

The logo features the word "Galileo" in a white, elegant cursive script. Below it, the date "06.24.09" is written in a smaller, white, sans-serif font. The background is a dark, starry space with a large, glowing blue and white circular element on the left, resembling a planet or a celestial body.

## ***Eclipse Galileo Co-ordinated Release***

Review Date: June 10th, 2009

Release date: June 24th, 2009

# ***Eleven Top Level Projects***

- Eclipse
- Tools
- Web Tools Platform
- Test & Performance Tools Platform
- Business Intelligence and Reporting Tools
- Modeling
- Data Tools Platform
- Device Software Development Platform
- SOA Tools Platform
- Technology
- Eclipse RT

# ***Galileo Projects (1/7)***

- The Eclipse Project
  - Eclipse Platform
  - Java Development Tools (JDT)
  - Plug-in Development Environment (PDE)
- Web Tools Platform (WTP)
- Data Tools Platform (DTP)

# ***Galileo Projects (2/7)***

- Tools
  - C/C++ Development Tools (CDT)
  - PHP Development Tools (PDT) \*
  - Mylyn
  - Graphical Editing Framework (GEF)
  - Buckminster
- Business Intelligence and Reporting Tools (BIRT)

# ***Galileo Projects (3/7)***

- Device Software Development Platform Project
  - Target Management (TM)
  - Tools for mobile Linux (TmL) \*
  - Mobile Tools for Java (MTJ) \*
- SOA Tools Platform (STP)  
SCA Tools  
BPMN
- Test & Performance Tools Platform (TPTP)  
Platform, Test, Trace, Monitoring

# ***Galileo Projects (4/7)***

- Modeling (1/2)
  - Eclipse Modeling Framework (EMF)
    - Query, Transaction, Validation, Teneo, Net4j, CDO
  - Eclipse Modeling Framework Technology (EMFT)
    - EMF Search, EMF Compare, Ecore Tools, Mint, MWE
  - Graphical Modeling Framework (GMF)

# *Galileo Projects (5/7)*

- Modeling (2/2)
  - Model Development Tools (MDT)
    - OCL, UML2, UML2 Tools, XSD
  - Model-to-Model Transformation (M2M)
    - ATL, QVTO
  - Model-to-Text (M2T)
    - JET, Xpand \*, Acceleo \*
  - Textual Modeling Framework (TMF) \*
    - Xtext

# ***Galileo Projects (6/7)***

- Technology
  - Accessibility Tools Framework (ACTF) \*
  - Dynamic Languages Toolkit (DLTK)
  - Eclipse Packaging Project (EPP)
  - Java Workflow Tooling (JWT) \*
  - Memory Analyzer (MAT) \*
  - Subversive



# ***Galileo Projects (7/7)***

- Eclipse RT
  - Equinox \*\*
  - Eclipse Communication Framework (ECF)
  - Eclipse Persistence Services Project (EclipseLink) \*
  - Rich Ajax Platform (RAP)
  - Riena \*
  - Swordfish \*

The logo features the word "Galileo" in a white, elegant cursive script. Below it, the date "06.24.09" is written in a smaller, white, sans-serif font. The text is set against a dark background with glowing blue and white light trails and a faint grid pattern.

*Galileo*  
06.24.09

***And now...***

The mini-decks...



# Accessibility Tools Framework (ACTF) 0.7 Release Review

June 10<sup>th</sup>, 2009

Chieko Asakawa, IBM (Project Lead)

Kentarou Fukuda, IBM (Release Engineer)

- The Accessibility Tools Framework (ACTF) is a Technology subproject in the incubation phase
  - <http://www.eclipse.org/actf>
- ACTF aims at providing an extensible and comprehensive framework for accessibility tools.
- This release includes
  - Visualization SDK
  - Visualization Extension for WST
  - Visualization Extension for PDT

- Infrastructure components
  - Provide comprehensive and unified access mechanisms for the user interfaces of applications and for the object models of various kinds of content.
  - Provide middleware to manage components and dataflow in the framework on top of the Eclipse platform.
  
- Visualization components
  - Provide reusable view components for creating accessibility evaluation tools.
  - Provide visual representations of the content and applications as perceived by People with Disabilities (PwD).
  
- WST/PDT integration
  - Provide extension features for WST/PDT.
  - Enable use of the accessibility visualization functions of ACTF from the perspectives of the Web, J2EE, and PHP.



# Eclipse BIRT 2.5 Release Review (Subset)

May 27, 2009

## Eclipse BIRT PMC



## Features: BIRT 2.5 Requirements Process



- Requirements gathered from multiple sources:
  - Enhancement requests already entered in Bugzilla
  - Discussions in BIRT newsgroup
  - Innovation/experience from within the BIRT project team
- Requirements captured in Bugzilla
  - Community encouraged to enter all enhancements into Bugzilla for planning and tracking
- BIRT 2.5 Plan developed and published on Eclipse.org

# Features: Summary of BIRT 2.5 Objectives & Themes



- Integrate and provide BIRT as part of the Galileo Simultaneous Release
  - Tested with and integrates components from Galileo release
  - Support use of BIRT in a wide range of Eclipse 3.5 applications
  - Ensures BIRT technology is easily accessible to Eclipse 3.5 community
- Specific additional features can be grouped into broad categories
  - Report Layout (e.g. display page aggregates, consistency of report output layout with the design layout, consistent style sheet support across all report output formats)
  - Crosstab enhancements (e.g. apply filter on any cube dimension)
  - Data Access (e.g. support parameters for XML data sources)
  - Charts (e.g. multiple drill-downs, control chart output when dataset is empty)
  - Scripting (e.g. control page breaks through scripts, use expressions as default parameter values)
  - Parameters (e.g. multiple default values for list-box parameters)
  - Bidirectional enhancements (e.g. data source layout transformations, enhanced runtime support)
  - Performance improvements (e.g. improved performance of Java Event Handlers)
  - Usability improvements (e.g. extension point for custom Report Templates, create connection profile from existing data source)
- Incorporate Eclipse Themes & Priorities where applicable

For Details, refer to BIRT 2.5 Release Plan and Bugzilla



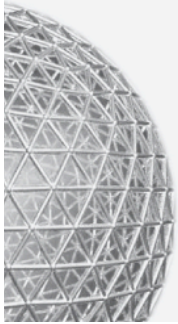
# Non-Code Aspects: Documentation & Examples

- BIRT 2.5 download includes online documentation
  - Created by professional technical writers
- Tutorials and examples available on [www.eclipse.org/birt](http://www.eclipse.org/birt)
  - How-To recorded demos
  - Articles on common BIRT usage scenarios
  - Examples of common reports, code snippets
- BIRT includes an embedded Derby sample database
  - Easy to learn how to use BIRT with tutorials and examples
  - Standard SQL data that can easily be loaded into other DBs
- New & Noteworthy documents
  - Have been created for Milestone releases
  - Comprehensive BIRT 2.5 N&N will be created for final 2.5 release

# Community: Activity



- Articles and Technical Content Placement on BIRT Exchange
  - <http://www.birt-exchange.org/devshare/>
- Conferences and User Groups
  - Eclipse Summit Europe, November 2008
  - EclipseCon 2009, March 2009
  - JAX Germany, April 2009
  - Presented on BIRT at many other conferences and events during last 12 months
- Blogging
  - BIRT World: <http://birtworld.blogspot.com>
  - Promoting BIRT on many other sites such as TheServerSide, JavaLobby and EclipseZone
- Four books available:
  - BIRT: A Field Guide to Reporting (Addison-Wesley)
  - Integrating and Extending BIRT (Addison-Wesley)
  - Practical Data Analysis and Reporting with BIRT (Packt Publishing)
  - Eclipse BIRT: Business Intelligence und Reporting Tool (Xpert.press) (German)



# Buckminster

**Galileo** 2009

<http://www.eclipse.org/buckminster>

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## BUCKMINSTER OBJECTIVE

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Buckminster's objective is to leverage and extend the Eclipse platform to make mixed-component development as efficient as plug-in development. The basic approach is to introduce a project-agnostic way of describing a development project's component structure and dependencies, and to provide a mechanism for materializing source and binary artifacts for a project of any degree of complexity.

## BUCKMINSTER CAPABILITIES

- **Complex dependency resolution**, providing recursive resolution of dependencies leveraging existing Eclipse "Team Providers," with the addition of new retrievers, for exemplary purposes, covering source and binary artifacts that are not version-controlled in a traditional sense as well as P2 repositories. Resolution uses the flexible Omni Version from P2 to describe versions and ranges. This allows comparison of current and prior dependency resolutions to support update impact analyses.
- **Uniform component dependency format**, using a component-type agnostic mechanism for describing components and their respective targets and dependency requirements. Most Eclipse projects, and many other component types, have some level of dependency information that can be leveraged. Extensions can be added to provide additional strategies for dependency pattern recognition.
- **Intelligent retrieval mechanisms**, using a component query mechanism the resolution and generated bill of material needed for a given configuration are separated from the actual materialization. This allows sharing of configurations with varying degree of variability between team members (e.g. from "all source needed for latest revision on main branch" to "frozen release configuration").
- **Flexible project workspace binding**, allowing components materialized on disc to be bound to a workspace in different ways, including invoking "build action" before binding to a workspace and supporting "Proxy Projects" consisting of links to physical artifacts and auto-generated Eclipse project information. These capabilities are helpful when sharing code or other artifacts that are not eclipse projects.

## BUCKMINSTER CAPABILITIES

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- **Actions**, leveraging existing “build technologies” both within Eclipse (PDE-build) and external (ANT), Buckminster can drive building, and assembling components. Materialization is not just “copying of files” – a compiled artifact can be materialized from its source.
- **Headless mode**, a headless packaging of Buckminster gives the same capabilities to command line level tools and scripts as what is available in the Eclipse IDE. As an example Buckminster can drive headless PDE builds.

# CDT 6.0 Galileo Overview

Doug Schaefer  
CDT Project Lead

# New Features

- N&N: <http://wiki.eclipse.org/CDT/User/NewIn60>
- The Debug Services Framework has completed move to CDT and is a new component of CDT
- New heuristics to help indexer find header files in projects
- Added index support for implicit references and overloaded operators
- Improved Convert to C/C++ Project to factor in project types (e.g. Makefile)
- New Launch Group launch config for launching multiple sessions at once
- New features for embedded development
  - Remote Launch based on RSE
  - GCC Cross compiler build support
- p2 support for installing tar files for C/C++ SDKs



# Communities

- Numerous design discussions carried out in Bugzilla and on the cdt-dev mailing list
- A small number of committers continue to contribute to the newsgroup to help the user community
- CDT monthly calls continue
- CDT Summit in September 2008 held to plan for CDT 6.0.
- Blogs from Doug, Ken, Chris and others
- Participation in Demo Camps in Ottawa, Toronto, Austin and others
- EclipseCon and Eclipse Summit Europe activity continued but lower levels than previous years

# Contribution Status

- CDT Community continues to be active and growing
- Number of committer hours is declining, though
  - Not clear how many new major features can be produced by existing team
  - Not clear if anything big is needed anyway
  - Still missing investment in documentation and QA
- But usability of existing CDT features is strong and the CDT remains a popular C/C++ IDE choice, especially for embedded and Linux
  - Minor work needed to improve build workflows, but workarounds available
- CDT Summit for this year is in jeopardy due to travel restrictions
  - Will need to have planning sessions on-line instead

# Bugzilla

- Number of bugs currently open
  - 1247
- Number of new bugs since 5.0.0
  - 1601
- Number of bugs closed since 5.0.0
  - 1561
- CDT contributors' current focus on quality is keeping our head above water
  - Backlog remains fairly stable

# DLTK - Introduction



- DLTK 1.0 releasing following components to Galileo
  - Core Frameworks
  - Ruby IDE
  - TCL IDE
  - XOTcl and ITcl OO Extensions support for TCL IDE
  - Remote development via DSDP TM RSE
  - Mylyn Integration Component

