GMF 1.0
in the Callisto Simultaneous Release

May 26, 2006

Release Review version 032 – January 15, 2006

GMF – APIs & Standards

- API
  - 1.0 Release, so all new (no end-of-life issues):
    - Either public or within 'internal' namespace (no "provisional")
    - No 'discouraged access' warnings (internal usage)
    - API change notification email to gmf-dev mailing list [runtime process]
    - Full javadoc and exsd, with guides/tutorials in Help
  - Some metrics, as of 1.0RC3 (tooling & runtime):
    - 25 extension-points in 53 plugins
    - 1715 public classes comprising 299,154 LOC
    - 743 'internal' classes comprising 60,402 LOC
- Relevant standards (OMG):
  - In use:
    - OCL - Object Constraint Language (EMFT OCL)
    - UML2 (Class & StateMachine diagram examples started)
  - Planned
    - QVT (for use in tooling model transformations)
    - Diagram Interchange Specification [#114229]

Checkpoint – Exiting Incubation

- ✓ A working and demonstrable code base
- ✓ Active communities:
  - Active plug-in provider community (10+ companies have confirmed usage)
  - Active tool user community (2471 newsgroup postings)
  - An active multi-organization community
    - 13 committers + 19 contributors from 2 organizations
- ✓ The project is operating fully in the open using open source rules of engagement
  - Full use of Bugzilla, newsgroups, mailing lists
  - Published development guidelines, FAQs, build process, etc.
- ✓ The project team members have learned the ropes and logistics of being an Eclipse project (the project "gets the Eclipse way")
  - Abides by Eclipse Development Process, posted guidelines, IP policies, open and transparent nature, etc.
- Now included in in Eclipse Modeling Project
  - GMF leverages EMF, GEF, EMFT OCL, Query, Transaction, Validation (works well with others ;-)
- GMF has or will appear at the following conferences (high interest @ eclipsecon):

GMF – IP Cleanliness

- About files and license files are complete and correct
    - [#142272] notice and epl_v10.html to be included in 1.0RC4 zips
- All significant and third-party contributions have been reviewed by Eclipse Legal
    - Apache Batik 1.6.0 (also used by WTP, TPTP, BIRT)
    - Apache Xerces 2.8.0 (maintained by WTP)
    - Initial IBM contribution (basis of GMF Runtime component) *
        - OCL, Query, Validation, Transaction have moved to EMFT
- Project log complete and has been reviewed by Eclipse Legal
    - The URL is http://www.eclipse.org/gmf/development/gmf-log.csv
- Contributor contact list maintained by Project Lead and sent to EMO

* Awaiting final scan by Foundation

GMF Release Review

Backup Slides

Features

- As 1.0 release, all are new:
  - M3 New & Noteworthy
  - M4 New & Noteworthy
  - M5 New & Noteworthy
  - M6 New & Noteworthy

Runtime Component Features

- A set of frameworks to help the development of Eclipse graphical editors:
  - Reusable components for graphical editors
  - A standardized model to describe diagram elements
    - Semantic and diagram models are distinct
  - Enables open and extensible graphical editors
  - Command infrastructure that bridges EMF and GEF
    - EMF provides a runtime infrastructure to instantiate and manipulate models (among other things)
    - GEF is an MVC-based framework to create graphical editors
  - Leverage various other technologies:
    - EMFT-Transaction, Validation, OCL
    - Apache Batik

Tooling Component Features

- Defined models for:
    - Graphical definition (canvas, figures, connections, etc.)
    - Tooling definition (palette, etc.)
    - Mapping definition (links graphical/tooling to domain model)
    - Generator model (generates diagram plug-in that leverages runtime)
- Wizards for graphical, tooling, and mapping models
- Bootstrapped ECore editor for EMF diagramming
- Experimental WYSIWYG graphical definition diagram
- Optional "lite" generation option
    - Pure-GEF/EFM implementation for lightweight/RCP diagrams

