



EMF Compare 1.0.0 Galileo Simultaneous Release

Cédric Brun

Release Review : June 10 , 2009

Communication Channel : [eclipse.modeling.emft](mailto:eclipse.modeling.emft@eclipse.org) newsgroup

Process Documentation : http://www.eclipse.org/projects/dev_process/development_process.php

Project Plan : [http://www.eclipse.org/projects/project-plan.php?](http://www.eclipse.org/projects/project-plan.php?planurl=http://www.eclipse.org/modeling/emft/compare/project-info/plan.xml&component=Compare)

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Galileo Release Talking Point

- Noteworthy New Features
 - ResourceSet-wide comparison
 - VCS proxy resolving
 - Comparison engines selection
 - Addition of a patch format for EMF Compare
 - Fragmented resources comparison
 - Addition of new differences types (reference ordering, containment reference change, ...)
- Quality of APIs
 - The component lead certifies that the requirements for Eclipse Quality APIs have been met for this release
- End of Life Issues:
 - No significant deprecations, deletions, or other end-of-life changes
- Committer Changes
 - New commiter : **Moritz Eysholdt** (Itemis)
 - Moritz is employed by Itemis AG and specialized in model driven technologies, especially model evolutions. He contributed the patch format and the corresponding editor for EMF Compare .



Galileo Release Talking Point

IP Issues:

The about files and use licenses are in place as per the Guidelines to Legal Documentation.

All contributions (code, documentation, images, etc) have been committed by individuals who are either Members of the Foundation, or have signed the appropriate Committer Agreement. In either case, these are individuals who have signed, and are abiding by, the Eclipse IP Policy.

All significant contributions have been reviewed by the Foundation's legal staff.

All non-Committer code contributions, including third-party libraries, have been documented in the release and reviewed by the Foundation's legal staff.



Galileo Release Talking Point

IP Issues

All contribution Questionnaires have been completed

The "provider" field of each plugin is set to "Eclipse Modeling Project"

The "copyright" field of each plugin is set to the copyright owner

Any third-party logos or trademarks included in the distribution (icons, logos, etc) have been licensed under the EPL

The EMFT IP log is located at

<http://www.eclipse.org/modeling/emft/project-info/ipquery.php>

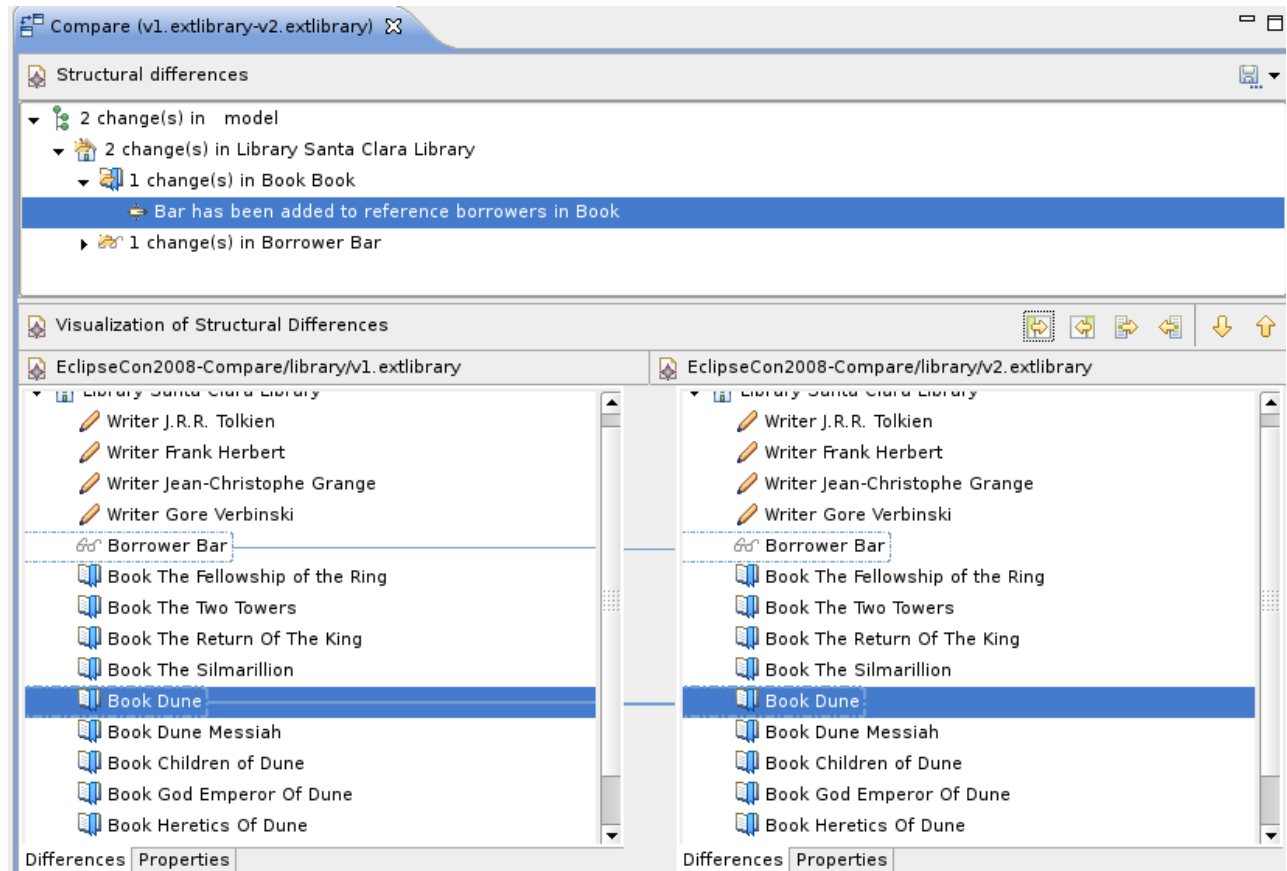
The contributions for this release were recorded in 2 bugzillas