# DLTK - Community



- Community
  - 12 committers from Zend Technologies, Embarcadero, Xored Software, Servoy, and individual committers
  - DLTK Core Frameworks serves as a foundation for Eclipse PDT Project
  - Embarcadero 3rdRail Ruby on Rails IDE and TurboRuby products are built on top of DLTK Ruby component
  - froglogic is utilizing DLTK project in new version of their leading GUI testing and automation tool – Squish
  - Servoy works on cross-platform application development environment based on DLTK JavaScript component
  - More projects built on top of DLTK:  
[http://wiki.eclipse.org/DLTK\\_Based\\_Projects](http://wiki.eclipse.org/DLTK_Based_Projects)

# DLTK - Project Milestones and IP



- Proposed December 2005
- Created December 2006
- DLTK 0.9 Released with Europa (June 2007)
- DLTK 0.95 Released with Ganymede (June 2008)
- DLTK 1.0 is under development and going to be released with Galileo (June 2009)
  - Project plan available at: [http://wiki.eclipse.org/index.php/DLTK\\_Project\\_Plan](http://wiki.eclipse.org/index.php/DLTK_Project_Plan)
- All plugins contain appropriate license files
- All committers have completed Eclipse Committer Agreements and have been approved by the PMC
- Project IP Log maintained at [http://www.eclipse.org/dltk/ip\\_log.html](http://www.eclipse.org/dltk/ip_log.html)



# DLTK 1.0 Features

- Core Frameworks
  - Structural Source Code Model
  - Type Inference Engine
  - Search and Indexing
  - Launching and Debugging over DBGp protocol
  - Interactive Console
  - Common UI components (Wizards, Views, Preference Pages, etc)
  - Plan available at: [http://wiki.eclipse.org/index.php/DLTK\\_Project\\_Plan](http://wiki.eclipse.org/index.php/DLTK_Project_Plan)
- Ruby IDE Component
  - Many of JDT-alike features implemented
- TCL IDE Component
  - Many of JDT-alike features implemented
- Integration Components
  - Mylyn Integration and Remote Projects support via RSE

# DLTK - API: 1.0 Status



- Implementation
  - DLTK Core Frameworks API is used by 10+ projects and quite stable – not a lot of changes since 0.95 release
  - Other DLTK components and external projects depends on the Core
- Documentation
  - Project still lacks of documentation, but quite well supported by community through newsgroup and other communication channels
- Test Cases
  - Essential parts of the code covered with test cases
- Compatibility
  - Version 1.0 is not backward compatible with 0.95 (Incubation)





*Tools for mobile Linux  
Mini Deck 0.3  
29 May 2009*

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[TmL mailing list: dsdp-tml-dev@eclipse.org](mailto:dsdp-tml-dev@eclipse.org)

Data compiled for [Development Process 2.4](http://www.eclipse.org/projects/dev_process/development_process.php) ([http://www.eclipse.org/projects/dev\\_process/development\\_process.php](http://www.eclipse.org/projects/dev_process/development_process.php))

# *What is TmL*



- A sub-project of DSDP  
([http://www.eclipse.org/projects/project\\_summary.php?projectid=dspd.tml](http://www.eclipse.org/projects/project_summary.php?projectid=dspd.tml))
- Incubated in December 2006 and driven largely by Motorola. Still in incubation.
- Providing tools to support mobile Linux application developers using C/C++.

# *TmL 0.3 Features*



- Components:
  - Device framework
    - Provides support for the Devices and Services plugins, allowing them to start, pause, stop, and halt services used by the VNC Viewer and others.
  - VNC Viewer
    - Provides a VNC client as an Eclipse View.
  - Protocol Component
    - Provides the Remote Frame Buffer (RFB) protocol used by the VNC viewer as well as a framework for handling client/server protocol interactions.
  - Linux /proc Tools
    - Provides Eclipse views to show CPU Load and Memory Map from the Linux /proc file system

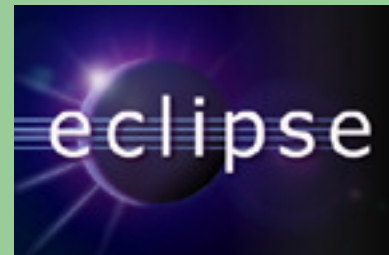
# *The Future of TmL*



- 0.4 release in 4Q2009
- After 0.4, for Eclipse Helios, TmL will be rescoped with Eclipse Pulsar, DSDP/MTJ and other projects. The result will be a project with more of a general “mobile development” focus covering all platforms and language choices. A project proposal for this rescope is available on the TmL website.
- More details in the [TmL 0.3 Release Review](#) slide deck

# Eclipse Data Tools Platform (DTP) 1.7 Release Review Minideck

Eclipse DTP PMC  
May 27, 2009





## DTP 1.7 Themes

- Provide incremental feature improvements for all projects
- Additional enablement support and exemplary tools
- Evolve the core frameworks past DTP 1.6
- Provide API improvements for UI components and better support for RCP
- Provide stability and new functionality in the SQL Query Builder component

# DTP 1.7 Features: Some Examples

- Enablement
  - SQLite support
  - Ingres contributions
  - SQL Server 2000/2005/2008 Contributions
  - New exemplary tooling for SQL Object schema editing (Stored procedures, tables, schemas, etc.) for Sybase ASA
- Core Connectivity
  - Better APIs for managing ad hoc connections
- SQL Query Builder
  - Continued improvement from IBM & Sybase contributions
- Further stabilize the foundation of DTP by resolving as many bugs and *Discouraged Access* warnings as possible.
- Enhance user tools to make DTP a compelling choice for developing data centric applications in Eclipse.
- Make DTP easier to understand and leverage, from both the extender and user perspectives.
- Meet milestone dates in tight synchronization with Galileo plans.



# Architectural Issues

- Further integration of DTP models and components, including parser
- Streamlining of some DTP Connectivity models to simplify implementation and usage
- Increase number, depth and quality of exemplary and extensible tools going forward
- Pull code up into frameworks from Enablement as necessary





## UI Usability

- SQL editor allows users to create, edit, and test SQL statements
- SQL routine editor allows for execution of stored procedures
- SQL query builder allows for graphical construction of SQL queries
- Connectivity components allow for using heterogeneous data sources



# Community: Adoption

- “Community” page on DTP web site\*
- Commercial Adoption
  - Sybase
  - Actuate
  - Nexaweb
  - Oracle
  - Ingres
  - IBM
- Open Source
  - BIRT
  - Jalcedo
  - JFire
  - NightLabs
  - WTP
- Standards
  - OMG for *Information Management Metamodel* (IMM)\*\*
- Based on community feedback, estimating about 8 to 10 more commercial products in development using DTP

\* <http://www.eclipse.org/datatools/community.html>

\*\* <http://www.omg.org/cgi-bin/doc?ab/05-12-02>



# Project Plan

- DTP 1.7 maintenance releases with Galileo
- Two maintenance releases planned for 2009/2010
- Next major release will coincide with the next major platform release (June 2010)
- Additional releases will be considered based on community requests and readiness



# ECF 3.0 Release Review Minideck

Project Lead: Scott Lewis [slewis@eclipsesource.com](mailto:slewis@eclipsesource.com)

Mailing List: [ecf-dev@eclipse.org](mailto:ecf-dev@eclipse.org)

Home Page: <http://www.eclipse.org/ecf>

# What is ECF?



- Framework/APIs for building applications that need interprocess communications
  - Distributed OSGi
  - Filetransfer
  - Presence/IM
  - VOIP, others
- Set of Exemplary Tools (Contacts List, IM/RT Collaboration, RT Shared Editing, etc) for Eclipse/RCP Apps

# Highlights



- Discovery (API and UI)
- Remote Services/RFC119, R-OSGi
- Apache HttpClient 3.1 for P2 Filetransfer
- Sync API
- RT Shared Editing
- RT Resource Sharing

# Community Growth



- More Organizations Contributing: IBM, Siemens, EclipseSource, Cloudsmith
- More Adopters: <http://wiki.eclipse.org/ECF/Adopters>
  - Special mention: Coffee project  
<http://www.coffee-soft.org/>
  - Now Contributing
- 321 Bugs Fixed



# Future Plans

- Remote Services/RFC119
- More providers: Discovery, RS (JMS, Riena), Presence (twitter), VOIP (SIP)
- ECF on Equinox Servers
- Testing Distributed Applications
- ECF Book
- Other Plans and Priorities under Consideration





# Eclipse Project 3.5 Release Review

Eclipse Project PMC

# Eclipse Project Overview



- The Eclipse Project is an open source software development project dedicated to providing a robust, full-featured, commercial-quality, and freely available industry platform for the development of highly integrated tools
- The project is comprised of three major parts:
  - Platform: A general purpose application framework and tools platform
  - JDT: Industry-leading Java development tools
  - PDE: Plug-in development environment for authoring Eclipse-based plug-ins and applications

# Highlights



- 3.5 new features:
  - New platforms: Mac Cocoa 32 and 64-bit, Solaris x86, os/390
  - Declarative services, block selection in editors, improved compare editors, PDE target management, extensible execution environments, improved test and build infrastructure
- API quality:
  - High. 7 changes in porting guide.
  - Binary compatible for compliant plug-ins
  - New API: 168 types, 351 methods
  - Deprecated API: 160 types, 51 methods, 23 fields
  - 7 breaking changes: Platform (7), JDT (0)
- End-of-life issues:
  - Bundle org.eclipse.pde.p2.ui removed, content merged into org.eclipse.pde.ui. No API involved.
- IP Clearance and Licenses:
  - All licenses and about files are in place as per the Eclipse Development Process, the Due Diligence Process was followed for all contributions
- Community and Committer Diversity:
  - 107 committers, 63 active in past 9 months
  - Organizations: IBM (51), Individuals (6), Code 9 (2), Adobe (1), Wind River (1), BestSolution (1), Red Hat (1)
  - Geographies: Canada, USA, France, Switzerland, Poland, Germany, Austria, Japan, India
  - Commits: IBM (91%), Individuals (4%), Wind River, Red Hat, Code 9, Adobe, BestSolution (1% each)
  - Consumed by many other Eclipse projects

# Eclipse Rich Ajax Platform Project (RAP)



Mission statement: RAP enables developers to build rich, Ajax-enabled web applications by using the Eclipse development model, plug-ins and a Java-only API

RAP implements a subset of SWT, JFace, Workbench APIs

- is built on top of Equinox, running in server environments
- provides the Eclipse extension point mechanism
- enables single sourcing of RCP and RAP apps
- uses the Qooxdoo Javascript library for client side rendering in the browser

