml2.dev/maillist.html>

## Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.mdt.uml2>



## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.mdt.uml2>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
Total	0	3	3		0	0	

## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>

	2010	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
modeling.mdt.uml2	IBM							7%	40%	7%	
	RedHatInc.					1%	1%	1%	1%		
	individual				100%	99%	99%	91%	58%	92%	

## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>

	2010	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
modeling.mdt.uml2	IBM							33%	33%	50%	
	RedHatInc.					50%	50%	33%	33%		
	individual				100%	50%	50%	33%	33%	50%	

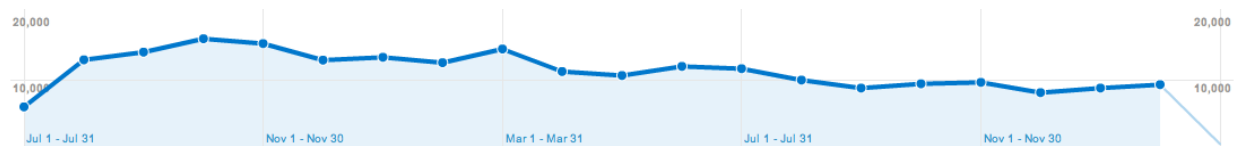
## User Community

[Open bugs](#) .

### Status

	NEW	ASSIGNED	REOPENED	RESOLVED	VERIFIED	CLOSED	Total
blocker	.	.	.	3	3	4	10
critical	.	.	.	6	6	3	15
major	9	.	.	9	42	10	70
normal	30	.	2	62	245	60	399
minor	6	.	.	3	8	6	23
trivial	1	.	.	.	3	1	5
enhancement	21	4	1	9	79	10	124
<b>Total</b>	<b>67</b>	<b>4</b>	<b>3</b>	<b>92</b>	<b>386</b>	<b>94</b>	<b>646</b>

### Downloads (Jul 1, 2008 - Mar 1, 2010)



## Adopter Community

<http://www.modeliosoft.com/>

<http://wiki.eclipse.org/MDT-UML2-Tool-Compatibility>

List of IBM products that have adopted UML2:

- ⌚ IBM Data Studio 1.1
- ⌚ WebSphere Classic Federation Server for z/OS v9.5
- ⌚ WebSphere Classic Replication Server for z/OS v9.5
- ⌚ Optim Data Privacy Solution 1.2
- ⌚ Rational Application Developer for WebSphere Software 7.0.0.8
- ⌚ Rational Software Architect
- ⌚ Rational Method Composer 7.2
- ⌚ IBM Rational Developer for System z 7.5
- ⌚ Rational Software Modeler 7.5
- ⌚ Rational Data Architect 7.5
- ⌚ Rational Application Developer for WebSphere Software 7.5.1
- ⌚ Rational Software Architect for WebSphere Software 7.5.1
- ⌚ IBM InfoSphere Warehouse for DB2 for z/OS 9.5.2
- ⌚ Warehouse Tooling 2.2
- ⌚ IBM InfoSphere Classic Federation Server for z/OS V10.1
- ⌚ Rational Software Architect Standard Edition 7.5.2
- ⌚ InfoSphere Data Architect 7.5.2.1
- ⌚ WebSphere Service Registry and Repository v6.3
- ⌚ IBM Rational Developer for System z 7.6
- ⌚ InfoSphere Data Architect 7.5.2
- ⌚ Rational Software Architect Standard Edition 7.5.3
- ⌚ Rational Software Architect RealTime Edition 7.5.3
- ⌚ Cognos Diagnostic Tools 1
- ⌚ Rational EGL Community Edition 1.0
- ⌚ Rational Software Architect for WebSphere Software 7.5.4
- ⌚ IBM Data Discovery and Query Builder 3.2

## Learning

Documentation: <http://wiki.eclipse.org/MDT/UML2>

### Training

<http://www.obeo.fr/pages/training/en>

## Support

Forum: <http://www.eclipse.org/forums/eclipse.modeling.mdt.uml2>

Bugs: <https://bugs.eclipse.org/bugs/buglist.cgi?product=MDT&component=UML2>

### Consulting

<http://www.obeo.fr/pages/mda-and-productivity/en>

<http://www.modeliosoft.com/>

## Customizability

1. Tools
  - a. Users may choose which aspects of UML2 API to make use of.
2. Processes
  - a. Customizations include the ability to create/apply profiles.
  - b. Ability to customize where profiles reside:  
[https://bugs.eclipse.org/bugs/show\\_bug.cgi?id=267688](https://bugs.eclipse.org/bugs/show_bug.cgi?id=267688)
3. Languages.
  - a. Language packs provide translations for various languages including German, Japanese, Russian, Dutch etc.: <http://www.eclipse.org/modeling/mdt/downloads/?project=uml2>

## Extensibility

1. Tools
  - a. Automatic migration between various versions of UML is automatically supported through the sample editor and is automatically triggered through resource handlers.
2. Processes
  - a. Users have ability to extend code generation facilities by customizing existing templates.