238423 - https://bugs.eclipse.org/bugs/show_bug.cgi?id=238423

240201 - https://bugs.eclipse.org/bugs/show_bug.cgi?id=240201

EMF Compare

- model :
 - differencing
 - merging
- team API
 - CVS/SVN
- diff export
- extensibility



Non-Code Aspects

- Unit tests
 - 211 unit tests launched on every build
 - Code coverage is about
 - 90 % of the core
 - 30 % of the differencing plugin
 - 50 % of the matching plugin
- Non-regression tests
 - Comparison with results and expected results on 15 different models
- Code quality
 - Checkstyle activated on each distinct plug-in
 - EclEmma used on a regular basis to improve test coverage
 - Yourkit used on a regular basis to improve performances
 - Javadoc represents more than 50% of the source code lines

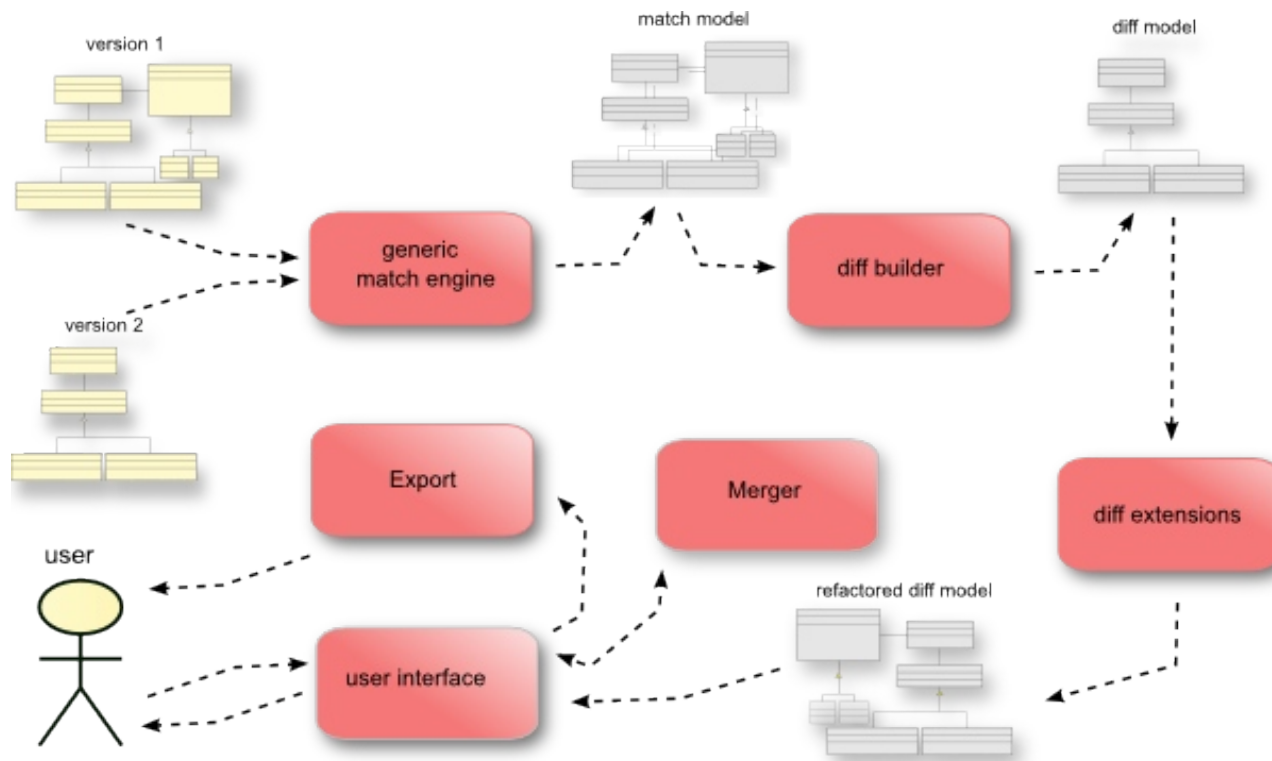


APIs

- Metamodel definitions and corresponding implementations are considered APIs.
- Non-API classes are separated from the exposed API through an "internal" package.
- Commitment to provide stand-alone diff and match features (JAR used without Eclipse)
- API Tooling is activated on all plugins to mark exceptions within the exposed API

Architectural Issues

- Since its beginning the EMF Compare component has been designed so that every part of the process is extensible (represented with red boxes below)





Documentation

- User tutorials
 - Setting up and using the EMF compare component
 - Comparing and merging XML Files
- Developer tutorials
 - Adding new actions to the export menu
 - Customizing the diff process
 - Domain model Synchronization with EMF Compare
- Examples
 - Library diff to HTML export
 - Domain model synchronization with EMF Compare
 - Creating differences representations dedicated to UML
- FAQ on the Eclipse Wiki http://wiki.eclipse.org/EMF_Compare

Bugzilla



	NEW	RESOLVED	VERIFIED	CLOSED	Total
critical	1	-	1	-	2
major	3	1	4	1	9
normal	28	9	26		63
enhancement	8	-	6	-	14
Total	40	10	37	1	88

