



EMF 2.4.0 Ganymede Simultaneous Release

June 4th, 2008



Ganymede Release Talking Points

- Noteworthy New Features
 - Support for Content Types
 - Applications using EMF can now register its resources using content types
 - Content types in EMF can be used both in stand-alone and Eclipse based applications. For the latter, it integrates seamless with Eclipse's content type support
 - A new role for `URIConverters`
 - In addition to the creation of input and output streams for URIs, `URIConverters` now support several operations, including deletion, and timestamp and existence queries
 - Easier integration with REST applications
 - Easier customization via `URIHandlers`

Ganymede Release Talking Points

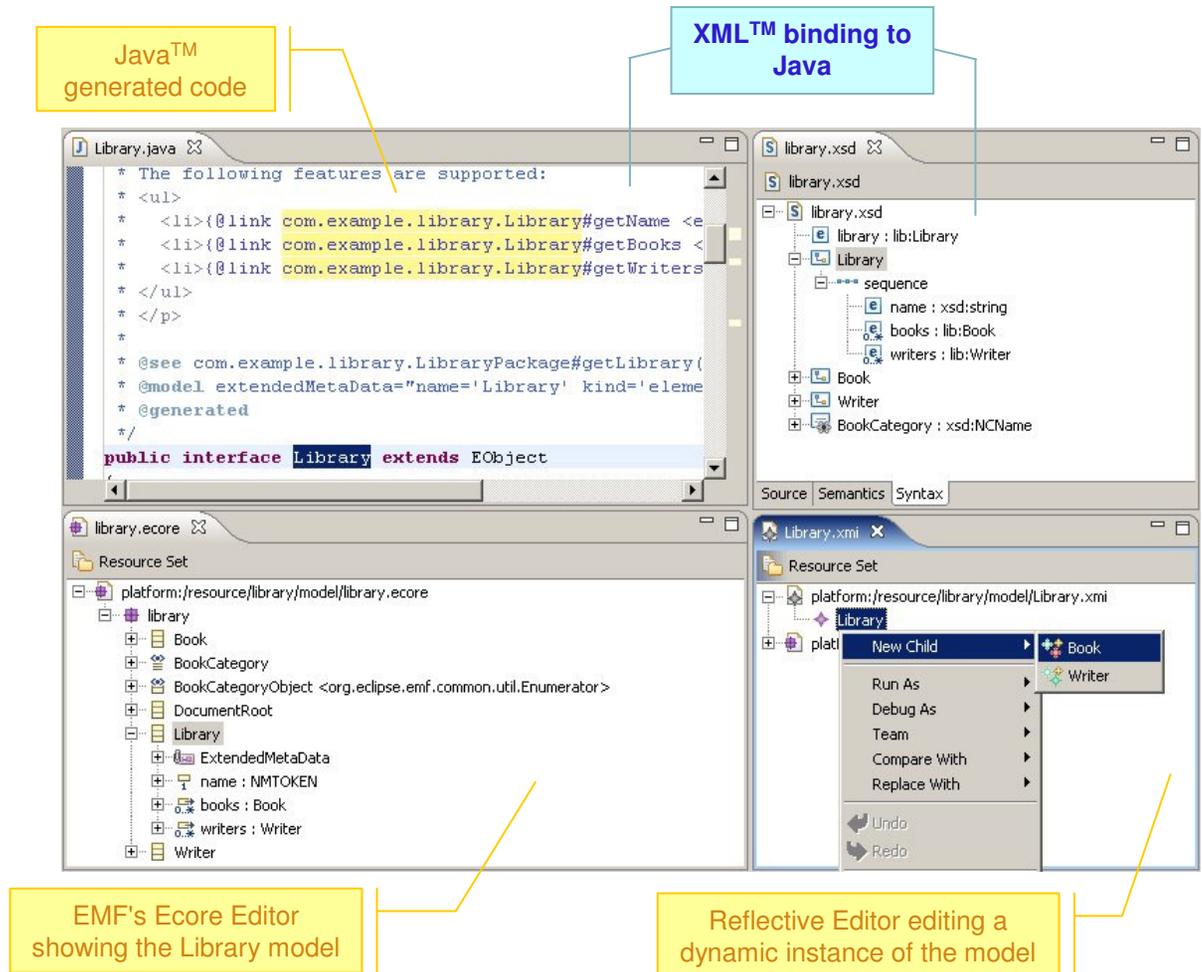
- Noteworthy New Features (cont.)
 - Support for Data Binding
 - EMF now provides the hooks to easily integrate instances of Ecore models and Eclipse's data binding API
 - Terrific example of the community stepping up to provide an important feature
 - Installable Examples
 - The EMF examples can now be installed to the workspace via wizards located under Eclipse's "Example" category
 - Several performance and usability improvements, including
 - Support for defining the fonts and colors on Item Providers
 - Binary serialization and deserialization