## Scalability

Models produced by UML2 project can be fragmented to support multi user use.

## Usability

The UML2 project provides a sample editor that:

- Allow users to quickly create models.
- Allows users to convert models to .xmi or .cmof standards.
- Provides a means to create and apply profiles
- Provides a means to merge models.

UML2 makes use of the code generation facilities of EMF to allow users to generate code.



- Genmodel extensions are provided to enhance default code generation with notions introduced by UML2.
- In addition, the code generation facilities provide a means to integrate with OCL project by generating code to evaluate OCL expressions.

Users can decide to use as little or as much of the UML metamodel as desired.

Language packs provide translations for various languages including German, Japanese, Russian, Dutch etc.:  
<http://www.eclipse.org/modeling/mdt/downloads/?project=uml2>

- UML2 conforms to Eclipse User Interface Guidelines
- Eclipse platform standard i18n support used where applicable/possible; stand-alone deployment uses equivalent J2SE APIs
- ICU4J is used but optional; stand-alone deployments delegate to corresponding J2SE 5.0 APIs when ICU not available
- Language packs are provided as part of an Eclipse Translation Project
- Eclipse platform APIs used to provide accessible UI

## Interoperability

UML2 project is considered the de-facto standard implementation of the UML metamodel. XMI interchange work makes indirect use of UML2 <http://www.omgwiki.org/model-interchange/doku.php?id=start>.

Normative representations of the UML metamodel are produced by a combination of Rational Software Architect which is based on opensource UML2, in addition to opensource UML2:  
<http://www.omgwiki.org/uml2-rtf/doku.php?id=start>.

## Dependencies

<http://www.eclipse.org/modeling/mdt/downloads/?project=uml2>

Eclipse  
EMF EMF (Core)

## Standards

[Meta Object Facility \(MOF\)](#)

[Unified Modeling Language \(UML 2.0, 2.1.1, 2.1.2, 2.2\)](#)

[XML Metadata Interchange \(XMI\)](#)

# MDT UML2 Tools

Model Development Tools Unified Modeling Language 2.x Tools

## Overview

<http://www.eclipse.org/modeling/mdt/?project=uml2tools>

UML2 Tools is a set of GMF-based editors for viewing and editing UML models; it is focused on (eventual) automatic generation of editors for all UML diagram types.

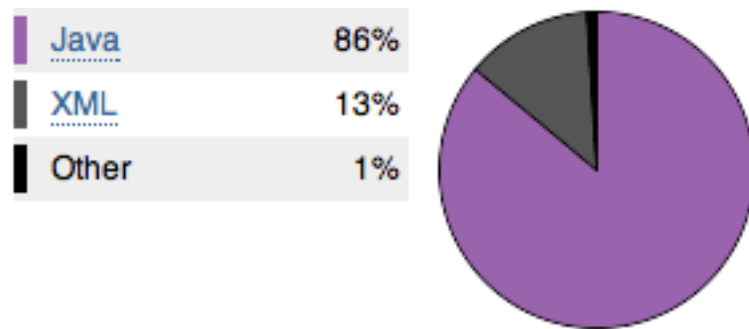
## Licensing

<https://www.ohloh.net/p/mdt-uml2tools/analyses/latest>

Eclipse Public License 262 files

## Platforms / Languages

<https://www.ohloh.net/p/mdt-uml2tools/analyses/latest>



Home Page: <http://www.eclipse.org/modeling/mdt/?project=uml2tools>

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.mdt.uml2-tools](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.mdt.uml2-tools)

Wiki Page: <http://wiki.eclipse.org/MDT-UML2Tools>

## Predictability

Release Train? No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

Plan: N/A

New & Noteworthy: [http://wiki.eclipse.org/MDT\\_Helios\\_New\\_and\\_Noteworthy](http://wiki.eclipse.org/MDT_Helios_New_and_Noteworthy)

Release Notes: N/A


## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.mdt.uml2-tools>

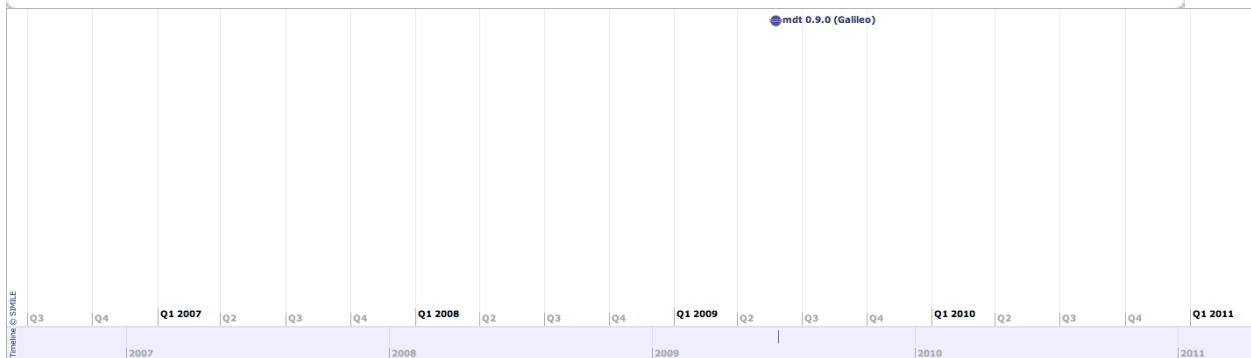


## Releases

No Eclipse update site has been listed.

