

***EMF Core 2.5 Release Review
Galileo Simultaneous Release***



Planned Review Date: June 10, 2009

Communication Channel: eclipse.tools.emf

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Eclipse Modeling Framework



- Framework and code generation facility for model-driven development and data integration
- Core component of the Eclipse Modeling Project
- Supports conversion between different model formats (Ecore/EMOF, XML Schema, UML) and generation of Java code
- Merging generator allows alternating between modeling and programming
- Editor generation for rapid tool prototyping in Eclipse

The screenshot displays four Eclipse IDE windows illustrating the EMF workflow:

- Library.java**: Shows the generated Java code for the Library interface, extending EObject. It includes methods like getName(), setName(), getWriters(), and getBooks(). A callout box labeled "Generated Java code" points to this window.
- library.xsd**: Shows the XML Schema definition for the Library model, including elements like Book, Writer, and Library. A callout box labeled "XML to Java Binding" points to this window.
- library.ecore**: Shows the Ecore model definition for the Library, including classes like Book, BookCategory, and Library. A callout box labeled "Sample Ecore Editor (Model)" points to this window.
- Library.xml**: Shows the reflective editor instance for the Library model, displaying the data for the Library object, including writers (Greg Mortenson, Michael Connelly) and books (Three Cups of Tea, The Scarecrow). A callout box labeled "Reflective Editor (Instance)" points to this window.

Features

- Minimal footprint EObject implementation
 - New, optimally memory-efficient base EObject implementation available for use in generated models
 - Adopted in Ecore to reduce footprint of metadata
- Generate models command
 - Convenient new UI for generating one or more models
- New code generator options
 - Flexible interface/implementation naming

Features

- Old-runtime XML types support
 - New generator support for XML types (date, time, duration, QName, etc.) when targeting EMF 2.2 runtime
- Implementation of property-based data binding
 - Support for JFace's new data binding API, providing model-agnostic creation of observables and bindings

Non-Code Aspects

- No significant new documentation or examples
- Minor updates to existing documentation (overviews, tutorials, and API reference)
 - Mostly new Javadoc and accessibility-related changes
- Changes with the potential for significant impact documented in The Bleeding Edge
 - <http://www.eclipse.org/modeling/emf/docs/#whatsnew>
- Two major EMF publications this year
 - *Eclipse Modeling Framework*, Second Edition
 - *Essential EMF* Refcard

APIs

- The component lead certifies that the requirements for Eclipse Quality APIs have been met for this release
- Due to historical use, most of EMF is treated as API
 - Increasingly, more recent code is identified as internal
- Provisional API
 - Generate models command
 - Data binding implementation
 - Accessible table editing
 - Binary resource implementation
- Deprecated API continues to be supported

Architectural Issues

- No new architectural issues in this release
- EMF continues to be highly extensible and finely componentized

Tool Usability

- New generate models command improves generator usability by simplifying regeneration

End-of-Life

- EMF's SDO implementation, which was previously delivered as part of EMF core, has been removed in this release

Bugzilla

- Over Galileo timeframe (as of May 27, 2009)

		Status						
		NEW	ASSIGNED	REOPENED	RESOLVED	VERIFIED	CLOSED	Total
Severity	blocker	-	-	-	-	1	-	1
	critical	-	-	-	2	2	2	6
	major	-	-	-	4	6	3	13
	normal	-	-	1	34	111	6	152
	minor	-	-	-	6	5	1	12
	trivial	-	-	-	1	3	2	6
	enhancement	49	1	-	21	53	2	126
	Total	49	1	1	68	181	16	316

Standards

- No standards-related changes
- EMF continues to support OMG XMI 2.0 and 2.1 for serialization and EMOF 2.0 interchange

UI Usability

- Small usability improvements
 - Better organization of New Project/Model wizards
 - Galileo capabilities
- Accessibility
 - Reviewed for Section 508 compliance
 - Keyboard navigation added to tables in wizards
- Internationalization
 - All strings externalized using Java message bundles
 - Babel participant
 - Translatability verified with Babel Pseudo-Translation Test

Schedule

- EMF followed the Galileo schedule as a +1 component

- Completed

- M1 2008/08/11 (as planned)
- M2 2008/09/24 (as planned)
- M3 2008/11/03 (two days early)
- M4 2008/12/15 (two days early)
- M5 2009/02/03 (as planned)
- M6 2009/03/16 (as planned)
- M7 2009/05/04 (as planned)
- RC1 2009/05/18 (as planned)
- RC2 2009/05/25 (as planned)

- Planned

- RC3 2009/06/01
- RC4 2009/06/08
- RC5 2009/06/15
- GA 2009/06/24

Communities

- Active interaction in EMF's newsgroup and Bugzilla
- Committers attended and presented at Eclipse Summit Europe 2008, EclipseWorld 2008, and EclipseCon 2009
- Several committers are active bloggers
- Significant cross-project collaboration

IP Issues

- The project leadership verifies that the Eclipse IP policies and procedures have been followed.
- A frozen copy of the Project Log is part of the Release Review documentation
 - The “live” version is also available at eclipse.org/modeling/emf/eclipse-project-ip-log.php
- Would any Member like to assert that this release infringes their IP rights?

Project Plan

- EMF 2.5 development plan available at eclipse.org/projects/project-plan.php?projectid=modeling.emf
- Draft plan for EMF 2.6 is not yet available