

#### EMF Compare 0.8.0 Ganymede Simultaneous Release

June 16<sup>th</sup>, 2008



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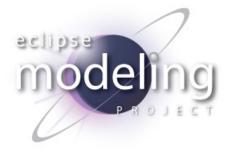
# Ganymede Release Talking Point

- Noteworthy New Features
  - 2 way / 3 way comparison detecting conflics
  - differencing, merging and extensibility
  - diff export
- Quality of APIs
  - The component lead certifies that the requirements for Eclipse Quality APIs have been met for this release
  - A few classes were marked as "provisional" (this is further detailed in this presentation)
- End of Life Issues:
  - No significant deprecations, deletions, or other end-of-life changes
- IP Issues:

- No significant contributions and has been integrated and the component do not use third-party libraries.
- Committer Changes





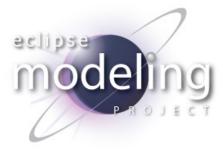


# EMF Compare (Incubation)

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

Compare (v1.extlibrary-v2.extlibrary) 🔀						
Structural differences						<u>.</u> -
📲 2 change(s) in model						
👻 禶 2 change(s) in Library Santa Clara Library						
🗕 🐳 1 change(s) in Book Book						
💠 Bar has been added to reference borrowers ir	n Book					
🕨 🖮 1 change(s) in Borrower Bar						
Vieweliestien of Chrysteinel Differences				Elo dE	L.	
Visualization of Structural Differences			<b>\</b>	P 4	4	U
EclipseCon2008-Compare/library/v1.extlibrary		EclipseCon2008-Compare/library/v	2.extlibrary			
	-					ŀ
Writer J.R.R. Tolkien		Writer J.R.R. Tolkien				- 1
🖉 Writer Frank Herbert		🖉 Writer Frank Herbert				
🖉 Writer Jean-Christophe Grange		🖉 Writer Jean-Christophe Gr	ange			
🖉 Writer Gore Verbinski		🖉 Writer Gore Verbinski				
ਲਾ Borrower Bar		– 66 Borrower Bar				
💷 Book The Fellowship of the Ring		🛄 Book The Fellowship of th	e Ring			
💷 Book The Two Towers		💷 Book The Two Towers				
💷 Book The Return Of The King		💷 Book The Return Of The King				
💷 Book The Silmarillion		🛄 Book The Silmarillion				
🛄 Book Dune	_	- 🛄 Book Dune				
💷 Book Dune Messiah		🛄 Book Dune Messiah				
💷 Book Children of Dune		💷 Book Children of Dune				
🛄 Book God Emperor Of Dune		🛄 Book God Emperor Of Dur	ne			
🛄 Book Heretics Of Dune	_	🛄 Book Heretics Of Dune				
ifferences Properties	•	Differences Properties				





# 0.8.0 features and non code aspects

- Features
  - 3 way Comparison (detecting conflicts)
  - Merge support
  - Differencing Export
  - Extensibility on match/diff/merge
  - Performance enhancements
- Unit tests
  - 161 unit tests launched on every build
  - Code coverage is about 30% of the diff and 50% of the match core.
- Non-regression tests
  - Comparison with results and expected results on 15 different models
- Code quality
  - Checkstyle activated on each distinct plug-in
  - Javadoc represents more than 50% of the source code lines



#### Metamodels definition and corresponding implementations are considered APIs. Every plugin provides its API through an « api » prefixed package.

Core services

**APIs** 

- DiffService / MergeService
- MatchService
- Generic implementations (GenericMatchEngine, GenericDiffEngine)
- Export diff model
- Utility classes in org.eclipse.emf.compare
  - ModelUtils
- Commitment to provide stand-alone diff and match features (JAR used without Eclipse)
- Non-API classes and extension points are marked as « internal » through the id or package name.