**0.9.0 (Galileo):** 2009-06-24 completed 

Here is the **Project Release Timeline**.



## Committer Community

<http://www.eclipse.org/modeling/mdt/?project=uml2tools>

### Lead(s)

Michael Golubev, individual

### Committers

Tatiana Fesenko, individual  
Michael Golubev, individual  
Sergey Gribovsky, Borland Software

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/mdt-uml2tools.dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.mdt.uml2-tools>

N/A

### Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.mdt.uml2-tools>

N/A

### Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>

2010

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

N/A

### Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>

2010

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

N/A

## User Community

N/A

### Downloads (Jul 1, 2008 - Mar 1, 2010)



## Adopter Community

N/A

## Learning

Documentation: <http://wiki.eclipse.org/MDT-UML2Tools>

### Training

N/A

## Support

Forum: <http://www.eclipse.org/forums/eclipse.modeling.mdt.uml2tools>

Bugs: <https://bugs.eclipse.org/bugs/buglist.cgi?product=MDT&component=UML2Tools>

### Consulting

N/A

## Customizability

As an implementation of the very specific standard, UML2 Tools neither targets any specific process, tool or a language, nor provides any customizability in those areas.

## Extensibility

UML2 Tools allows to add new capabilities via rich set of GMF extension points. As a GMF-based editor, it allows such tools to obtain complete information about the state of the editor via GMF public API.

At this time, no known extenders of UML2 Tools exist.

UML2 Tools supports the definition, application and exchange of UML2 profiles, allowing to define custom language extensions using standard means defined in UML2.

There are known usages of the UML2 Tools in the support of the [UPDM](#) profile (Unified Profile for DoDAF/MODAF) profile, and in the projects supporting the National Information Exchange Model ([NIEM](#)).

## Scalability

There are known technical problems with processing of the diagrams with 1000+ elements. Usability issues limits the scope even further, to a few dozens element per single practically usable diagram at a maximum.

However, with semi-synchronized structural diagrams, UML2 Tools allows user to operate on the small subset (view) of the very big semantic models. Normally, each diagram represents the contents of a single model package, but user may limit the set of considered elements to arbitrary set of elements.

Every element may present on arbitrary number of diagrams at the same time, which allows team of developers/architects to process the intersecting pieces of the model independently.

## Usability

No advanced usability concepts have been implemented for UML2 Tools so far.

## Interoperability

UML2 Tools does NOT support interoperability with external toolsets at the diagram level. In particular, any visual information (colors, positions, styles, etc) can NOT be imported nor exported from/to the diagram editor.

However, UML2 Tools supports OMG XMI as a de facto standard of the semantic models exchange, allowing to import/export semantic models from/to external diagram editors.

## Dependencies

<http://www.eclipse.org/modeling/mdt/downloads/?project=uml2>

Eclipse  
EMF EMF (Core)  
EMF Query  
EMF Transaction  
EMF Validation  
GEF  
GMF  
M2M QVTo  
MDT OCL  
MDT UML2

## Standards

[Unified Modeling Language](#)

# MDT XSD

Model Development Tools XML Schema Definition

## Overview

<http://www.eclipse.org/modeling/mdt/?project=xsd>

The XML Schema Definition is a reference library that provides an [API](#) for use with any code that examines, creates or modifies [W3C XML Schema](#) (standalone or as part of other artifacts, such as XForms or WSDL documents).

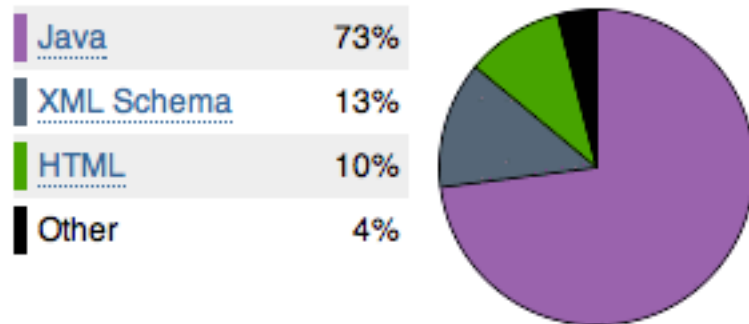
## Licensing

<https://www.ohloh.net/p/mdt-xsd/analyses/latest>

Eclipse Public License 284 files

## Platforms / Languages

<https://www.ohloh.net/p/mdt-xsd/analyses/latest>



**Home Page:** <http://www.eclipse.org/modeling/mdt/?project=xsd>

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.mdt.xsd](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.mdt.xsd)

**Wiki Page:** <http://wiki.eclipse.org/index.php/MDT-XSD>

## Predictability

**Release Train?** Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** <http://www.eclipse.org/projects/project-plan.php?planurl=http://www.eclipse.org/modeling/mdt/xsd/project-info/plan.xml&component=XSD>

**New & Noteworthy:** [http://wiki.eclipse.org/MDT\\_Helios\\_New\\_and\\_Noteworthy](http://wiki.eclipse.org/MDT_Helios_New_and_Noteworthy)

**Release Notes:** <http://www.eclipse.org/modeling/mdt/news/relnotes.php?project=xsd&version=HEAD>

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.mdt.xsd>



## Releases

No Eclipse update site has been listed.