Ganymede Release Talking Points

- 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:
 - All significant contributions, non-Committer code contributions, and third-party libraries have received IP clearance
- Committer Changes
 - Kenn Hussey now works for Embarcadero Technologies

Eclipse Modeling Framework (EMF)

- Provides a uniform mechanism for describing and accessing all data to facilitate sharing
- Supports conversion to and from different models descriptions
- Developer can focus on the creative tasks rather than repeating the mundane tasks again and again
- The merging generator supports alternating between modeling and programming
- Full support for Java 5



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

- Library.java:** Shows Java code generated from the model, including an interface `Library` that extends `EObject`. A callout points to this code as "Java™ generated code".
- library.xsd:** Shows the XML Schema Definition (XSD) for the library model, defining elements like `Library`, `Book`, `Writer`, and `BookCategory`. A callout points to this as "XML™ binding to Java".
- library.ecore:** Shows the Ecore model structure in the Resource Set, including the `Library` package and its classes. A callout points to this as "EMF's Ecore Editor showing the Library model".
- Library.xml:** Shows a dynamic XML instance of the model being edited in the Reflective Editor. A callout points to this as "Reflective Editor editing a dynamic instance of the model".

Non-Code Aspects

- Change Management
 - Every change in EMF is described by at least one bugzilla
 - The EMF Release Notes presents all the bugzillas implemented in a given build:
<http://www.eclipse.org/modeling/emf/news/relnotes.php?project=emf&version=HEAD>
- Plan Items
 - Release plan document:
http://www.eclipse.org/modeling/emf/docs/dev-plans/emf_project_plan_2.4.html
 - 6 of 6 plan (keyword) items resolved as of May 13th, 2008
 - 227 bugzillas addressed in the 2.4.0 release as of May 13th, 2008

Non-Code Aspects

- 516 JUnit Tests
 - Combined with SDO and XSD
 - On every build, about 200 of these JUnit tests are invoked both as plug-in and stand-alone tests
- Packaging
 - As indicated on the plan for this release, the EMF zips were changed in the M5 milestone, which happened on February 11, 2008. Since then, to both save bandwidth and make it easier to add source & docs to an existing installed runtime, the SDK zips include only source and doc.
- Documentation
 - Vast documentation available at
 - <http://www.eclipse.org/modeling/emf/docs/>
 - <http://wiki.eclipse.org/Category:EMF>

APIs

- The component lead certifies that the requirements for Eclipse Quality APIs have been met for this release
- Historically, clients of EMF have treated every class in EMF as API. Therefore, we are left with no choice but to try our best to treat every class as API
 - There are a few classes that we consider non-API code, which are properly identified by the word “internal”
 - It is widely known that users are neither expected to extend the `EModelElement` class nor any of its subclasses

APIs

- The classes implementing the following new features have been marked as “provisional”
 - Data Biding
 - Binary Resource
- Deprecated API
 - All the deprecated methods were properly marked with the `@Deprecated` annotation
 - If appropriate, the alternative API is also indicated
 - Continues to be fully supported