# eclipse modeling

# APIs (provisionning)

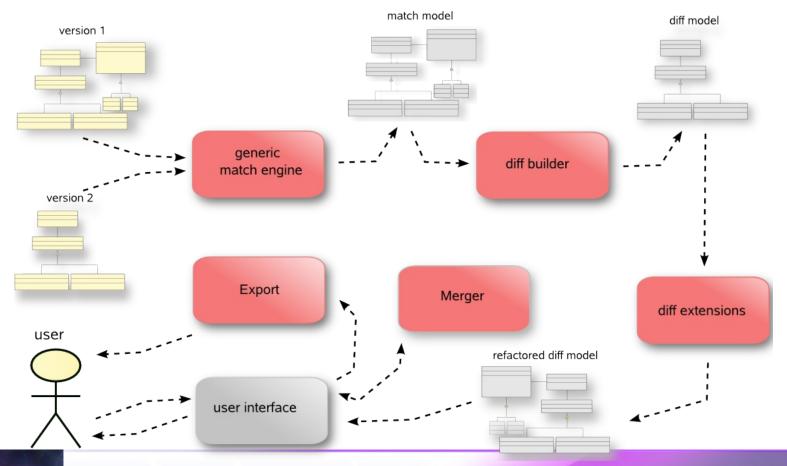
- UI classes extensibility is not finalized. Clients are not expected to extends the UI classes yet.
- diff\_extension in org.eclipse.emf.compare.diff
- org.eclipse.emf.compare.internal.team.handler extension point
  - Used to fix issues with the Subversive Team implementation, not considered as finalized yet.



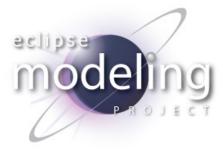


#### **Architectural Issues**

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



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#### 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

eclipse

	NEW	RESOLVED	VERIFIED	total
critical	-	1	1	2
major	1	3	3	7
normal	8	8	5	21
minor	3	2	2	7
enhancement	2	3	3	8
total	14	17	14	

 Note : these figures are subjects to change as the whole team is in the process of fixing bug until the final release (this snapshot has been taken on May 14, 2008)

## **Tool usability**



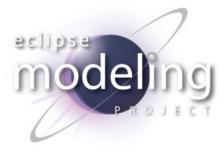
- EMF Compare is tightly integrated with org.eclipse.compare support and as such provides the same user interface.
- Localization
  - French, Dutch and German translations integrated into Babel
- Standards
  - No standard exists concerning the model comparison though EMF Compare works nicely with any standard-based metamodel (UML®...)

# End of Life

 As this is the first release there are no specific end of life concerns.



## Communities



- Talks have been given on the following events:
  - EclipseCon 2007 Model Comparison Panel
  - Eclipse Summit Europe 2007 EMF Compare One Year Later
  - EclipseCon 2008 An Update on EMF Compare
- Activity on the EMFT newsgroup
  - 55 threads from June 2007 to May 2008
- Planet Eclipse
  - about 1 update a month
- Articles

- « EMF Compare : vie d'un projet Eclipse » in « Programmez! » Feb 2008
- « Comparing XML files » in « Programmez! » June 2008



#### Schedule

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

#### 0.8 Release Plan

- ✓ M4: 2007-01-10
- M6 slipped from 2 April to 4 April
- as EMF slipped from 31 March to 2 April
- ✓ M5: 2008-02-13 ✓ M6: 2008-04-02
- ✓ M7: 2008-05-06
- RC1: 2008-05-16
- RC2: 2008-05-23
- RC3: 2008-05-30
- RC4: 2008-06-06
- 0.8: 2008-06-13

#### **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 :
  - 196438
  - 226565

#### **IP** Issues



- The EMF compare component leadership verifies that
  - 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.

#### **IP** Issues

eclipse

ompare component leadership verifies that (cont.)

- The EMF compare component leadership verifies that (cont.)
  - All Contribution Questionnaires have been completed.
  - The "provider" field of each plug-in is set to "Eclipse.org".
  - The "copyright" field of each feature is set to the copyright owner (the Eclipse Foundation is rarely the copyright owner).
  - Any third-party logos or trademarks included in the distribution (icons, help file logos, etc) have been licensed under the EPL.
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# eclipse modeling

# Project plan

- Graduating from Incubation status
- Patch/Changeset for model differences
- UI Extensibility and reuse
- Graphical modeler integration proof of concept
- Remote proxy resolving
- DiffExtension API stabilization

This plan is an initial list , the up to date plan is on the wiki : http://wiki.eclipse.org/EMF\_Compare



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