RAP enables

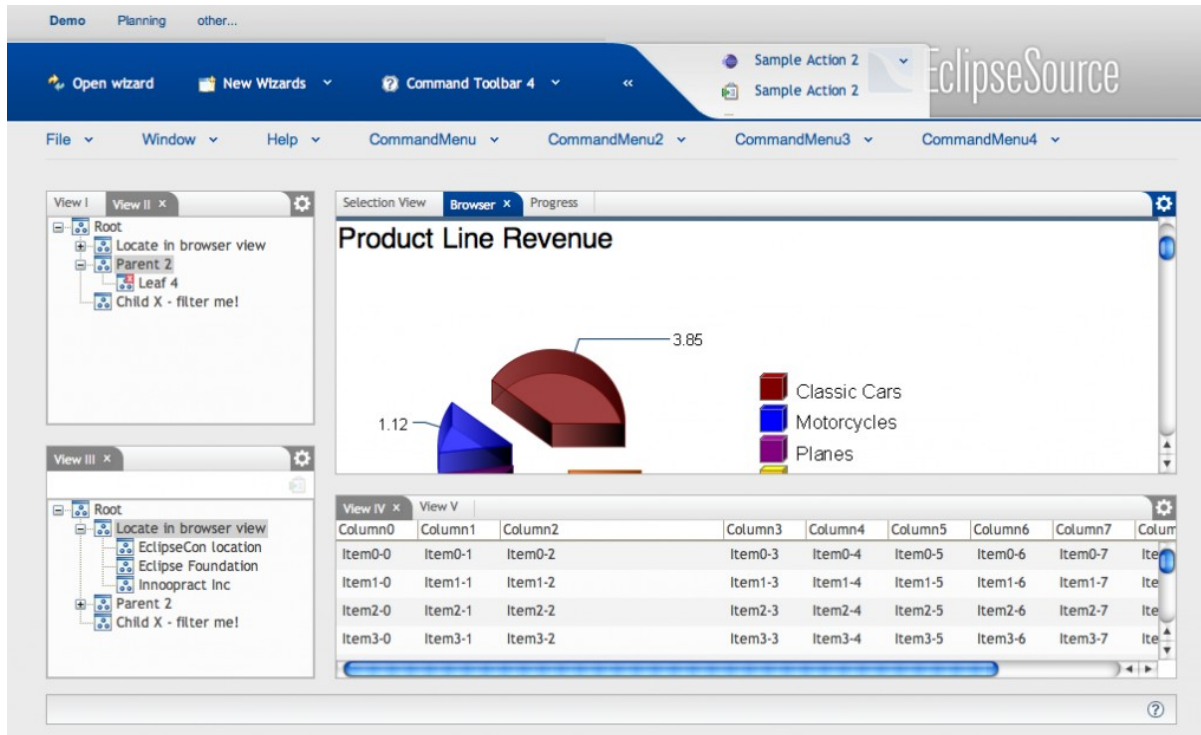
- coding in Java, developing the UI with SWT, JFace and Workbench extension points
- running the application on the server
- and accessing it with a browser

# Features



- broad coverage of SWT 3.5 APIs
- broad coverage of JFace 3.5 APIs  
includes JFace databinding
- broad coverage of Workbench 3.4 APIs
  - `org.eclipse.ui.workbench`
  - `org.eclipse.ui.views`
  - `org.eclipse.ui.forms`
- tools for launching and unit testing

# RAP in Action



## Custom Form Widgets Demo

### Eclipse Projects:

- **RAP- Rich Ajax Platform.**  
The RAP project enables developers to build rich, Ajax-enabled Web applications by using the Eclipse development model, plug-ins with the well known Eclipse workbench extension points, JFace, and a widget toolkit with SWT API (using qooxdoo for the client-side presentation).

[Subscribe](#)



# EMFT Ecore Tools 0.9 Release Review Mini Deck

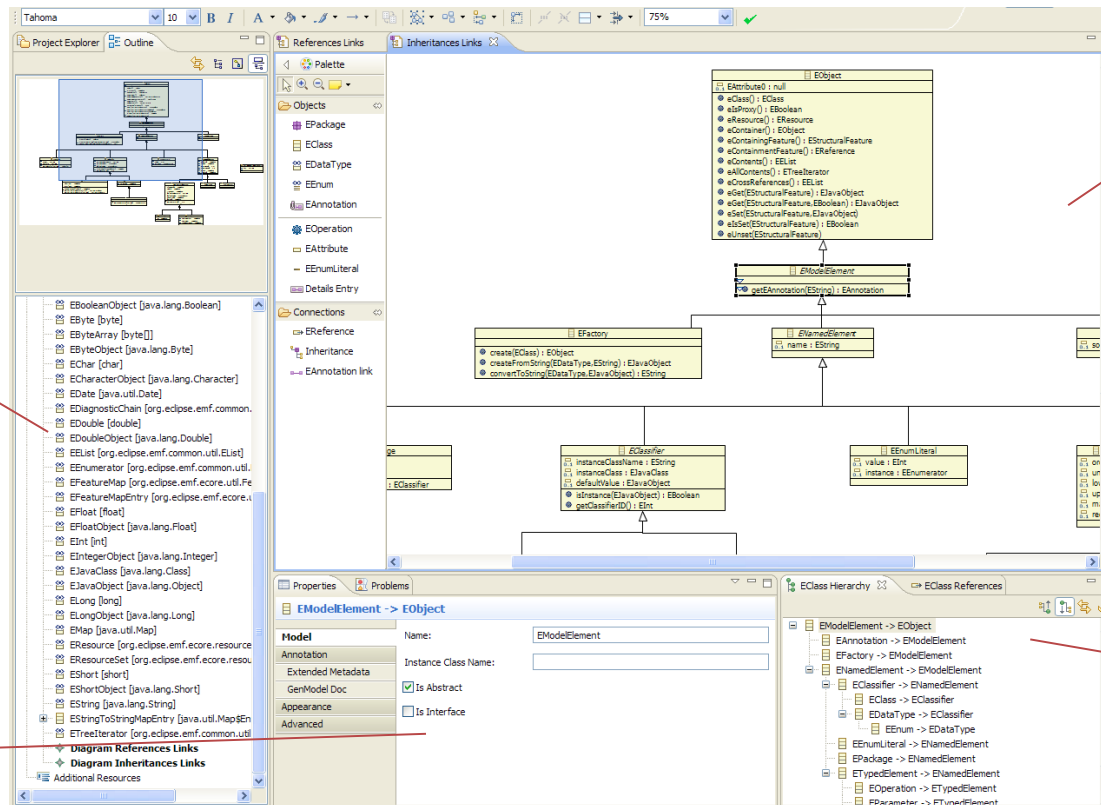
## Galileo Simultaneous Release

Planned Review Date : June 10<sup>th</sup>, 2009  
Communication Channel : [eclipse.technology.emft](http://eclipse.technology.emft)

# What is Ecore Tools ?



- Provides a complete environment to create/edit Ecore models



Model oriented outline

Graphical editor supporting multi-diagrams

Custom tabbed properties view

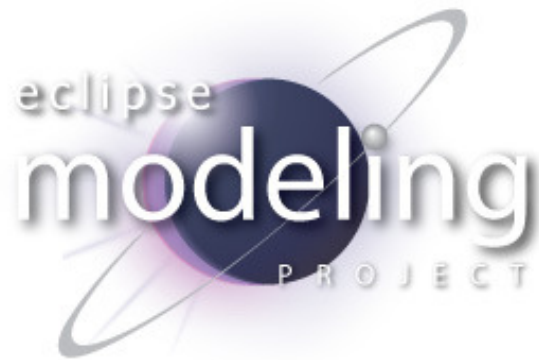
Analysis views : Hierarchy, References





# What's new ?

- Features
  - Make diagram more sexy by adding gradients and shadow borders
  - Outline View : add EMF actions + filtering capabilities
  - Improve diagrams management and navigation
- Bugzilla
  - 13 enhancements, 19 bugs fixed
  - 0 blocker or critical bugs open



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<http://www.esc-net.de>  
<http://thegordian.blogspot.com>

**Berlin, Germany**



# **Net4j Signalling Platform**

## **2.0 Release Review**

### **(Mini Deck)**

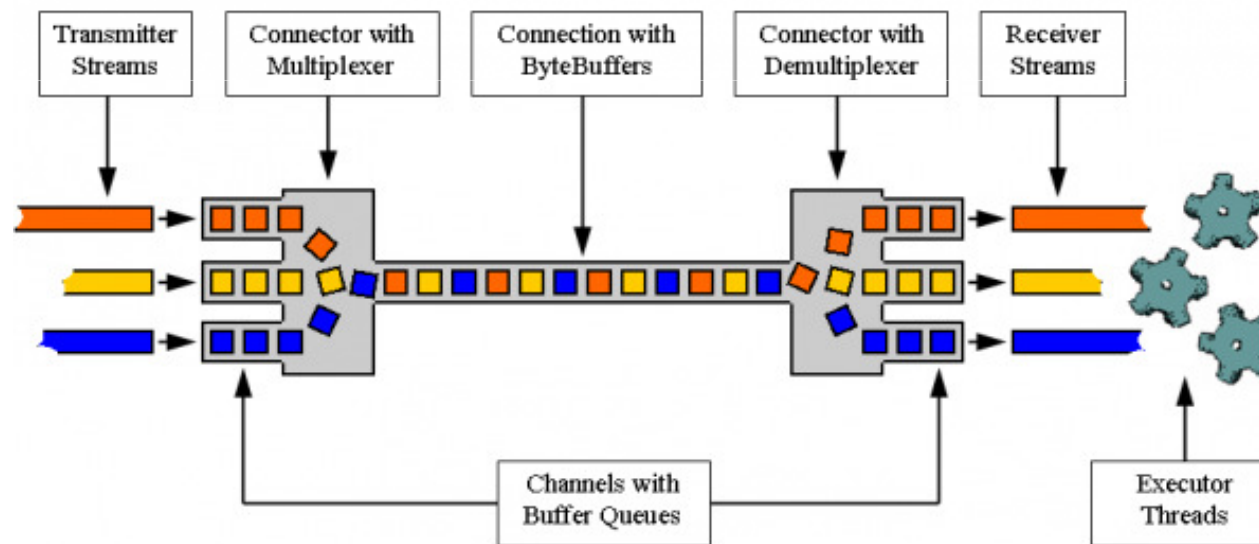
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**Planned Review Date: June 10th, 2009**  
**Project Newsgroup: eclipse.tools.emf**

---

# Introduction

The Net4j Signalling platform is an extensible client/server communications framework. Net4j eases the development of fast and maintainable application protocols that are independent of the physical transport medium. Transport protocols are pluggable and Net4j ships with support for TCP, HTTP and in-memory transport. The core of Net4j is a fast, asynchronous and non-blocking buffer multiplexing kernel, based on OSGi but also executable stand-alone.



Project URL: <http://wiki.eclipse.org/Net4j>

# *Release Highlights*

## § **Quality of APIs**

- § 2.0 API is partly incompatible with 1.0
- § API Toling has been used consequently

## § **End of Life**

- § None

## § **IP**

- § IP Log URL:  
<http://www.eclipse.org/modeling/emf/net4j/project-info/eclipse-project-ip-log.csv>

- § No issues

## § **Committer Diversity**

- § 7 committers from 7 different companies
- § Several additions to the team are pending

# Project Activity Since 1.0

## § **Bugzilla**

§ 28 of 42 enhancements done (10 left open)

§ 13 of 20 bugs fixed (4 left open)

## § **CVS**

§ 44187 changed lines of code committed (incl. CDO)