**2.5.0:** 2009-06-24 completed

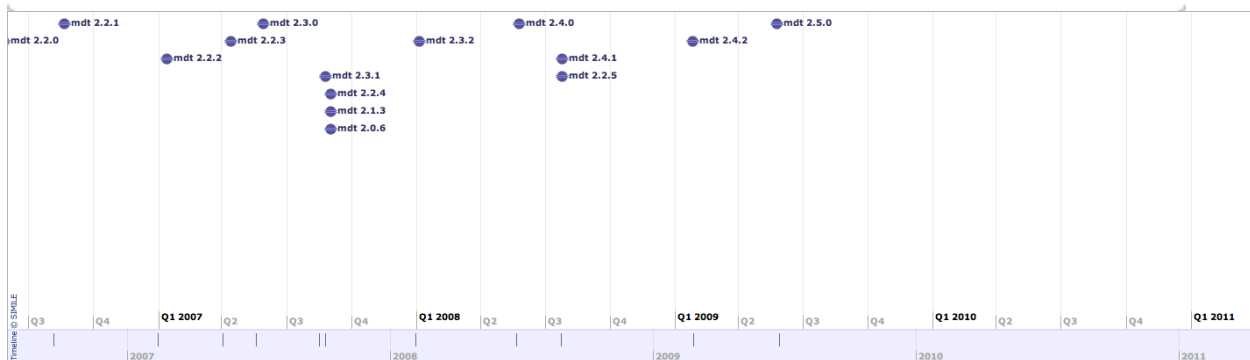
**2.4.2:** 2009-02-25 completed

**2.4.1:** 2008-08-25 completed

**2.4.0:** 2008-06-25 completed

**2.3.2:** 2008-02-05 completed

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.mdt.xsd](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.mdt.xsd)

### Lead(s)

Ed Merks, individual

### Committers

Nick Boldt, Red Hat Inc.

Ed Merks, individual

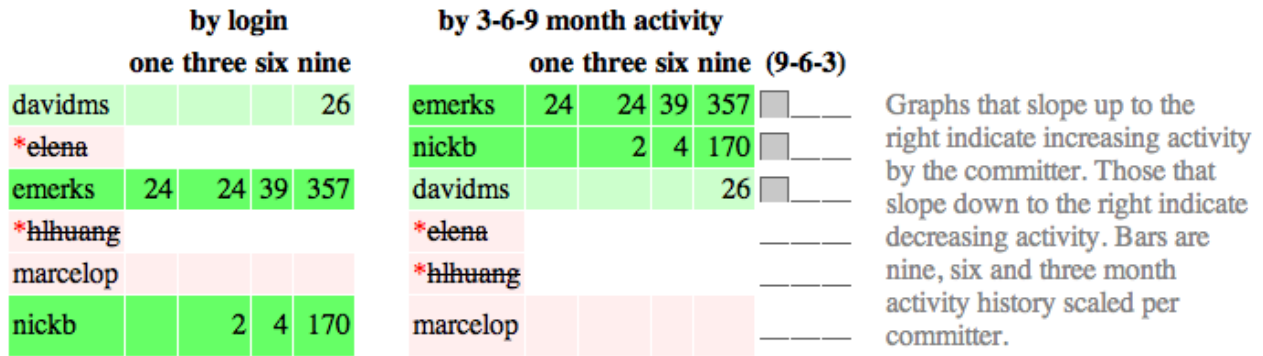
Marcelo Paternostro, IBM

David Steinberg, IBM

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/mdt-xsd.dev/maillist.html>

### Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.mdt.xsd>



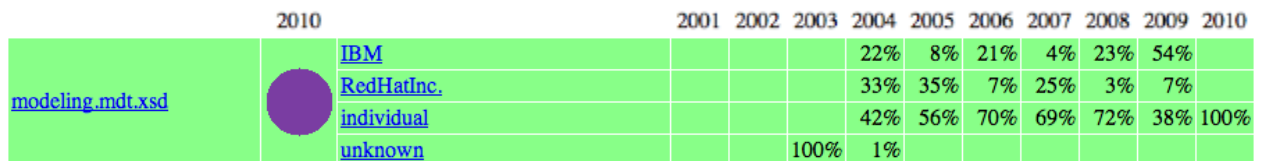
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.mdt.xsd>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
individual	1 (100%)	0 (0%)	1 (16.67%)	100%	4 (100%)	24 (100%)	6
<b>Total</b>	<b>1</b>	<b>5</b>	<b>6</b>		<b>4</b>	<b>24</b>	