- Note : these figures are subjects to change as the whole team is in the process of fixing bugs until the final release (this snapshot has been taken on May 14, 2009)



Tool usability

- EMF Compare is tightly integrated with org.eclipse.compare support and as such provides the same user interface.
- Localization
 - *French, Dutch and German* translations integrated into Babel

Standards

- No standard exists concerning the model comparison though EMF Compare works nicely with any standard-based metamodel (UML®...)

End of Life

- There are no specific end of life concerns for this release.



Communities

- Talks have been given on the following events:
 - Eclipse Summit Europe 2008 – TeamWork with models
 - EclipseCon 2009 – Compare and Merge with EMF Compare in Galileo
- Activity on the EMFT newsgroup
 - 70 threads from June 2009 to May 2009
- Planet Eclipse
 - About 1 update a month
- Articles
 - “Model Differences in The Eclipse Modeling Framework” In Upgrade Volume IX, issue no. 2

Schedule

- Since the feature freeze our commitment was to follow the EMF builds as closely as possible.

1.0 Release Plan

- ✓ M4: 2009-01-29
- ✓ M5: 2009-02-05
- ✓ M6: 2009-18-03
- ✓ M7: 2009-05-05
- ✓ RC1: 2009-05-19
- ✓ RC2: 2009-05-26
- RC3: 2009-06-02
- RC4: 2009-06-06
- 1.0: 2009-06-24

IP Issues

- About files and licenses in place and sent to EMO
- No dependency on external JAR's or libs.
- IP log has been submitted with the EMFT project
- The contributions to this release has been recorded in bugzilla :

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240201 - https://bugs.eclipse.org/bugs/show_bug.cgi?id=240201



IP Issues

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IP Issues

- The EMF compare component leadership verifies that (cont.)
 - All Contribution Questionnaires have been completed.
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 - Any fonts or similar third-party images included in the distribution (e.g. in PDF or EPS files) have been licensed under the EPL.



