

UML2 2.0 Release Review

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# Agenda

- Features
- Non-Code Aspects
- APIs
- Tool Usability
- Architectural Issues
- End-of-Life
- Bugzilla
- Standards
- UI Usability
- Schedule
- Process
- Communities
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- Project Plan
- Release Review Version



#### **Features**

- 2.0 Plan available at http://www.eclipse.org/uml2/docs/plans/uml2\_project\_plan\_2\_0.html
- Major features
  - <u>UML™ 2.1 Conformance</u>. Implement the revised package merge algorithm and regenerate the code using a source model based on the finalized UML™ 2.1 Superstructure specification (compliance level L3). Update UML2 resources (libraries, metamodels, profiles), examples, and EMF generator extensions as necessary. Enhance the generator extensions (developed in UML2 1.1) to facilitate code generation for an arbitrary compliance level.
  - <u>UML™ 2.1 Interchange</u>. Provide support for importing/exporting resources based on the official OMG XMI representation of UML™ 2.1.



# Features (Continued)

- Major features (continued)
  - UML2 2.0 Migration. Provide a mechanism to migrate resources based on the UML2 1.x schema to 2.0.
  - Reduced Memory Footprint / Improved Performance. Reduce the memory footprint of UML models. Improve performance of key operations such as model load, save, traversal, etc..
  - Improved Convenience Methods. Provide improved factory and convenience methods. For example, factory methods that accept a name as an argument (for named element creation), and retrieval methods that accept arguments indicating whether name comparisons should be case-sensitive and whether elements should be created on demand. Ensure that metadata exists for custom operations. Also provide query methods for retrieving the reverse of one-way references.



# Features (continued)

- Major features (continued)
  - Resource Fragments. Provide support for segregation of UML2 resources into 'fragments' (e.g. \*.fragment.uml2) with packages as root elements.
  - <u>Derived Features</u>. Make derived features changeable (where appropriate) and improve support for unions, subsets, and supersets (where possible).
  - UML Ecore Importer / Exporter. Provide an exporter that takes advantage of the new exporter framework in EMF to convert Ecore models to UML (\*.uml) models, in addition to an importer that converts UML models to Ecore.
- 2.0 release notes available at http://www.eclipse.org/uml2/news/release-notes.php?version=2.0.0



# Non-Code Aspects

- Documentation available at http://www.eclipse.org/uml2/docs.html
  - FAQ
  - Javadoc (for <u>1.0</u>, <u>1.0.1</u>, <u>1.0.2</u>, <u>1.0.3</u>, <u>1.1</u>, <u>2.0</u>)
  - UML2 2.0 Plan and Migration Guide
  - Link to OMG's <u>UML™ Resource Page</u>
  - Link to <u>UML2 Project Dashboard</u>
- Localization/externalization
  - NL packs for 1. x available at http://download.eclipse.org/tools/uml2/scripts/downloads.php
  - NL packs for 2.0 to be made available



# Non-Code Aspects (Continued)

- Examples available as part of org.eclipse.uml2.examples feature
  - Actions to convert models to metamodels, model libraries
  - Actions to generate metamodels, libraries, profiles
  - Actions to externalize labels, keywords
  - Actions to convert between Ecore and UML formats

#### Articles

- Getting Started with UML2 (needs to be updated)
- Introduction to UML2 Profiles (needs to be updated)
- Others (TBD) see bug <u>77413</u>



## **APIs**

- The APIs in this release are *Eclipse Quality*
- Internal APIs marked as such
- More convenience operations
- Improved factory methods
- New utilities available



# **Tool Usability**

- The usability of the UML editor has been improved as follows:
  - new icons introduced to aid in recognition of concepts
  - labels enhanced to include keywords
  - support added for display of stereotype icons
  - display of stereotype applications refactored under base element
  - properties organized into categories in Properties view
- Import/export wizards were added/updated to round-trip models between Ecore and UML



### **Architectural Issues**

- Improved architectural quality
  - Less redundancy
  - Smaller, cleaner metadata
  - More efficient support for derived unions
- Generic features contributed to EMF
  - Virtual feature delegation
  - Package literals
  - FlatEObjectImpl



## End-of-Life

- User features
  - UML2 editor (\*.uml2) replaced with UML editor (\*.uml)
  - Ecore2XML example retired
- APIs
  - Legacy 1.x API (org.eclipse.uml2.\*) replaced with 2.0 API (org.eclipse.uml2.uml.\*)
  - Factory methods replaced with overloads offering more options
  - Some profile/stereotype methods renamed
  - Subset/superset lists deprecated (merged into combined implementations)



# Bugzilla

- 158 bugs opened
- 151 bugs resolved/closed
- 6 bugs deferred
- 12 new bugs
- 1 P1 bug outstanding (87260) plan to resolve by GA
- 1 P2 bug outstanding (<u>77413</u>) plan to resolve by GA
- 2 P3 bugs outstanding (<u>143357</u>, <u>85177</u>) plan to resolve by GA
- 2 P4 bugs outstanding (80308, 80315)



## Standards

- 2.0 release based on convenience document ptc-06-04-02 of UML
   2.1 specification
- OMG to finalize specification soon



# **UI** Usability

- UML2 tools use Eclipse platform APIs to provide accessible UI
  - No outstanding accessibility bugs
- All text is externalized, and has been translated into 14 languages, including BiDi languages
  - Brazilian Portuguese, French, German, Spanish, Italian, Japanese, Korean, Simplified Chinese, Traditional Chinese, Russian, Hungarian, Czech, Polish, Arabic
  - Translation verification testing in progress, to complete mid-June



## Schedule

- M1 met on November 10
- M2 slipped from December 22 to January 5
- M3 slipped from to February 23 to March 2
- M4 slipped from April 6 to April 13



### Process

- This release has been developed using open, transparent, and inclusive processes
- This release has followed its charter principles
- The UML2 project makes appropriate use of Bugzilla, mailing lists (<u>uml2-dev@eclipse.org</u>), newsgroups (<u>eclipse.tools.uml2</u>), and conference calls
- There were no committer elections/removals during the 2.0 release cycle, although contributions were made by a new contributor



### Communities

- Increased interaction in Bugzilla and on newsgroup
- UML2 represented at EclipseCon 2006 (short talk, code camp)
- Continued coordination with EMF tools project
- Orientation with new Modeling top level project
- UML2 is among the most active projects at Eclipse



#### **IP** Issues

- The UML2 project leadership verifies that:
  - the about files and use licenses are in place as per the <u>Guidelines to Legal</u> <u>Documentation</u>
  - 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
  - that 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 plug-in is set to "eclipse.org"
  - the "copyright" field of each plug-in is set to the copyright owner
  - that any third-party logos or trademarks included in the distribution (icons, help file logos, etc) have been licensed under the EPL
  - that any fonts or similar third-party images included in the distribution (e.g. in PDF or EPS files) have been licensed under the EPL



# Project Plan

■ Draft 2.1 plan not yet available



## Release Review Version

■ This presentation is based on Release Review version 032, dated January 15, 2006

eclipse

Thank you!

Q&A