EMF Compare 1.2.0

Release Review - Indigo Simultaneous Release

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Project Summary

- ## Contact

Communication channel : `eclipse.modeling.emf.newsgroup`

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

Project Plan : `http://www.eclipse.org/projects/projectplan.php?`
`projectid=modeling.emf.compare`

Project Summary

- ## Focus

EMF Compare provides :

- model comparison

- differences merge

- integration with Source Control Management systems

- diff export

1.2.0 Release Talking Points

- ## Features

Overall stability and performance have been improved

Filtering and grouping possibilities for the displayed differences have been added to the EMF compare viewer

Changed Attribute values can now be textually compared from the EMF viewer

Introduced an UML specific comparison engine

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- ## Non-Code Aspects

Unit Tests

461 unit tests launched on every build. Code coverage is about:

- 90% of the core

- 50% of the differencing plugin

- 80% of the matching plugin

Non-regression tests

Comparison with results and expected results on 15 different models

1.2.0 Release Talking Points

- ## Non-Code Aspects

Code Quality

`Checkstyle` activated on each distinct plugin

`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

More statistics on the project's ohloh page : http://www.ohloh.net/p/emf_compare/analyses/latest

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- ## Documentation

Some tutorials are located on the Eclipse Wiki while others are in the Online Help. Both should be merged for the next simultaneous release.

User tutorials:

- Setting up and using the EMF Compare framework
- Comparing and merging XML files

Developer tutorials:

- Architecture overview
- Adding new actions to the export menu
- Adapting the comparison process
- Using the compare services

Examples:

- Library to HTML export
- Creating differences representations dedicated to UML
- FAQ on the Eclipse Wiki (http://www.eclipse.org/EMF_Compare)

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- ## APIs

The project lead certifies that the requirements for Eclipse Quality APIs have been met for this release.

Metamodel definitions and corresponding implementations are considered APIs.

Non-API classes are separated from exposed API through an *internal* package in their namespace.

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

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- ## Architecture

Comparison process

The comparison process is divided in 2 phases : matching and differencing. The matching phase browses both models trying to figure out which element of model 1 corresponds to which element of model 2. The differencing process then browses the result of the matching and creates the corresponding delta. The result of both phases can be serialized as models.

Extensibility

Each phase of the comparison process might be redefined or extended by clients to fulfill specific requirements.

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- ## Tool Usability

EMF Compare is tightly integrated with org.eclipse.compare and ass such provides the same user interface.

- ## End Of Life

The set of plugins linked to the EPatch feature (org.eclipse.emf.compare.epatch.*) are deprecated and will be removed from the next release. Adopters can use the MPatch plugins instead.

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- Bugzilla

Bugzilla snapshot for Indigo as of May 2011

Severity	NEW	ASSIGNED	REOPENED	RESOLVED	VERIFIED	CLOSED	Total
blocker	1	0	0	3	0	10	14
critical	6	0	0	0	3	6	15
major	13	0	0	5	10	9	37
normal	44	1	5	35	54	41	180
minor	4	0	1	1	5	0	11
trivial	0	0	0	0	2	1	3
enhancement	15	0	0	1	14	11	41
Total	83	1	6	45	88	78	301

1.2.0 Release Talking Points

- ## Standards

No standard exists concerning the model comparison, though EMF Compare works nicely with any standard based metamodel.

With the 1.2 release a specific support for the UML standard is included in EMF Compare.

- ## UI Usability

EMF Compare is conforming to the user interface guidelines.

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- ## Schedule

The EMF Compare project follows the Eclipse "+2" schedule :

- M1 08/17/2010
- M2 09/28/2010
- M3 11/09/2010
- M4 12/14/2010
- M5 02/01/2011
- M6 03/15/2011
- M7 05/03/2011
- RC1 05/17/2011
- RC2 05/24/2011
- RC3 05/31/2011
- RC4 06/07/2011
- 1.2.0 06/22/2011

1.2.0 Release Talking Points

- ## Project Plan

The Indigo project plan is available at

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

- ## Communities

Talks have been given on the following events:

- Eclipse 2011 : **What every developer should know about EMF Compare**

Activity on the EMF and EMFT newsgroups:

- About 65 (EMFT) new threads from June 2010 to May 2011 (accounting to ~150 messages)

About one update every two months on Planet Eclipse.

- ## Commiter Changes

Patrick Könemann is now a commiter on EMF Compare

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- ## IP Issues

The about files and 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.

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 EMF IP log is generated and submited at http://www.eclipse.org/projects/ip_log.php?projectid=modeling.emf.compare

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- IP Issues

The contributions for this release were recorded in the following bugzillas:
343404 https://bugs.eclipse.org/bugs/show_bug.cgi?id=343404
345451 https://bugs.eclipse.org/bugs/show_bug.cgi?id=345451
345454 https://bugs.eclipse.org/bugs/show_bug.cgi?id=345454
318854 https://bugs.eclipse.org/bugs/show_bug.cgi?id=318854
323796 https://bugs.eclipse.org/bugs/show_bug.cgi?id=323796