Architectural Issues, Usability, End-of-Life

- Architectural Issues
 - As the 2.3 version, EMF 2.4 requires a 5.0 JVM or greater
- Usability
 - Users can now install the examples through wizards located under the “Example” category
 - The names of the EMF bundles and features were modified to better match other Eclipse features and to increase their homogeneity
 - We’ve revised the categories of the EMF wizards to simplify the user’s out-of-box experience
 - Several recipes and tips were added to the EMF wiki and FAQ
<http://wiki.eclipse.org/Category:EMF>
- End-of-Life Issues
 - Continuing viability of deprecated API guaranteed

Bugzilla

- As of May 13th, 2008 (since the end of the 2.3.0 release with Europa):

		Status				
		NEW	RESOLVED	VERIFIED	CLOSED	Total
Severity	blocker	.	4	24	.	28
	critical	1	3	27	.	31
	major	1	6	151	2	160
	normal	2	52	1182	6	1242
	minor	1	1	68	1	71
	trivial	1	3	33	.	37
	enhancement	57	26	575	2	660
	Total	63	95	2060	11	2229

Note: the high number of “verified” bugzillas is partially due to a change in our development process (see bugzilla 206558 for further details)

Standards and UI Usability

- Standards
 - OMG™'s EMOF™ 2.0 and XMI™ 2.0/2.1 used and supported
- UI Usability
 - Internationalization
 - EMF uses Eclipse Platform standard i18n support
 - ICU4J and Java 5 codepoint support are used when necessary
 - Localization
 - Tested for localization (awaiting readiness of Babel, the Eclipse Globalization Project)
 - Accessibility
 - Standard Eclipse capabilities

Schedule

- EMF is a “+1” component in the simultaneous release
- We missed the dates for these Milestone builds
 - M6 slipped from 31 March to 2 April and M7 slipped from 5 May to 6 May

2.4 Release Plan

- ✓ M2: 2007-09-26
- ✓ M3: 2007-11-07
- ✓ M4: 2007-12-16
- ✓ M5: 2008-02-09
- ✓ M6: 2008-04-02
- ✓ M7: 2008-05-06
- RC1: 2008-05-16
- RC2: 2008-05-23
- RC3: 2008-05-30
- RC4: 2008-06-06
- 2.4: 2008-06-13

2.0 Release Plan

- ✓ 2.0.6: 2007-10-03

2.1 Release Plan

- ✓ 2.1.3: 2007-10-03

2.2 Release Plan

- ✓ 2.2.4: 2007-10-03

2.3 Release Plan

- ✓ 2.3.1: 2007-09-26
- ✓ 2.3.2: 2008-02-05

Communities

- Very active newsgroup
 - eclipse.tools.emf
- Steady interaction in both Bugzilla and on newsgroup
- As others components of the Eclipse Modeling Project, EMF is experiencing a fantastic momentum
 - The community is clearly embracing the Eclipse modeling technologies
 - We've seen a record number of new components being proposed and created
 - Important features available in this release were developed either by or with close interaction of people outside the core development team

Communities

- Conference Participation (using EMF 2.4.0)
 - EclipseWorld 2007
 - Tutorial and several talks at EclipseCon 2008

IP Issues

- The EMF 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

- The EMF 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.
 - Any fonts or similar third-party images included in the distribution (e.g. in PDF or EPS files) have been licensed under the EPL.

IP Issues

- The EMF project IP log is located at <http://www.eclipse.org/modeling/emf/eclipse-project-ip-log.php>

IP Issues

- The contributions for this release were recorded in 45 bugzillas
 - 75625, 101163, 122422, 129874, 130468, 130525, 131811, 132360, 136881, 147594, 149770, 150500, 156783, 161744, 163291, 165458, 165661, 165770, 166112, 166967, 170204, 170223, 177643, 177644, 177645, 177647, 177653, 177656, 178121, 178793, 178840, 179004, 185971, 196579, 207306, 209491, 210139, 211055, 215131, 225068, 227203, 228357, 228482, 228679, 229998
- For more details, including the name of the contributor, see http://www.eclipse.org/modeling/emf/project-info/ipquery.php?sortBy=bugs.bug_id&showobsolete

Project Plan

- A draft development plan for EMF 2.5 is not yet available

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