Project plan

- Ease of UI reuse and extensibility
- “Live” Match and Diff Computation
- Diff ↔ ChangeModel transformations
- Performances and Scalability improvements

This plan is an initial list , the up to date plan is on :

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



Graduation : Active Community

- Integration with many other Eclipse projects
 - EMF Core
 - Eclipse Team Support
 - Eclipse SVN (Subversive)
 - XText
- Newsgroup Activity
 - > 70 newsgroup threads per year
 - No post stay un-answered
- Contributions
 - 2 major contributions for the 1.0 release
 - A new commiter (Moritz Eysholdt) in the team
- Diversity : 5 committers from 3 companies
- 105 bugzilla entries filed and closed



Graduation : Open and Transparent

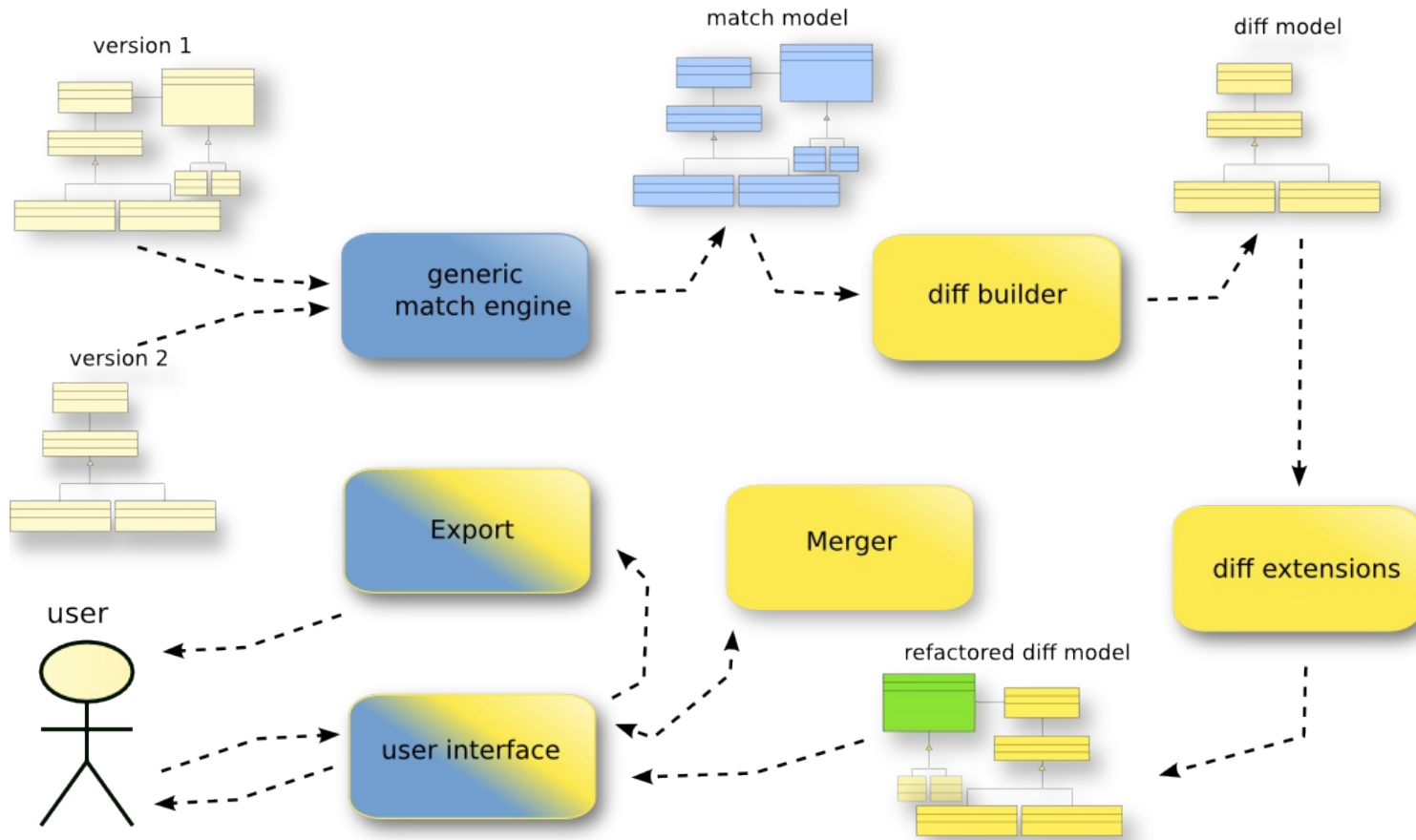
- Very responsive support on newsgroup, open discussions and reactions on proposals from users
- All core bugzillas solved immediately
- Project Materials are all available to the public
- Explanation of Development Environment Set-up (http://wiki.eclipse.org/Setting_up_a_development_environment_for_EMF_Compare)
- Follow IP-policy (approval for major contributions, for example).



Graduation Review : The Eclipse Way

- Short talks at Eclipse Summit 2008 and EclipseCon 2009
- Integrates with other Eclipse Projects : EMF, Team, Subversive and Xtext
- Frequent/Continuous builds using the Modeling Releng infrastructure
- Part of the simultaneous release for 2 years now

Graduation Review : Technical Architecture





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