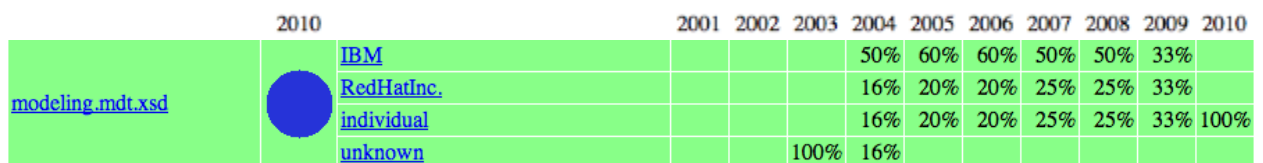
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

XSD is purely a framework with only a crude sample editor, so there is no direct user community or at least that community is effectively just an adopter community.

### Downloads (Jul 1, 2008 - Mar 1, 2010)





## Adopter Community

XSD is used heavily by EMF for importing XML Schemas as Ecore models than then supporting serialization and deserialization conforming to that schema. As such, it acts as an XML binding framework analogous to JAXB.

XSD is also used by the Web Tools project to support their XML Schema editing tools.

## Learning

**Documentation:** <http://wiki.eclipse.org/index.php/MDT-XSD>

### Training

N/A

## Support

**Forum:** <http://www.eclipse.org/forums/eclipse.technology.xsd>

**Bugs:** <https://bugs.eclipse.org/bugs/buglist.cgi?product=MDT&component=XSD>

### Consulting

N/A

## Customizability

XML Schema is a formally specified W3C model that should not be customized other than via the specified annotations mechanism.

## Extensibility

XML Schema is not intended to be extended.

## Scalability

XSD has been successfully used to work with large industrial scale instances.

## Usability

XML Schema is a complex formalism that includes both an abstract syntax and a concrete syntax. Both aspects are supported via a single unified API.

## Interoperability

XSD supports all aspects of the XML Schema 1.0 specification and is by that definition a conforming processor.

### Dependencies

<http://www.eclipse.org/modeling/mdt/downloads/?project=xsd>

Eclipse

EMF EMF (Core)

### Standards

[W3C XML Schema](#)

# PMF

Presentation Modeling Framework

## Overview

<http://www.eclipse.org/pmf/>

The PMF project is a modeling solution and code generation facility to build enterprise data presentation application. It provides the basic functional concepts of user interaction in a PIM level UI modeling language. This framework is highly extensible and can be integrated with any UI technology such as SWT/Jface, e4, JSF, XUL, Swing, GWT, Ajax, Silverlight or others. The final goal is to provide a rich-feature, intrusive, high extensible UI MDA framework.

## Licensing

(Eclipse Public License)

## Platforms / Languages

(Java)

**Home Page:** <http://www.eclipse.org/pmf/>

**Portal Page:** [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.pmf](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.pmf)

**Wiki Page:** <http://wiki.eclipse.org/Pmf>

## Predictability

**Release Train?** No

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.pmf>

**New & Noteworthy:** N/A

**Release Notes:** N/A

## Release Timeline

<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.pmf>

N/A

## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.pmf](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.pmf)

## Lead(s)

Jim Van Dam

Yves Yang, Soyatec

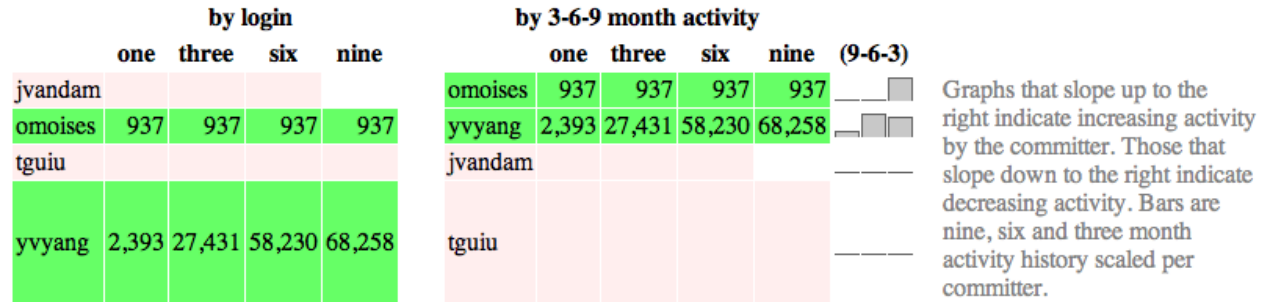
## Committers

Thomas Guiu, Soyatec  
 Olivier Moises  
 Jim Van Dam  
 Yves Yang, Soyatec

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/pmf-dev/maillist.html>

## Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.pmf>



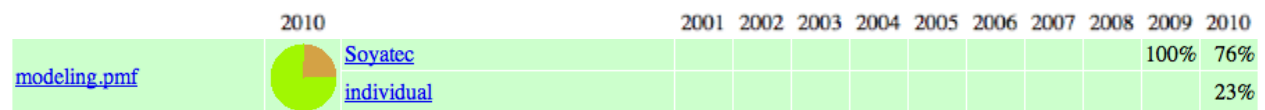
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.pmf>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
individual	1 (50%)	0 (0%)	1 (50%)	100%	97 (37.45%)	937 (23.06%)	10
Soyatec	1 (50%)	0 (0%)	1 (50%)	100%	162 (62.55%)	3,127 (76.94%)	19
<b>Total</b>	<b>2</b>	<b>0</b>	<b>2</b>		<b>259</b>	<b>4,064</b>	