## § **Communication**

§ More than 120 newsgroup posts

§ Talk at EclipseCon, several demo camps

§ Several magazine articles



# EMF Compare 1.0.0 Galileo Simultaneous Release

Cédric Brun

Release Review : June 10 , 2009

**Communication Channel** : [eclipse.modeling.emft](mailto:eclipse.modeling.emft@eclipse.org) newsgroup

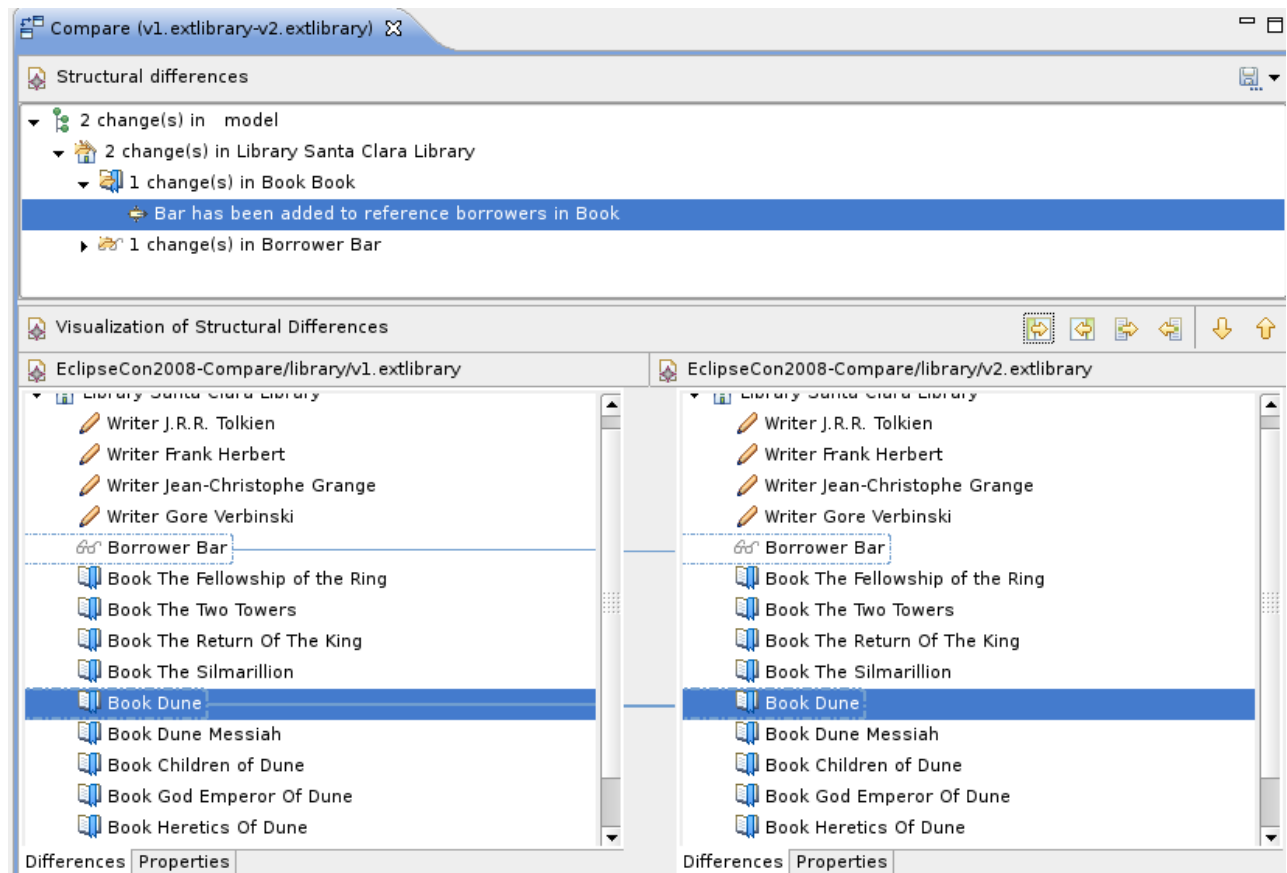
**Process Documentation** : [http://www.eclipse.org/projects/dev\\_process/development\\_process.php](http://www.eclipse.org/projects/dev_process/development_process.php)

**Project Plan** : [http://www.eclipse.org/projects/project-plan.php?](http://www.eclipse.org/projects/project-plan.php?planurl=http://www.eclipse.org/modeling/emft/compare/project-info/plan.xml&component=Compare)

[planurl=http://www.eclipse.org/modeling/emft/compare/project-info/plan.xml&component=Compare](http://www.eclipse.org/modeling/emft/compare/project-info/plan.xml&component=Compare)

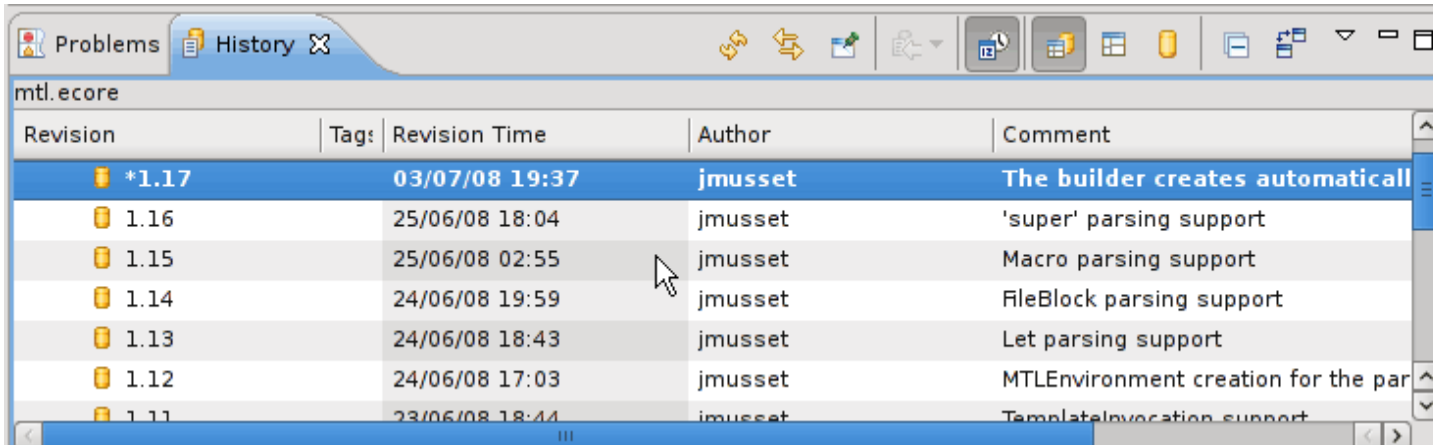
# EMF Compare

- model :
  - differencing
  - merging
- diff export
- extensibility



# Team Support

- Compare, merge support
- SCM integration (CVS, SVN, GIT...)
- History analysis



The screenshot shows the Eclipse IDE's History view for the file 'mtl.ecore'. The view displays a table of revisions with columns for Revision, Tag, Revision Time, Author, and Comment. The revisions are listed in descending order of time, with the most recent revision (+1.17) at the top. The revision +1.17 is highlighted in blue, and a mouse cursor is pointing at the revision 1.15.

Revision	Tag	Revision Time	Author	Comment
+1.17		03/07/08 19:37	jmusset	The builder creates automaticall
1.16		25/06/08 18:04	jmusset	'super' parsing support
1.15		25/06/08 02:55	jmusset	Macro parsing support
1.14		24/06/08 19:59	jmusset	FileBlock parsing support
1.13		24/06/08 18:43	jmusset	Let parsing support
1.12		24/06/08 17:03	jmusset	MTLEnvironment creation for the par
1.11		23/06/08 18:44	jmusset	TemplateInvocation support





# Galileo Release : EMF Compare 1.0

- **ResourceSet-wide comparison**

EMF Compare is now able to compare a whole resourceset, meaning a model having links to other models will be properly compared and (when possible) linked models will be retrieved from the your SCM history.

- **VCS proxy resolving**

- **Comparison engines selection**

- **Addition of a patch format for EMF Compare**

When you diff two models you're now able to export those as an EPatch model which is self contained, and that you can re-apply or un-apply later on.

- **Fragmented resources comparison**

- **Addition of new differences types (reference ordering, containment reference change, ...)**

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



Planned Review Date: June 10, 2009

Communication Channel: [eclipse.tools.emf](http://eclipse.tools.emf)

Dave Steinberg and Ed Merks

# 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, which extends `EObject`. It includes methods for `getName()`, `setName(String value)`, `getWriters()`, and `getBooks()`.
- library.xsd**: Shows the XML Schema definition for the `Library` model, including elements for `name`, `writers`, and `books`.
- library.ecore**: Shows the Ecore model structure, including classes like `Book`, `BookCategory`, `BookCategoryObject`, and `Library`.
- Library.xml**: Shows the reflective editor instance, displaying the `Library` object with its `writers` (Greg Mortenson, Michael Connelly) and `books` (Three Cups of Tea, The Scarecrow).

Callouts identify the following components:

- Generated Java code**: Points to the `Library.java` window.
- XML to Java Binding**: Points to the `library.xsd` window.
- Sample Ecore Editor (Model)**: Points to the `library.ecore` window.
- Reflective Editor (Instance)**: Points to the `Library.xml` window.

# What's New

## ■ Features

- Minimal footprint EObject implementation available for use in generated models and adopted in Ecore
- Generate models command
- Generator options for flexible interface/implentation names
- Support for XML types when targeting EMF 2.2 runtime
- Implementation of property-based JFace data binding API

## ■ Non-Code Aspects

- Minor updates to existing documentation
- Publication of *Eclipse Modeling Framework*, Second Edition and *Essential EMF* Refcard

# *Other*

- Usability
  - Generate models command improves tool usability
  - Minor UI and accessibility improvements
- End-of-Life
  - SDO removed from EMF
- Bugzilla
  - 55 enhancements, 139 bugs fixed
  - 0 critical, blocker, or major bugs open

# *Teneo 1.1.0 Mini-Deck*



29 May, 2009

# *Teneo*

Teneo is a database persistency solution for EMF using Eclipselink or Hibernate. It supports automatic creation of EMF to Relational Mappings and the related database schemas. The solution contains a runtime layer to support specific EMF features. EMF Objects can be stored and retrieved using advanced queries (HQL or EJB-QL). EMF resource implementations are provided for integration with EMF Editors. The persistence logic and mapping can be controlled using EJB3/JPA-like annotations. Most of the EJB3/JPA mapping standard is supported.

Project URL:

<http://www.eclipse.org/modeling/emf/?project=teneo>

Communication Channel:

newsgroup: `eclipse.tools.emf`

# *Release Highlights*

- **New Features:**
  - The main new feature in 1.1.0 is support for EclipseLink.
  - Annotation support has been extended with new annotations
- **End-of-Life**
  - Support for Jpox has been stopped in Teneo 1.1.0. This has been communicated in the newsgroup, no objections were raised and no other committers have stepped up to continue support of Teneo-Jpox.
- **Bugzillas:**
  - 124 new Bugzillas entered, 122 Bugzillas solved





# Equinox Project 3.5 Release Review

RT Project PMC

# Equinox Overview

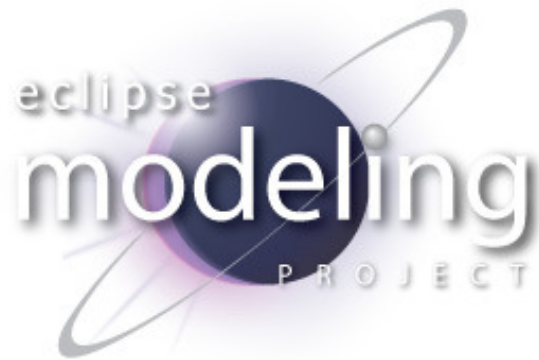


- The goal of the Equinox project is to be a first class OSGi community and foster the vision of Eclipse as a landscape of bundles. As part of this, it is responsible for developing and delivering the OSGi framework implementation used for all of Eclipse.
- Equinox provides an implementation of the [OSGi R4.2 core framework specification](#), a set of bundles that implement various optional OSGi services and other infrastructure for running OSGi-based systems.

# Highlights



- 3.5 new features:
  - Implementation of OSGi R4.2 core framework specification and various compendium services specifications
  - Redesigned p2 UI, more robust p2 implementation
- API quality:
  - High. No breaking changes to Equinox API
  - Binary compatible for compliant plug-ins
  - 42 classes or interfaces with new API (either new types, or existing types with new members)
  - 1 deprecated class, 7 deprecated methods
- End-of-life issues:
  - No longer distributing Jetty 5.1, replaced with Jetty 6.1
- IP Clearance and Licenses:
  - All licenses and about files are in place as per the Eclipse Development Process, the Due Diligence Process was followed for all contributions
- Community and Committer Diversity:
  - 33 committers, 17 active in past 9 months
  - Organizations: IBM (10), Individuals (2), Prosyst, EclipseSource, compeople AG, Cloudsmith, WeigleWilczek GmbH (1 each)
  - Geographies: Canada (8), USA (3), Germany (3), Bulgaria (1), Sweden (1), France (1)
  - Commits: IBM (83.4%), EclipseSource (6.3%), Individuals (6%), Prosyst (1.8%), WeigleWilczek GmbH (1.4%), Cloudsmith (1.1%), Compeople (0.1%)
  - Consumed by all other Eclipse projects



**Eike Stepper**

[stepper@esc-net.de](mailto:stepper@esc-net.de)  
<http://www.esc-net.de>  
<http://thegordian.blogspot.com>

**Berlin, Germany**



# **CDO Model Repository**

## **2.0 Release Review**

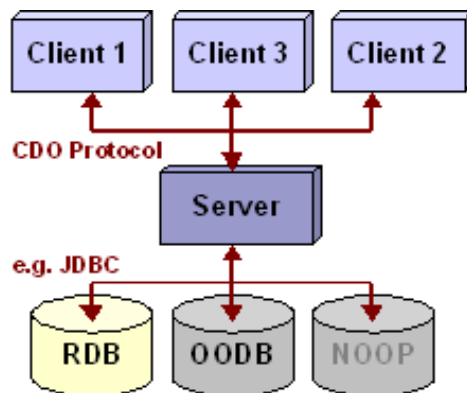
### **(Mini Deck)**

---

**Planned Review Date: June 10th, 2009**  
**Project Newsgroup: eclipse.tools.emf**

---

# Introduction



The CDO (Connected Data Objects) Model Repository is a distributed shared model framework for EMF models and meta models. CDO is also a model runtime environment with a focus on orthogonal aspects like model scalability, transactionality, persistence, distribution, queries and more.