Project Milestones

- Project formed on April 14th, 2005
- Contribution Reviews from 12 organizations
- Kickoff Meeting week of July 17th, 2005 in Prague
- Plan Posted
    - Milestone Themes
        - M2 – Clean
        - M3 – Functional
        - M4 – Bootstrapped [not fully achieved in 1.0]
        - M5 – Ready to Hatch
- Requirements from Website → Bugzilla
- Joined Callisto release
- Migrated to Phoenix look & feel
- Became part of Eclipse Modeling Project
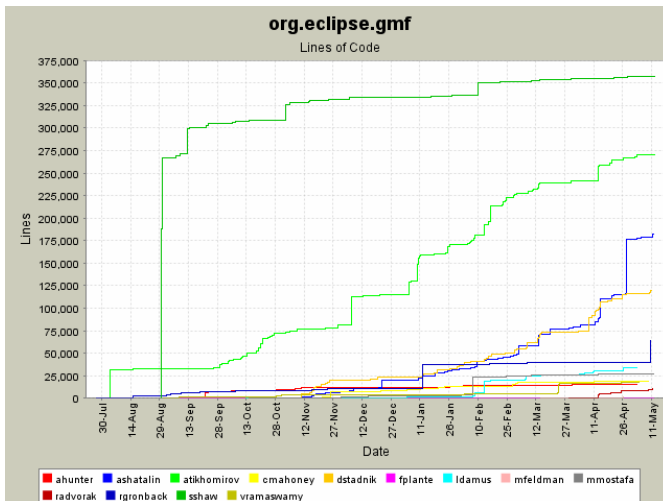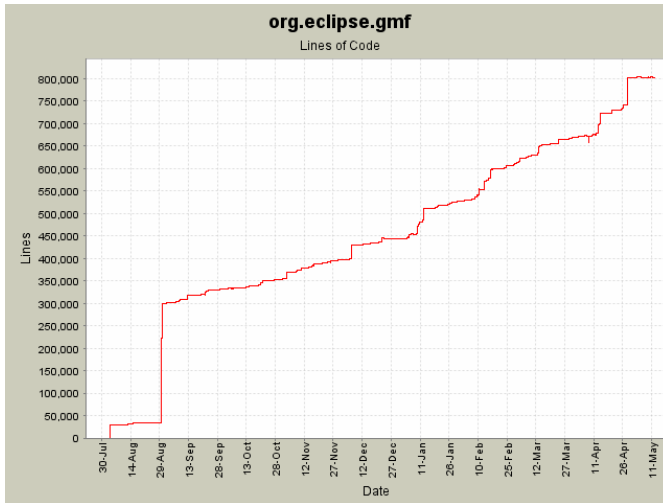   - CVS, newsgroup, bugzilla migration following 1.0 release

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Release Plan

✓ 1.0 M3   Nov 18, 2005 (M3 to align with others)
✓ 1.0 M4   Jan 13, 2006 (US/CA/RU holidays)
✓ 1.0 M5   Mar 03, 2006
✓ 1.0 M6/RC0/RC1   Apr 14, 2006
✓ 1.0 RC2   May 05, 2006
✓ 1.0 RC3   May 19, 2006
▪ 1.0 RC4   May 31, 2006
▪ 1.0 RC5   June 20, 2006
▪ 1.0 RC6   June 28, 2006

▪ Some date changes made to align with Callisto release

Development

- Full use of bugzilla, newsgroup, mailing list
  - No regular teleconferences
- Continuous build system with 6 week milestones
  - CruiseControl & Update Manager based on PDE basebuilder
  - Build instructions posted
  - Build machine reporting site and build schedule posted
  - Dedicated gmf-releng mailing list
- Development Guidelines posted, covering:
  - CVS, coding standards, testing, workspace config, bugzilla, etc.
- API change notifications to gmf-dev mailing list

StatCVS and Dashboard View

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Documentation and Examples

- Help Contents:
    - Programmer's Guide (7 docs)
    - Tutorials (11 docs)
    - Examples Guide (5 docs)
- 5 Runtime example projects
    - Logic & geoshape diagrams, decorator, service, layout
- 5 Tooling example projects
    - Taipan, UML2 Class & State diagrams, ECore, Mindmap
- Introduction to Runtime on Eclipse Corner
- Mindmap Tutorial on Wiki
    - Cheat sheet in Help for part 1
- FAQ on Wiki

I18n, I10n, Accessibility

- Internationalization
    - GMF uses Eclipse i18n support
    - ICU4J used per Callisto requirements
- Localization
    - IBM to contribute language packs for GMF
- Accessibility
    - Nothing beyond standard Eclipse and GEF features

Bugzilla – Defect Statistics

- As of 05/17/06:
  - Total: 1424
  - New: 317
  - Assigned: 45
  - Reopened: 3
  - Resolved: 1004
  - Verified: 5
  - Closed: 50

Target Milestone

Severity	1.0 M3	1.0 M4	1.0 M5	1.0 M6	1.0 RC	1.0 RC2	1.0 RC3	Total
blocker	.	2	1	4	3	.	2	12
critical	1	.	8	7	4	2	6	28
major	2	5	13	27	25	5	6	83
normal	3	17	18	49	15	.	10	112
minor	1	.	2	4	2	.	.	9
trivial	.	.	.	1	.	.	.	1
enhancement	13	22	47	13	5	.	1	101
Total	20	46	89	105	54	7	25	**346**

Process: Community

- 13 Committers + 18 Contributors from 2 organizations
  - Newsgroup/User community represent numerous organizations
- Active in community, according to 'Liveness' measure
  - GMF typically in top 5 (when site up and project-info.xml correct ;-)
- Several organizations actively evaluating/using GMF in internal and commercial projects/products (names withheld)
- Visibility and Outreach
  - Blog at http://eclipse-modeling.blogspot.com (not so active)
  - Upcoming webinar with EMF (part of Callisto release & EMP)
  - GMF has been or will be presented at the following:

Future Plan

- To be posted here:
  http://wiki.eclipse.org/index.php/GMF_Project_Plan
- Preliminary themes:

  - Quality API

  - Improved Performance

  - Become a Model[ing] Citizen

  - Broaden use of Standards

  - Improved Usability

Room to Improve

- Improve automation of IP Log [#113717]
  - Today, dependent on bug# in CVS log policy, with statCVS report
- Broaden contributor participation (beyond Borland & IBM)
  - Many parties interested, though without firm commitment yet
- No strict component ownership, though no cross-component development either
  - Need team exposure across tooling/runtime bounds