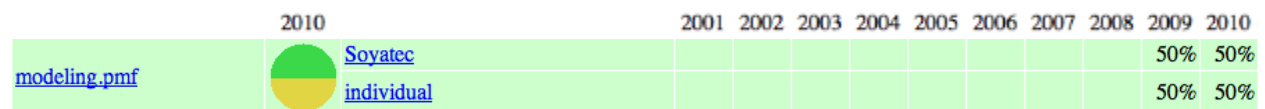
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>



## User Community

The first user community will be e4 application. Other user communities will be explored as the framework evolves and the requests of the communities.

# Adopter Community

TBD

## Learning

Documentation: <http://wiki.eclipse.org/Pmf>

### Training

N/A

## Support

Forum: <http://www.eclipse.org/forums/eclipse.pmf>

Bugs: <https://bugs.eclipse.org/bugs/buglist.cgi?product=PMF>

### Consulting

N/A

## Customizability

The framework is designed to be customized to support other relative frameworks such as UI solutions, code generation or transformation engines, programming languages, and all kinds of data models like EMF, UML, and programming language data models.

## Extensibility

The extensibility is one of the main features of this framework. It targets for two kinds of users:

1. Application designers
2. System developers

Application designers are the final users of this framework, and system developers are the PMF framework developers, i.e. they extend PMF for application designers by providing domain components.

## Scalability

The framework is a tooling solution; it is not a runtime library, so scalability is not so critical. But it should support large models.

## Usability

Usability is not the main focus of the first release. It will be explored in later major releases by integrating with other tools such as Instant Preview, Visual Designer, DSL support, etc..

## Interoperability

N/A

### Dependencies

Eclipse (SWT/JFace, e4)

EMF EMF (Core)

EMFT EGF

## **Standards**

None.

# TMF Xtext

Textual Modeling Framework Xtext

## Overview

<http://www.eclipse.org/Xtext>

**Xtext** (<http://www.eclipse.org/Xtext>) is a framework for development of programming languages and domain specific languages (DSLs). Just describe your very own DSL using Xtext's simple EBNF grammar language and the generator will create a parser, an AST-meta model (implemented in EMF) as well as a full-featured Eclipse text editor from that.

The Framework integrates with technology from Eclipse Modeling such as EMF, GMF, M2T and parts of EMFT. Development with Xtext is optimized for short turn-arounds, so that adding new features to an existing DSL is a matter of minutes. Still sophisticated programming languages can be implemented.

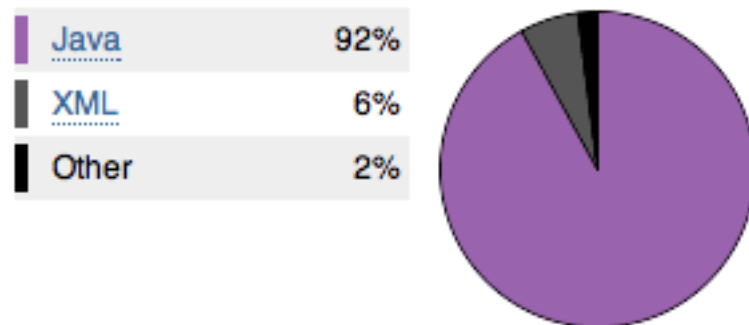
## Licensing

<http://www.ohloh.net/p/xtext/analyses/latest>

Eclipse Public License	1419 files
Apache License 2.0	469 files

## Platforms / Languages

<http://www.ohloh.net/p/xtext/analyses/latest>



Home Page: <http://www.eclipse.org/Xtext>

Portal Page: [http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.tmf.xtext](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.tmf.xtext)

Wiki Page: N/A

## Predictability

Release Train? Yes

[http://wiki.eclipse.org/Helios/Participating\\_Projects](http://wiki.eclipse.org/Helios/Participating_Projects)

<http://wiki.eclipse.org/Galileo#Projects>

<http://wiki.eclipse.org/Ganymede#Projects>

[http://wiki.eclipse.org/Europa\\_Simultaneous\\_Release#Projects](http://wiki.eclipse.org/Europa_Simultaneous_Release#Projects)