CDO has a 3-tier architecture supporting EMF-based client applications, featuring a central model repository server and leveraging different types of pluggable data storage back-ends like relational databases, object databases and file systems. The default client/server communication protocol is implemented with the Net4j Signalling Platform.

Project URL: <http://www.eclipse.org/cdo>  
old: <http://wiki.eclipse.org/CDO>

# *Release Highlights*

## § **Quality of APIs**

- § 2.0 API is partly incompatible with 1.0
- § API Toling has been used consequently

## § **End of Life**

- § None

## § **IP**

- § IP Log URL: <http://www.eclipse.org/modeling/emf/cdo/project-info/eclipse-project-ip-log.csv>
- § No issues

## § **Committer Diversity**

- § 7 committers from 7 different companies
- § Several additions to the team are pending

# Project Activity Since 1.0

## § **Bugzilla**

§ 127 of 254 enhancements done (106 left open)

§ 121 of 173 bugs fixed (16 left open)

## § **CVS**

§ 44187 changed lines of code committed (incl. Net4j)

## § **Communication**

§ More than 2000 newsgroup posts

§ Talks at EclipseCon, ESE, JAX, several demo camps

§ Webinar and several magazine articles



# Galileo Release Review: Mini Deck: EMF Query 1.3.0

Anthony Hunter

IBM Rational Software, Ottawa, Canada





# Galileo Release Review

- No new features.
  - Several small code changes for dependency compatibility.
  - Maintain high standards and complete must-dos for Galileo.
- No API changes from EMF Query 1.2.0.
- No End of life issues.
- No IP clearance and license issues.



# Galileo Release Review

## Mini Deck: EMF Transaction 1.3.0

Anthony Hunter  
IBM Rational Software, Ottawa, Canada



# Galileo Release Review Talking Points

- Noteworthy new features.
  - Many small enhancements for the community:
    - Allow creation of custom NotificationFilter
    - Pre and post hooks for Transaction execution
    - ResourceUndoContext is be more flexible regarding affected resource policy
    - Allow clients to set options on existing instances of unexecuted AbstractEMFOperations.
- No API changes from EMF Transaction 1.2.0.
- No End of life issues.
- No IP clearance and license issues.



# Galileo Release Review

## Mini Deck: EMF Validation 1.3.0

Anthony Hunter  
IBM Rational Software, Ottawa, Canada



# Galileo Release Review Talking Points

- Noteworthy new features.
  - Many small enhancements for the community:
    - Enhanced MarkerUtil class in validation framework
    - Support adding a constraint filter to a validator
- No API changes from EMF Validation 1.2.0.
- No End of life issues.
- No IP clearance and license issues.



# Galileo Release Review Mini Deck: GEF 3.5.0

Anthony Hunter  
IBM Rational Software, Ottawa, Canada



# GEF - Galileo Release Review

- Noteworthy new features.
  - Draw2D: Many small enhancements.
    - Support new SWT Line Attributes and fractional line widths in Shape.
    - Added LineBorder line style.
    - Added getAdvanced() should be added to Graphics.
  - Zest: Added support for figure providers
    - Now possible to provide custom figures, such as images.
  - Draw2D: added a scalable polygon figure.
- No API changes from GEF 3.4.0.
- No End of life issues.
- No IP clearance and license issues.



# GMF 2.2.0

## Galileo Simultaneous Release

June 10, 2009

Communication Channel: [eclipse.modeling.gmf](mailto:eclipse.modeling.gmf) newsgroup

Process Documentation: [http://www.eclipse.org/projects/dev\\_process/development\\_process.php](http://www.eclipse.org/projects/dev_process/development_process.php)





# GMF – Galileo Release Talking Points

- Noteworthy New Features:
  - Xpand code generation templates migrated to OCL/QVTO
  - The rest: [http://wiki.eclipse.org/GMF\\_New\\_and\\_Noteworthy](http://wiki.eclipse.org/GMF_New_and_Noteworthy)
- Quality of APIs
  - Overall: no “provisional” APIs, all non-API code in “internal” packages
  - Leveraging API Tooling from PDE
  - Experimental features in separate download
- End of Life Issues:
  - None
- IP Issues:
  - None
- Committer Diversity
  - Committers from Borland, IBM, and now Obeo



**Java Workflow Tooling (JWT)  
Release review: JWT v0.6 – part of ‘Galileo’  
Summary**

**Marc Dutoo (Open Wide, FR)  
Mickael Istria (Open Wide, FR)  
Florian Lautenbacher (University of Augsburg, DE)  
Christian Saad (University of Augsburg, DE)**



# Introduction



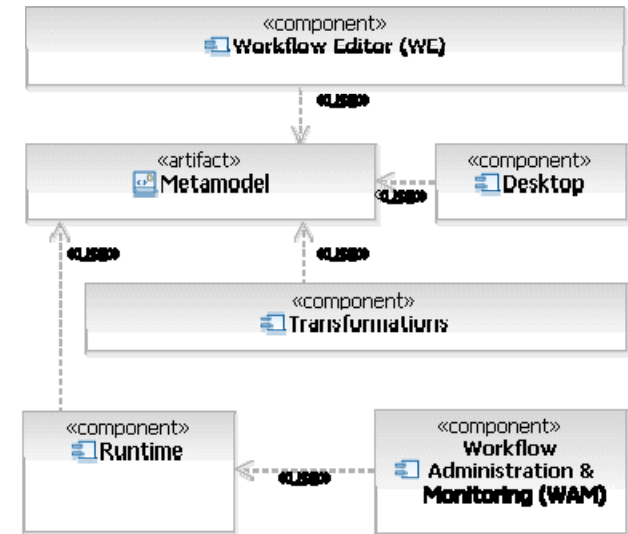
- Java Workflow Tooling (JWT) is a Technology sub-project currently in Incubation phase.
- JWT aims at providing a complete Business Process Management (BPM) and workflow tooling platform
  - with special focus on a unified approach to BPM design, allowing to bridge the gap between BP representation, BP standards, BP engines, BP deployment environments (platforms, Information System, SOA)
- Currently, there are many graphical modeling languages, process execution languages and implementations available



- JWT provides a tool-suite and framework with several extension points which allow users and vendors to extend it to the different needs.

# Overview about JWT

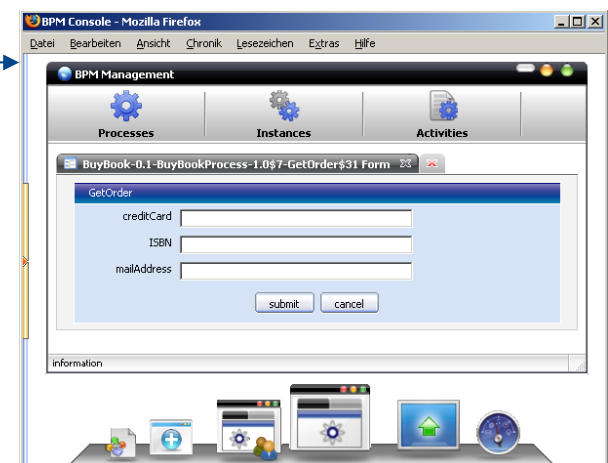
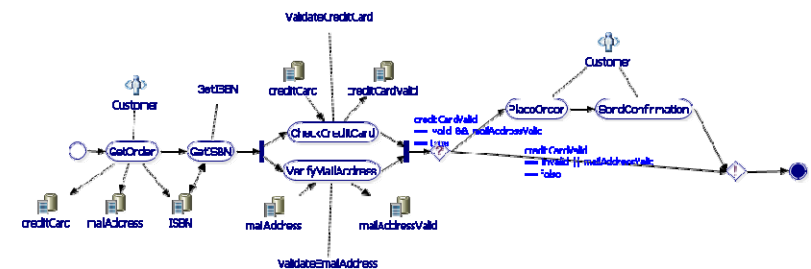
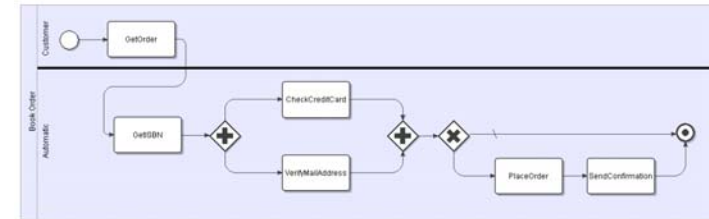
- Support for workflow and business process modeling, deployment, execution and monitoring inside Eclipse
- Provide a complete, flexible, interoperable and usable BPM toolkit
- Set of generic and extensible plugins and APIs
- Five main components: Workflow Editor, Transformations, Desktop, Workflow Administration & Monitoring and Runtime
- Extensions allowing support for specific business representations, process language formats, process engines, service platforms, etc.
- This release (version 0.6) covers several bugfixes and improvements to the Workflow Editor, additional views, the possibility to enrich the meta-model with custom elements, new Transformations and new code in the Runtime component.



# Typical usage of JWT



- Work on a process with different graphical representations
- Use already existing models (e.g. in BPMN) and import them in JWT
- Add technical details such as Java classes or web service interfaces
- Export the process to a process execution language (such as XPDL or jPDL)
- Deploy the process to a workflow engine and execute it





# ATL 3.0 Mini-deck

ATL PMC



# *ATL: ATLAS Transformation Language*

- ATL: ATLAS Transformation Language
- ATL is a language and a Virtual Machine dedicated to model transformation
- ATL is an Eclipse Model-to-Model (M2M) component, inside of the Eclipse Modeling Project (EMP)
- ATL has been moved from GMT to M2M in 2007



# Overview



- An Eclipse based IDE
  - Editor (syntax coloration, content assist)
  - Debugger
- A syntax adapted to Model To Model transformation
- A Virtual Machine
  - Executes ATL transformations pre-compiled into low-level transformation-specific bytecode
  - Provides execution environment for any transformation language
    - The M2M QVT Relational project is based on the ATL Virtual Machine

[http://wiki.eclipse.org/M2M/Relational\\_QVT\\_Language\\_\(QVTR\)](http://wiki.eclipse.org/M2M/Relational_QVT_Language_(QVTR))

- A use case implements a QVT Operational Mappings compiler

<http://www.eclipse.org/m2m/atl/usecases/QVT2ATLVM/>



# Community



- Wiki-based FAQ, User Guide, and Tips & Tricks
- ATL Transformation Zoo (100+ scenarios, with contributions from the community)
- Complete use cases (20+, with contributions from the community)
- Articles
- Newsgroup: very active community, more than 2000 posts since its creation
- EclipseCon 2008, 2009: tutorial

<http://www.eclipsecon.org/2009/sessions?id=511>

- Publications about ATL:

<http://www.eclipse.org/m2m/atl/publication.php>



# M2T-Xpand 0.7.0 MiniDeck

June 10, 2009

Communication Channel: [eclipse.modeling.m2t](mailto:eclipse.modeling.m2t) newsgroup

Process Documentation:

[http://www.eclipse.org/projects/dev\\_process/development\\_process.php](http://www.eclipse.org/projects/dev_process/development_process.php)



# What is Xpand

- Code generation language from openArchitectureWare
- Statically typed
- Interpreted
- Pluggable Typesystem
- Works with EMF
- Supports
  - model transformation
  - validation



# Release Highlights

- Performance improvements
  - Runtime / Execution
  - Static Analysis
- Profiler

```
GrammarAccessFragment.xpt  *GrammarAccess.xpt x
«IMPORT org::eclipse::xtext»

«EXTENSION org::eclipse::xtext::generator::Naming»
«EXTENSION org::eclipse::xtext::generator::grammarAccess::GrammarAccess»
«EXTENSION org::eclipse::xtext::GrammarUtil»

«DEFINE root FOR Grammar»
«FILE gaFQName().asPath()+".java" SRC_GEN-»
/*
«fileHeader()»
*/

package «gaFQName().toJavaPackage()»;

import com.google.inject.Singleton;
import com.google.inject.Inject;

import org.eclipse.xtext.*;

import org.eclipse.xtext.service.GrammarProvider;

«FOREACH usedGrammars AS usedGrammar-»
import «usedGrammar.gaFQName()»;
«ENDFOREACH-»

@Singleton
public class «gaFQName()» implements IGrammarAccess {
    «EXPAND pars «usedGrammar.gaFQName()» gaElementAccessMethodEName(AbstractElement rule)-»
    «EXPAND pars «usedGrammar.gaFQName()» gaElementAccessor(AbstractElement element)
    «EXPAND pars «usedGrammar.gaFQName()» gaElementAccessorLocalVarName(AbstractElement rule)-»
    «EXPAND pars «usedGrammar.gaFQName()» gaElementIdentifyer(AbstractElement element)
    «EXPAND pars «usedGrammar.gaFQName()» gaElementsAccessor(AbstractRule rule)
    private find «usedGrammar.gaFQName()» gaFQName() - Grammar
    «FOREACH usedGrammars AS usedGrammar-»
    private «usedGrammar.gaFQName()» gaFullAccessor(AbstractElement element)
    private «usedGrammar.gaFQName()» gaGrammarAccessLocalVarName() - Grammar
    private «usedGrammar.gaFQName()» gaRuleAccesorClassName(AbstractRule rule) name());
«ENDFOREACH-»
}
```

# Acceleo 0.8.0 Mini-deck

Jonathan Musset





# Galileo Release Highlights

- First release at Eclipse of the Acceleo.org project
- Implementation of the OMG MOF Model-To-Text Language (MTL)
- Eclipse Editor to define a code generator, with completion, error detection
- Run and debug a code generation in Eclipse
- Package a module as an Eclipse plug-in or as a standalone application
- Core feature compliance level of the MOF Model-To-Text Language Specification

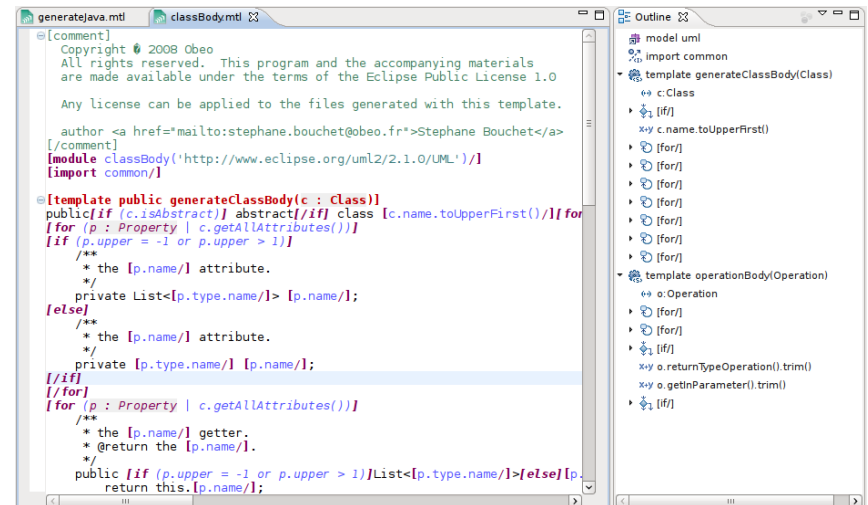
## Communities

- M2T newsgroup : [eclipse.modeling.m2t](mailto:eclipse.modeling.m2t)
- Talks have been given on the following events :
  - Eclipse Summit Europe 2008
  - EclipseCon 2009

*“A Standard Alternative for Code Generation : Acceleo MTL”*

# Acceleo 0.8.0

- Template Editor Features
- Smart Completion on Syntax Constructs, on Scripts and Meta-model
- Open Declaration and Search References
- Running and debugging modules, Java Standalone API to run modules
- Module UI – Create automatically a Popup Action to Generate
- Dynamic templates, user code, Jmerge support (@generated)
- Create templates from an example



```

generatejava.mtl  classBody.mtl
[comment]
Copyright © 2008 Obeo
All rights reserved. This program and the accompanying materials
are made available under the terms of the Eclipse Public License 1.0
Any license can be applied to the files generated with this template.

author <a href="mailto:stephane.bouchet@obeo.fr">Stephane Bouchet</a>
[/comment]
[module classBody('http://www.eclipse.org/uml2/2.1.0/UML')]
[import common/]

[template public generateClassBody(c : Class)]
public [if (c.isAbstract)] abstract [if] class [c.name.toUpperFirst()] [if]
[for (p : Property | c.getAllAttributes())]
[if (p.upper = -1 or p.upper > 1)]
/**
 * the [p.name/] attribute.
 */
private List<[p.type.name]/> [p.name/];
[else]
/**
 * the [p.name/] attribute.
 */
private [p.type.name/] [p.name/];
[if]
[/for]
[for (p : Property | c.getAllAttributes())]
/**
 * the [p.name/] getter.
 * @return the [p.name/].
 */
public [if (p.upper = -1 or p.upper > 1)] List<[p.type.name]/> [else] [p.
return this.[p.name/];
    
```

Outline

- model uml
  - import common
  - template generateClassBody(Class)
    - c:Class
      - [if]
      - [for]
      - [for]
      - [for]
      - [for]
      - [for]
      - [for]
    - template operationBody(Operation)
      - o:Operation
        - [for]
        - [for]
        - [if]
        - [for]



# Documentation

- Eclipse Help Plug-in
  - Acceleo Plug-ins Features Overview
  - Acceleo Tutorials
    - Create a new module
    - Create a new plug-in to launch the module
- The specification : <http://www.omg.org/spec/MOFM2T/1.0/>
- Basic Examples : UML to Java, Ecore to Python
- Basic Page on the Eclipse Wiki <http://wiki.eclipse.org/Accleo>



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# Eclipse Memory Analyzer Mini-Deck

**Review Date: May 29, 2009**

Community Channel:

- <mailto:mat-dev@eclipse.org>
- <http://www.eclipse.org/newsportal/thread.php?group=eclipse.technology.memory-analyzer>

Author: Andreas Buchen (project lead)

# Introduction

- Memory Analyzer is a Technology sub-project in Incubation
  - <http://www.eclipse.org/mat>
- This release (part of the **Galileo Release Train**) adds support for IBM dumps (via DTFJ API), thread stack information, improved object inspectors and miscellaneous bug fixes.

# Support for IBM Heap Dumps

- Read J9 and Sovereign dumps via DTFJ (**D**iagnostics **T**ool **F**ramework for **J**ava)
- Supported formats: Portable Heap Dump (PHD), JExtracted system dump (.dmp and .xml), Javacore files
- Contributed by Andrew Johnson, IBM

# Thread Stack Information

- Show stack traces of threads at the time of the writing the heap dump + Java locals per stack frame
  - Supported by HPROF dumps written with  $\geq$  Java 6 Update  $\geq$  14 and Java 7
  - Support by DTFJ planned



# MDT OCL 1.3 Mini-deck

June 10, 2009





## What is OCL

- The OCL component is an implementation of the **Object Constraint Language (OCL)** OMG standard for EMF-based models.
- The OCL component provides the following capabilities to support OCL integration:
  - ◆ Defines APIs for parsing and evaluating OCL constraints and queries on EMF models.
  - ◆ Defines an Ecore implementation of the OCL abstract syntax model, including support for serialization of parsed OCL expressions.
  - ◆ Provides a Visitor API for analyzing/transforming the AST model of OCL expressions.
  - ◆ Provides an extensibility API for clients to customize the parsing and evaluation environments used by the parser.



## What's New in Galileo

- **Extensibility.** Refactored OCL type checking system, evaluation visitor and standard library for extensibility.
- **Escape-sequences in String Literals.** Control characters like '\n' or '\r' are now supported by OCL.
- **Error Recovery in OCL Grammar.** Backtracking-parser based error recovery allows to report multiple errors in the OCL input.
- **Enhanced Tracing.** Finer-grained control is available using system properties named according to the OCL plug-in's trace options.



# Unified Modeling Language (MDT UML2) 3.0 Galileo Mini-Deck

4 June, 2009



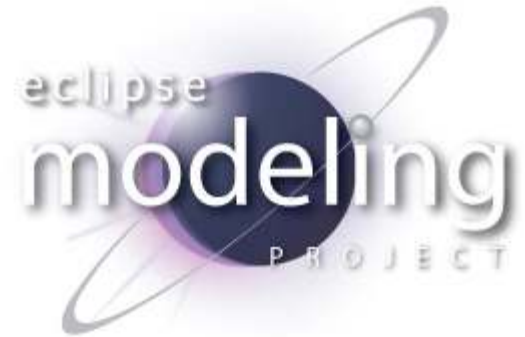
## What is UML2

- UML2 is an EMF-based implementation of the Unified Modeling Language 2.x (UML™) OMG metamodel for the Eclipse platform.
- UML2 3.0.0 aims to provide a complete implementation of the OMG standard UML 2.2 specification.



## Features – UML2 3.0

- Two major features of this release:
  - UML 2.2 Compliance. The UML2 project will maintain release currency with the revised 2.2 specification.
    - This change involved metamodel changes and API updates.
    - Automatic migration between older versions and new version has also been provided.
  - Eclipse 3.5 / EMF 2.5 Compatibility. Maintain release currency concurrent with EMF 2.5 (and Eclipse 3.5). Changes have been made to align with EMF features and bug fixes .



