EMF 2.3.0
Europa Simultaneous Release

6 June, 2007

Release Review revision 2.3.1 – 17 January, 2007

EMF - Europa Release Talking Points

- Noteworthy New Features:
  - Java 5.0: ***Generics are now fully supported in EMF's metamodel, Ecore, and in the EMF code generator. Other important Java 5 language features are also supported, including enumerated types, annotations, and the enhanced for loop. Developers still have the option to generate 1.4-compatible code, which can be run on the EMF 2.2 runtime.***
  - Complete validation of Ecore models
    - All the rules that defined a valid Ecore model are implemented as constraints using the EMF Validation framework
  - The objects in a reference can now be identified by a defined set of attributes
  - EMF can now be used in probably any Eclipse configuration
    - The EMF bundles are now defined in small features

EMF - Europa Release Talking Points

- Noteworthy New Features (cont.):
  - Ant task and headless application to generate code from Annotated Java
    - EMF now provides this support for all model importers
  - Numerous improvements to the Resource framework
    - New option to ensure that only the resources with a new serialized contents are saved
    - New option to use XML Entities to reduce the number of duplicated strings
  - The classes that are used to customize the code generation behavior are fully documented with Java Docs
    - Also, there is a new example that shows how to use these classes to generate an additional artifact
  - Several performance improvements, in both the runtime and code generation tools

EMF - Europa Release Talking Points

- Quality of APIs
  - No "provisional" APIs

- End of Life Issues:
  - None

- IP Issues:
  - None

- Committer Changes
  - Elena Litani gave up her status.

Features & Non-Code Aspects

- Features
    - The EMF Release Notes presents all the bugzillas implemented in a given build
        - All the changes in EMF are described by at least one bugzilla
            - http://www.eclipse.org/modeling/emf/news/relnotes.php?project=emf&version=HEAD
    - Plan Items (as of 25 May 2007)
        - 3.8 of 6 plan (keyword) items resolved, as of 25 May 2007
        - 337 bugzillas addressed in the 2.3.0 release

- Non-Code Aspects
    - Improved the documentation (Java Doc) of several parts of the code
    - Added new examples to demonstrate how developers can exploit specific features

Features & Non-Code Aspects

- 496 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

APIs

- No "provisional" APIs were added and there is no 'discouraged access' warnings (internal usage)

- 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"

- 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

API Changes

- Minor binary incompatibilities introduced when adopting Java 5 Generics
  - This only affects subclasses of
    - EPackageRegistryImpl
    - BasicFeatureMap and DelegateBasicFeatureMap
    - ETypedElement
  - Details at http://wiki.eclipse.org/index.php/EMF_2.3_Generics

Architectural Issues, Usability, End-of-Life

- Architectural Issues
  - EMF 2.3 requires a 5.0 JVM or greater
  - More details about JVM requirements can be found at
    http://wiki.eclipse.org/index.php/EMF_2.3_JVM_Requirements

- Usability
  - Added mnemonics to every wizard and dialogs

- End-of-Life Issues
  - Continuing viability of deprecated API guaranteed

Bugzilla

- As of 25 May 2007 (since the end of the 2.2.0 release with Callisto):

Status

		NEW	ASSIGNED	RESOLVED	VERIFIED	CLOSED	Total
	blocker	.	.	13	.	.	13
	critical	.	.	8	1	.	9
	major	.	.	49	4	4	57
Severity	normal	8	3	353	3	6	373
	minor	1	2	13	1	1	18
	trivial	.	1	11	.	2	14
	enhancement	73	.	193	1	1	268
Total		82	6	640	10	14	752

Standards and UI Usability

- Standards
  - OMG™'s EMOF and XMI used/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

- Our commitment was to provide a stable EMF driver no later than one week after Eclipse Milestone driver is available. We have met this goal

- 2.3 Release Plan
  - ✓ 2.3 M3:   09 November, 2006
  - ✓ 2.3 M4:   21 December, 2006
  - ✓ 2.3 M5:   12 February, 2007
  - ✓ 2.3 M6:   29 March, 2007
  - ✓ 2.3 M7/RC0:   11 May, 2007
  - ✓ 2.3 RC1:   23 May, 2007
  - 2.3 RC2:   30 May, 2007
  - 2.3 RC3:   13 June, 2007
  - 2.3 RC4:   20 June, 2007
  - 2.3:   29 June, 2007

- 2.2 Release Plan
  - 2.2.1:   21 September, 2006
  - 2.2.2:   13 February, 2007
  - 2.2.3:   14 May, 2007

Communities

- Very active newsgroup
  - eclipse.tools.emf

- Conference Participation (using EMF 2.3.0)
  - EclipseWorld 2006
  - OOSPLA 2006
  - Long Tutorial at EclipseCon 2007

IP Issues

- About and license files are complete and correct

- Project log complete and has been reviewed by Eclipse Legal
    - The URL is http://www.eclipse.org/modeling/emf/eclipse-project-ip-log.csv

- All significant and third-party contributions have been reviewed by Eclipse Legal (none, at present)

- Contributor contact list maintained by Project Lead and sent to EMO

IP Issues

- The contributions for this release were recorded in these bugzillas

  - 129874 - Default encoding for XML save doesn't preserve Unicode characters
  - 136881 - JET override/inserts for ItemProvider.javajet
  - 147594 - JET Compiler doesn't create missing target folder
  - 149770 - JETBuilder should call IWorkspace.validateEdit(..) before file updates
  - 150500 - bugs in merge algorithm in AdapterFactoryContentProvider$ViewerR efresh
  - 156783 - Add AES implementation of URIConverter.Cipher
  - 161744 - getReachableObjectsOfType StackOverFlow on Large Instance DataClick to add an outline

  - 165770 - Enhance combo box cell editor to support typing a prefix filter
  - 166112 - Support XML Processing Instructions
  - 166967 - When serializing XML documents, trailing comments don't get placed on a new line
  - 170204 - ID of Plugin containing a generated EPackage
  - 170223 - eNameToFeatureMap in EClassImpl is not being updated, after structural feature name had changed
  - 179004 - [Compatiblity]JDOM-based JMerge facade NPEs standard JMerge rules
  - 185971 - EMF RegistryReaders need to be dynamic