<http://www.eclipse.org/callisto/callistoprojects.php>

**Plan:** <http://www.eclipse.org/projects/project-plan.php?projectid=modeling.tmf.xtext>  
**New & Noteworthy:** [http://www.eclipse.org/Xtext/documentation/0\\_8\\_0/new\\_and\\_noteworthy.php](http://www.eclipse.org/Xtext/documentation/0_8_0/new_and_noteworthy.php)  
**Release Notes:** N/A

## Release Timeline

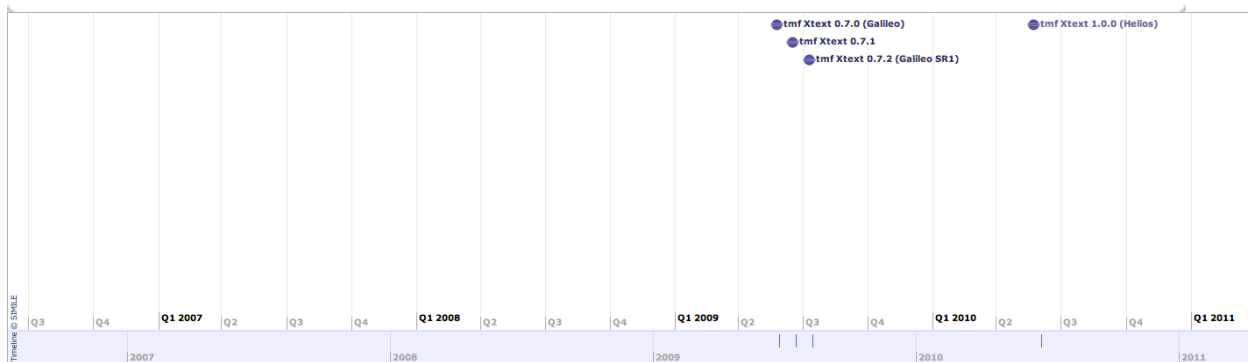
<http://www.eclipse.org/projects/timeline/index.php?projectid=modeling.tmf.xtext>

### Releases

The Eclipse update site for this project is  
<http://download.eclipse.org/modeling/tmf/updates/nightly/>.

<b>Xtext 1.0.0 (Helios):</b>	2010-06-23	planned	 
<b>Xtext 0.7.2 (Galileo SR1):</b>	2009-08-10	completed	
<b>Xtext 0.7.1:</b>	2009-07-17	completed	
<b>Xtext 0.7.0 (Galileo):</b>	2009-06-24	completed	

Here is the **Project Release Timeline**.



## Committer Community

[http://www.eclipse.org/projects/project\\_summary.php?projectid=modeling.tmf.xtext](http://www.eclipse.org/projects/project_summary.php?projectid=modeling.tmf.xtext)

### Lead(s)

Sven Efftinge, itemis AG

### Committers

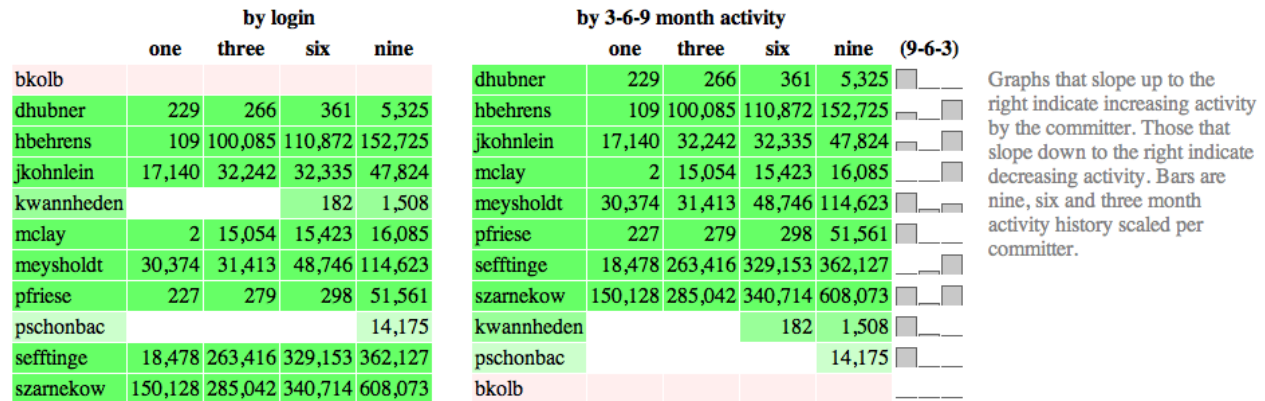
Heiko Behrens, itemis AG  
Michael Clay, individual  
Sven Efftinge, itemis AG  
Moritz Eysholdt, itemis AG  
Peter Friese, itemis AG  
Dennis Hübner, itemis AG

Jan Koehnlein, itemis AG  
 Bernd Kolb, SAP AG  
 Knut Wannheden, Paranor  
 Sebastian Zarnekow, itemis AG

**Mailing List:** <http://dev.eclipse.org/mhonarc/lists/xttext-dev/maillist.html>

## Lines Changed By Committer

<http://dash.eclipse.org/dash/commits/web-app/active-committers.cgi?project=modeling.tmf.xttext>