## Legal Notices

- UML and XMI are registered trademarks of the Object Management Group
- OMG is a trademark of the Object Management Group.
- Other company, product, or service names may be trademarks or service marks of others



# MDT UML2Tools 0.9

## Mini-deck

June 10, 2009

# What is UML2Tools

- Set of diagram editors for Unified Modeling Language models generated using GMF.
- UML2Tools component aims to provide a complete implementation of OMG standard [UML 2.2.0 specification](#)
- Galileo release supports
  - ◆ Behavior diagrams
    - Activity
    - State Machine
  - ◆ Structure diagrams
    - Class
    - Component
    - Composite Structure
    - Deployment
    - Profile Definition
    - Use Case
    - Object diagram integrated to Class, Component, CompositeStructures diagrams
  - ◆ Interaction diagrams
    - Sequence (new in Galileo)





## UML features

- UML 2.2 compliance
- Extended profiling support
  - ◆ Notation support
  - ◆ Tagged value editing
  - ◆ Validation of Stereotype constraints
- User control over diagram contents
  - ◆ Semi-synchronized mode
  - ◆ Show/hide icons/labels
- Tools Interoperability
  - ◆ OMG XMI as a native format



## Tooling features

- Improved look'n'feel
  - ◆ More stylish appearance of the elements
  - ◆ Better-looking feedback on element selection
  - ◆ More informative Diagram Header
- Structure diagrams synchronization
  - ◆ Synchronize action
  - ◆ Delete from Diagram action
- Improved property sheets
  - ◆ Custom tabs at Structure diagrams
  - ◆ Custom choosers for reference properties
  - ◆ Allow to edit reference properties using text cell editor
- Improved New Diagram wizards
  - ◆ Creating new diagrams from UML2 editor
  - ◆ Initialize new diagram from arbitrary set of elements
  - ◆ Control over root element and encoding

# *MDT XSD 2.5 Release Review Mini Deck Galileo Simultaneous Release*



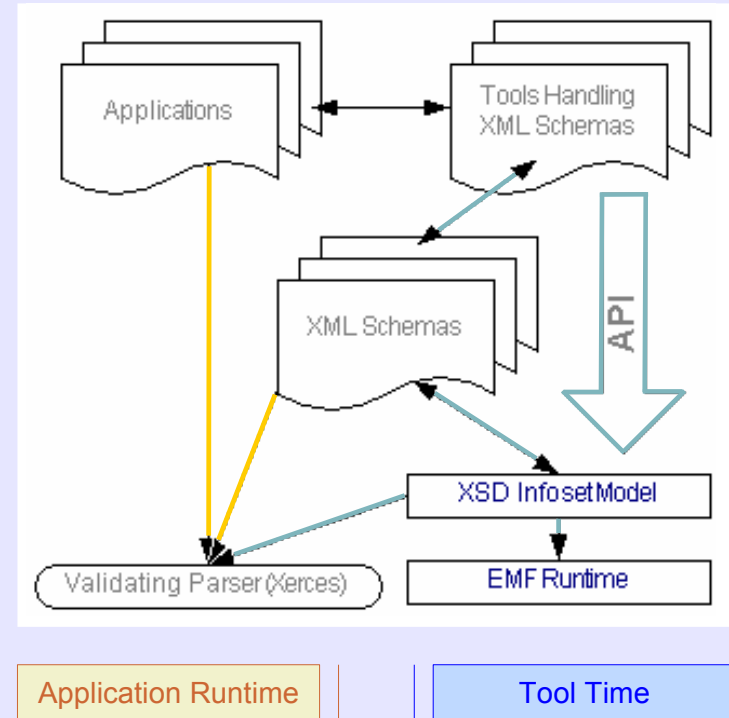
Planned Review Date: June 10, 2009

Communication Channel: [eclipse.technology.xsd](http://eclipse.technology.xsd)

Dave Steinberg and Ed Merks

# XML Schema Definition (XSD)

- Reference library providing an EMF-based API for use with any code that creates, examines, or modifies W3C XML Schema documents
- Also works with XML Schema embedded in other documents (e.g. XForms or WSDL)
- APIs for manipulating both XML Schema model components and underlying DOM representation
- Includes services for integrity checking and serialization/deserialization of schema documents



# What's New

- Features
  - XSD's model importer for EMF supports a new schema extension (ecore:nsURI), allowing a namespace URI to be specified for a schema without target namespace
  - Validation for complex content exposed as `XSDUtil.checkComplexContent()` API
- Non-Code Aspects
  - Minor updates to existing documentation
- Bugzilla
  - 4 enhancements, 25 bugs fixed
  - 0 critical, blocker, or major bugs open



# DSDP Mobile Tools for Java 1.0 Graduation and Release Summary

*Eclipse Development Process version 2.3.1 – January 17, 2007*

*Slide deck v1 – May 29, 2009*

Christian Kurzke & Gustavo de Paula

# Features



- [MTJ 1.0 plan available](#)

Main focus is to join Eclipse train and provide a MTJ API

- Besides that the following features were added
  - MIDlet Templates
  - Enhanced MIDlet suite signing solution
  - Fix major MTJ 0.9.X bugs
- MTJ 1.0 provide a refactoring on MTJ project build system
  - Build system was originally from EclipseME
- MTJ is also a core part of [Eclipse Pulsar](#)

# Non-Code Aspects



- Requirements and system test cases
  - [Requirements document](#)
  - [Manual System test cases document](#)
  - All documents reviewed with the community
- ISV documentation
  - Includes [Javadoc and a developer documentation](#)
    - Automatically updated from nightly builds
  - [MTJ Webinar](#)
  - [MTJ Video](#)
- Working Example Code
  - All extension points have sample code that shows how to use them
- Conference talks as part of DSDP
  - EclipseCon 2008, ESSE 2008 and EclipseCon 2009



# Communities



- Contributors
  - Initial code base from EclipseME
  - Current Major code contribution from Motorola, Sybase and Nokia
  - 5 active committers: 3 from Motorola 1 from Nokia and 1 individual
  - Mailing list participation from Motorola, Sybase, Nokia, RIM and other individuals
- Adopters
  - MTJ 0.9.1 is part of MOTODEV Studio for JavaME v2.2
  - Other vendors are working on their extensions
- Users
  - MTJ 0.9 had approximately 5500 downloads (from october/2008 until beginning on May/2009 )
  - MTJ 0.9.1 had approximately 21000 downloads (from december/2008 until beginning on May/2009)

# Future Plans



- MTJ needs to establish itself as the Eclipse mobile IDE environment
  - Add other mobile platforms support (CLDC, eRCP, Android, etc.)
  
- MTJ Team needs to work with the community to show the features that are currently available on MTJ 1.0
  - Conferences
  - Articles
  - Tutorials



*EMFT Modeling Workflow Engine (MWE)*  
*MiniDeck*

May 28, 2009

Bernd Kolb

SAP AG, Walldorf, Germany

# *What is MWE?*



- Tool to orchestrate and configure generators
- Generators are composed of
  - Model parsers
  - Model validators
  - Model transformations
  - Code generation components
- The order of the different components as well as the dependencies between them are managed and configured using MWE
- Individual component-specific configuration can be provided

# *Release Highlights*



- First release at Eclipse
  - Initial contribution from openArchitectureWare
- Many small enhancements



# Mylyn 3.2 Release Review

Mik Kersten and Steffen Pingel

Planned Review Date: June 10, 2009, 8am PT  
Communication Channel: [mylyn-dev@eclipse.org](mailto:mylyn-dev@eclipse.org)

# Introduction



The first goal of Mylyn is to make task and context management seamlessly integrated with the Eclipse Platform by providing rich and extensible frameworks for task repository connectors, structure bridges and team support.

The second goal is to provide a reference implementation of the Task-Focused UI for the Eclipse SDK. This includes structure bridges for the artifacts supported by the SDK which include Java, PDE, Ant and generic files. It also includes the Bugzilla Connector as the reference task repository implementation, and CVS integration as the reference team support. Additional features can be considered based on the availability community contributions and resources.

# Main Features added since 3.0



- WikiText provides an integrated source editor for authoring files containing wiki markup. The editor provides content assist, validation, folding, source formatting, an integrated preview, structured outline and a markup cheat-sheet. It is aware of 5 markup languages and is capable of supporting others via the common WikiText parsing framework.  
WikiText can convert lightweight markup to other formats including Eclipse Help, HTML, DocBook and DITA. Conversion may be performed within Eclipse or from Ant.
- Access to the Mylyn Connector Discovery Portal is provided on Eclipse 3.5 when creating task repositories. Selected extensions are available for installation through a wizard based work-flow that drives P2.
- The integrated bug reporting has an extension point for specifying support providers and supported products. The extensions are used to guide the user when bugs are reported from error log entries.
- Help content that is generated from the Wiki using WikiText is available in the Eclipse help system.



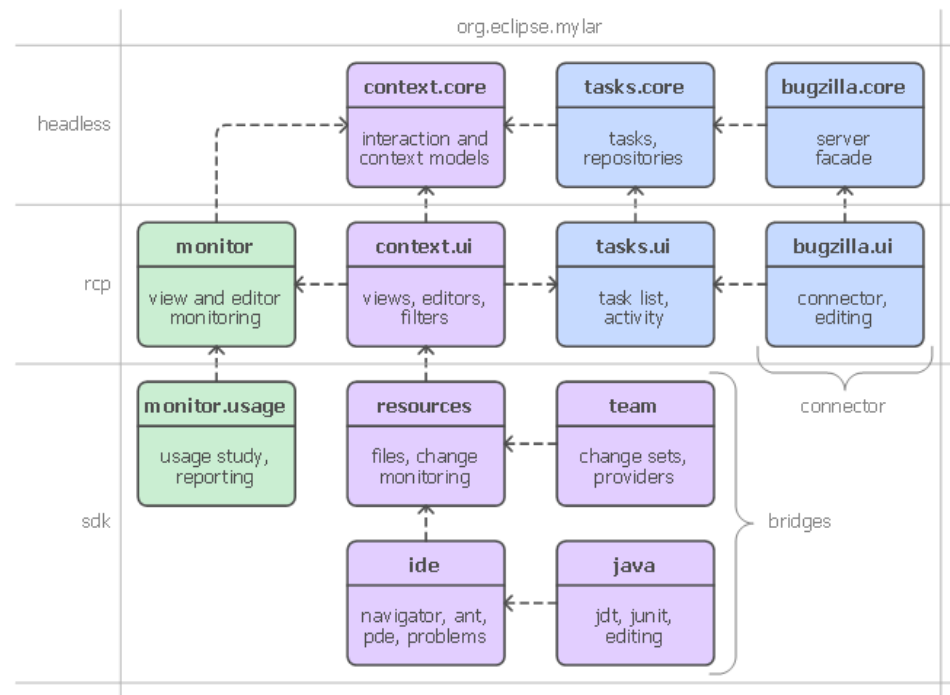
# APIs



- No breaking API changes from 3.0
- APIs are consumed by 3<sup>rd</sup> parties who provide regular feedback
- All API changes are tracked in Bugzilla on bugs tagged as [api]
  - Notes on API additions since Mylyn 3.0: [http://wiki.eclipse.org/Mylyn/Porting\\_Guide](http://wiki.eclipse.org/Mylyn/Porting_Guide)

- Frameworks:

- Commons API
- Context API
- Tasks API
- Monitor API
- Team API
- WikiText API





## *Riena - new Features in 1.1.0 (Galileo)*

- stabilize various APIs, most of the APIs are now stable
- LnF for Views
- Master/Detail Support
- Detached Views
- CompositeTable support
- support for more SWT Widgets including SWT DateTime
- Riena is now broken up into the Core SDK and a Samples feature

## Riena - APIs



- Injector API (inject services and extensions)
- Remote Service API (access remote services)
- Ridget API (separate controller/view in the UI, simplifies use of widgets)
- Navigation API (for the navigation model)
- ObjectTransaction API
- Look & Feel API (to extend the UI with a custom themes and looks)
- UI Filter API (to manage restrictions in the UI)
- **APIs with 1.1.0 are no longer provisional and we plan to follow the API guidelines of Eclipse for them to allow users now build applications on top of Riena. (there are exceptions outlined in the detail docuware)**

# Riena - Community and Activities



- 10 committers currently, 4 contributors that are actively submitting patches.
- Growing interest in the community in writing applications with Riena on the newsgroup and on the mailinglist
- Open Source framework „Redview“ (non-Eclipse project) is now based on Riena.
- Riena committers are also contributing to other projects i.e. equinox.log, p2, core.net
- Growing number of bugs and requests are filed by people who are not currently committers of Riena.
- Coordination/cooperation with other Eclipse projects
  - dependency to Nebula exists (CompositeTable)
  - interaction with EclipseLink and Birt has been discussed internally
  - interaction with ECF periodically, plan for provider for the time after Galileo



# SOA Tools Platform Project 2.0.0 Galileo Release

June 10, 2009

# SOA Tools Platform Content

- Two sub-projects
  - SCA Tools
  - BPMN Modeler
- Two components
  - WS-Policy Editor
  - SOA Intermediate Model
- SOA Tools 2.0.0 for release with Galileo
  - *sub-projects and components also submit their own release review materials.*

# Events over the last year

- Components and sub-projects releasing with many updates
  - *see individual review documents*
- Three component termination reviews
  - STP Core Framework
  - STP SOA System Framework
  - STP Service Creation Framework
  - *these components had seen zero activity for many months*
- Moved to p2 provision of build artifacts
- IP Log available at [http://www.eclipse.org/stp/development/ip\\_log.php](http://www.eclipse.org/stp/development/ip_log.php)
  - *sub-project logs are maintained separately*