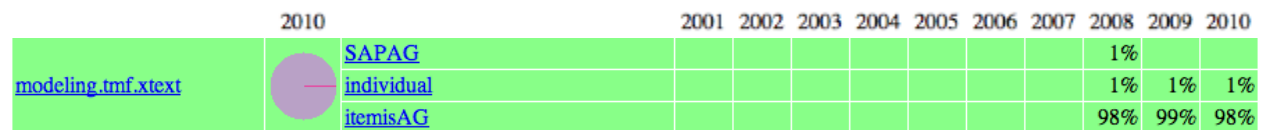
## Company Commit Details

<http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php?project=modeling.tmf.xttext>

Company	Active Committers	Inactive Committers	Total Committers	Percent Active	Commits (2010)	Lines of Code (2010)	Approx. LOC per Commit
individual	1 (12.5%)	1 (33.33%)	2 (18.18%)	50%	126 (0.7%)	6,382 (1.32%)	51
itemisAG	7 (87.5%)	1 (33.33%)	8 (72.73%)	87.5%	17,792 (99.3%)	475,571 (98.68%)	27
<b>Total</b>	<b>8</b>	<b>3</b>	<b>11</b>		<b>17,918</b>	<b>481,953</b>	

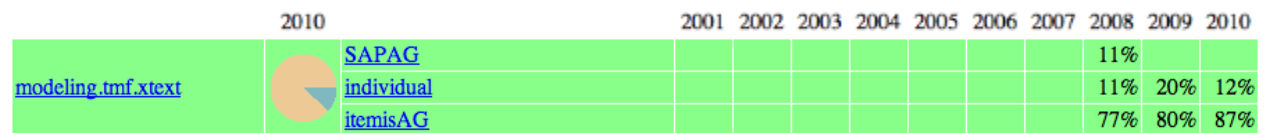
## Percentage of Lines Changed by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=loc>



## Percentage of Active Committers by Company by Year

<http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi?type=active>





# User Community

Xtext is widely used to develop IDE integration for domain-specific languages as well as general purpose programming languages.

Some examples are:

- in the industry (<http://blog.efftinge.de/2009/11/xtext-in-automotive-industry.html>)
- in research (<http://blog.efftinge.de/2009/09/xtext-in-wind-energy.html>)
- other open-source projects (Eclipse b3, EMF Query2 or the RelaxNG tooling from Eclipse WTP)

## Bugzilla:

Number of bugzilla entries (Total / Fixed) : 964 / 804  
Number of enhancements (Total/Fixed) : 218 / 125  
Number of bugs (Total/Fixed) : 746 / 679

## Newsgroup:

Number of newsgroup messages (total / February 2010): 4659 / 508

## Downloads (Jul 1, 2008 - Mar 1, 2010)



# Adopter Community

Xtext is a framework, hence its users are also essentially adopters.

## Learning

Xtext is shipped with a comprehensive documentation. In addition a tutorial, a webinar, and several slide decks are available.

**Documentation:** <http://www.eclipse.org/Xtext>

## Training

[http://www.opcoach.com/en/Training\\_Courses.html](http://www.opcoach.com/en/Training_Courses.html)

<http://www.itemis.com/itemis-ag/language=en/2642/education-and-coaching>

## Support

Xtext runs a very active newsgroup (up to 50 messages per day).

**Forum:** <http://www.eclipse.org/forums/eclipse.modeling.tmf>

**Bugs:** <https://bugs.eclipse.org/bugs/buglist.cgi?product=TMF&component=Xtext>

## Consulting

<http://www.opcoach.com/en/Consulting.html>

<http://www.itemis.com/itemis-ag/language=en/2621/portfolio>

## Customizability

Xtext is known to be very flexibly and highly customizable. Its architecture allows to change and adapt any component on a very fine-grained basis. This is mainly supported through the means of dependency injection.

## Extensibility

For the same reason Xtext is highly customizable it is also very extensible.

## Scalability

Xtext has reportedly been used successfully in large projects (see <http://blog.efftinge.de/2009/11/xtext-in-automotive-industry.html>).

*It's uncertain whether successfully Xtext has been used in a large project, based on our conversations with people who are familiar with using the project. That being said, Xtext produces textual files so it is as scalable as any programming language in terms of the end user experience. There are issues with the way the framework does its syntax highlighting and validation which sometimes make it slow but this can be worked around with the extensibility and customizability capabilities. There are some issues with expression all grammars, that is semantic and syntactic predicates are not supported.*

## Usability

Xtext is meant to be a professional open-source product. itemis is not selling any commercial product based on the open-source work, but instead sells services around the open-source products. That's why usability is much more important compared to other open-source projects at Eclipse.

## Interoperability

Xtext is implemented in Java and runs on any JVM which supports the Java 1.4 specification.

## Dependencies

<http://www.eclipse.org/modeling/tmf/downloads/?project=xtext>

Eclipse  
EMF EMF (Core)  
EMFT MWE  
M2T Xpand  
Orbit

## Standards

None.