## Events over the last year

- Two further components not shipped with Galileo release
  - STP BPEL 2 Java Framework
  - STP Enterprise Integration Designer
  - *these components did not meet release train requirements*
- Milestones tracked with acceptable accuracy
- Each project/component shipping in Galileo has at minimum one commercial consumer
- Summaries follow



# SCA Tools Project

- New features
  - Form Editor
  - XML Editor
  - Extra Runtimes
  - Embedded OSOA Annotations and APIs
  - Code-up Composite Designer
- 2.0 Completed according to plan and on schedule
- 2 new committers elected, no attrition
- Compliant with SCA 1.0 Specification
- No end-of-life issues
- IP Approved

		Severity						
		blocker	critical	major	normal	minor	enhancement	Total
Status	NEW	.	.	.	2	1	4	7
	ASSIGNED	.	.	.	.	.	1	1
	RESOLVED	1	1	3	25	5	23	58
	VERIFIED	.	.	.	.	.	1	1
	Total	1	1	3	27	6	29	67

# BPMN Modeler Project

- New features
  - API Extension
  - Japanese translation
  - Increased stability updates
- 1.1 Completed according to plan and on schedule
- no new committers elected, no attrition
- Compliant with BPMN 1.0, 1.1, 1.2 Specifications
- No end-of-life issues
- IP Approved

# Policy Editor Component

- New features
  - Increased Unit Tests
  - New Extension APIs on XEF
- 1.1 Completed according to plan and on schedule
- Was subject to a UI review
- no new committers elected, no attrition, potentially 1 new after Galileo
- Compliant with WS-Policy Specification
- No end-of-life issues
- IP Approved
- Post-Galileo, there will be a proposal put forward for this to become a project in its own right

		Status		
		NEW	RESOLVED	Total
Severity	normal	.	<u>13</u>	<u>13</u>
	enhancement	<u>2</u>	<u>2</u>	<u>4</u>
	Total	<u>2</u>	<u>15</u>	<u>17</u>

# SOA Intermediate Model Component

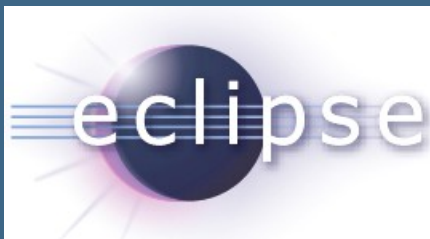
- New features
  - SCA-IM-SCA transformation
- 1.1 Completed according to plan and on schedule
- no new committers elected, no attrition, potentially 3 new after Galileo
- Potential contributions have been held over until after Galileo
- No end-of-life issues
- IP Approved

		Status		Total
		NEW	RESOLVED	
Severity	critical	0	1	1
	normal	2	1	3
	trivial	0	1	1
	enhancement	6	2	8
	Total	8	5	13

# Subversive Galileo Review

Review date: 10 June 2009

Mini-deck



Presentation prepared by: Igor Vinnykov (Polarion Software)  
Send your feedback to: [subversive-dev@eclipse.org](mailto:subversive-dev@eclipse.org)

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# Introduction

- Subversive is an Eclipse Team Provider for Subversion (SVN)
- Subversive is Technology sub-project in Incubation phase:
  - Project home: [www.eclipse.org/subversive](http://www.eclipse.org/subversive)
  - Project has been active since March 2005
  - Project proposal at eclipse.org was published in June 2006
  - Subversive migrated to eclipse.org and Incubation phase started in November 2007
  - Subversive is a part of the Galileo Simultaneous Release



# Features

- Diff Viewer:
  - Ability to use external diff program
- Tree Conflicts:
  - Detection of tree conflicts
- Commit:
  - Resources changes pane
  - Displaying conflicted resources
  - Pre-commit checks for files
- History:
  - Compare revisions for folders
  - Show merged revisions
  - Revision grouping
  - Support of local history
- Branches/Tags
  - Compare with branch/tag
  - Replace with branch/tag
- Properties:
  - Definition of custom properties
  - Property values validation
  - Support of “tsvn” properties
- Synchronize:
  - “Local” and “Remote” submenus
  - Displaying incoming changes for folders
- Repository:
  - Ability to create svn repository
- Patches:
  - Resources selection
  - Patch root selection
- API:
  - Team API 3.2 support



# Tool Usability

- Subversive provides support for all operations available for SVN clients. It means that it can be used as a fully-functional SVN client and a replacement of the original SVN client.
- Subversive provides a set of unique features that improve usability for developers:
  - Support of repository layouts recommended by Subversion
  - Revision browsing
  - Automatic search of Eclipse projects in the repository



# *Introduction*

- Swordfish provides an extensible runtime framework aimed at creating service-oriented applications
- Swordfish is internally based on Apache ServiceMix 4 as the core messaging engine
- Swordfish hooks into ServiceMix and adds functionality that is required for enterprise environments, such as service registry integration, remote configuration and monitoring
- Swordfish includes basic tool support and additional components such as a Service Registry and a Process Engine

# Features

- General interceptor framework that hooks into the underlying messaging engine (Apache ServiceMix NMR)
  - Message processing controlled based on meta-data carried inside or external to the message, e.g. policies
- APIs and exemplary plug-ins based on the general framework for specific areas that are significant for enterprise usage:
  - Dynamic Service Resolution: Resolve logical service endpoints into physically addressable endpoints by querying a service registry at runtime
  - Monitoring: Generate monitoring events that allow for detailed tracking of how messages are processed and that can be stored for later analysis or reporting or fed into a CEP (complex event processing) engine (not part of Swordfish)
  - Remote Configuration: Configure framework via a local Configuration Agent that can retrieve configurations from a remote server and uses the OSGi Configuration Admin service to provide them to the framework

## ***Features – cont'd***

- Integrated process engine capable of executing BPEL processes (Apache ODE)
- Basic tools supporting the most important use cases
- Service Registry to dynamically resolve logical service names into service endpoint addresses



# DSDP Target Management 3.1 Release Review Minideck

*Eclipse Development Process version 2.4 – August 20, 2008*  
*Slide deck v1 – June 3, 2009*

Martin Oberhuber, Wind River  
TM Project Lead

# *DSDP-TM 3.1 Features*



- TM 3.1 New Features
  - Platform/Team Synchronize integration (GSoC contribution)
  - Generic Terminal now also for telnet
  - Several smaller performance / usability improvements in RSE
  - Most feature work and community interest in TCF (still incubating)
- API Quality:
  - Few well-reviewed API additions backed by API Tooling.
    - W/o samples & tests: 833 API types / 1354 non-API (3.0: 935 API / 1476 non-API)
  - Fully binary compatible with TM 3.0
- TM 3.1 project size
  - RSE: 356 kLOC + TCF: 162 kLOC (R3.0: 346k + 97k)

# *DSDP-TM 3.1 EOL and Community*



- Non-Code Aspects
  - Full Documentation, Tutorials, FAQs, Example Code, ...
  - Detailed build notes with migration notes on each milestone
- End-of-Life issues:
  - RemoteCDT moving into CDT (but still very active)
  - TM Discovery no longer maintained
  - Some parts of RSE client moving from Java 1.4 to Java 5 (server still 1.4)
- Community and Committer Diversity:
  - 10 committers (5 WindRiver, 4 IBM, 1 Montavista) – was 11 in 3.0
  - 18 additional contributors, mostly IBM – was 23 in 3.0
  - Well known and respected in the Community, part of JEE package
- Bugzilla
  - 3.1 stream: 224 issues fixed / 690 open (3.0: 441 fixed / 671 open)

# *DSDP-TM 3.1 Process and Architecture*



- Process
  - Full process docs on the Web; adopting Modeling build for Releng
- IP Clearance and Licenses:
  - All licenses and about files are in place as per the Eclipse Development Process, the Due Diligence Process was followed for all contributions.
- Architectural Issues
  - Legacy code still not fully cleaned up – much Platform “internal” access
    - Need more UI / Non-UI separation for headless and RCP usage
    - Need more Unit Tests (hard for UI-heavy parts)
  - Overlaps with other projects - Many remote access APIs
    - E.g. Remote File Service – 5 APIs: Platform EFS, ECF fileshare, TPTP Agent File Interfaces, TCF, RSE IFileService
    - Talking with all those projects; absorbing / bridging
  - “Remote Development (RDT)” effort is disconnected at IBM / PTP
- Future:
  - Likely shooting for TM 3.2 next year – Focus on Multicore, TCF



# TMF-Xtext 0.7.0 Mini-Deck

June 10, 2009

Communication Channel: [eclipse.modeling.tmf](mailto:eclipse.modeling.tmf) newsgroup

Process Documentation:

[http://www.eclipse.org/projects/dev\\_process/development\\_process.php](http://www.eclipse.org/projects/dev_process/development_process.php)



# What is Xtext?

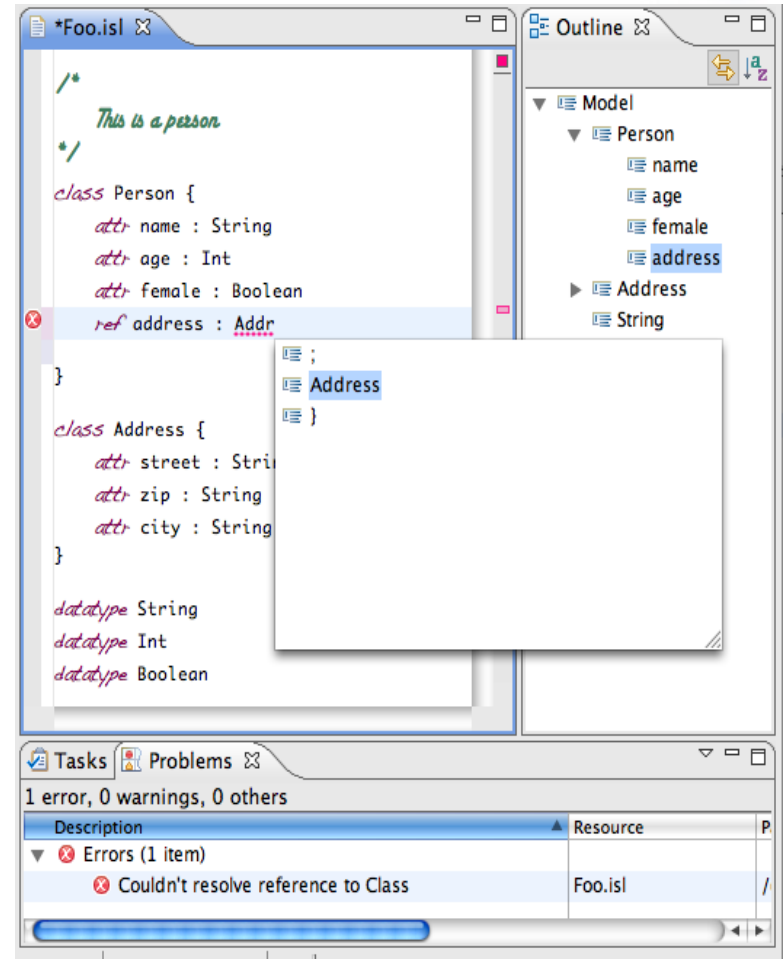


- Xtext is a framework to develop domain-specific languages and corresponding IDE-Support
- Similar to parser generators but also generates an Eclipse-based IDE and integrates with EMF
- It is based on
  - EMF
  - Antlr 3
  - Eclipse's Texteditor Framework

# Xtext Features



- Provides Grammar language
- Generates / Provides
  - Parsers
  - Serializers
  - Linker
  - EMF Ecore Model
  - EMF Resource Implementation
  - Eclipse Text Editor
    - Syntax Coloring
    - Code Completion
    - Outline View
    - Validation
    - Templates
  - Wizard





# Eclipse™ TPTP 4.6 Release Review Minideck

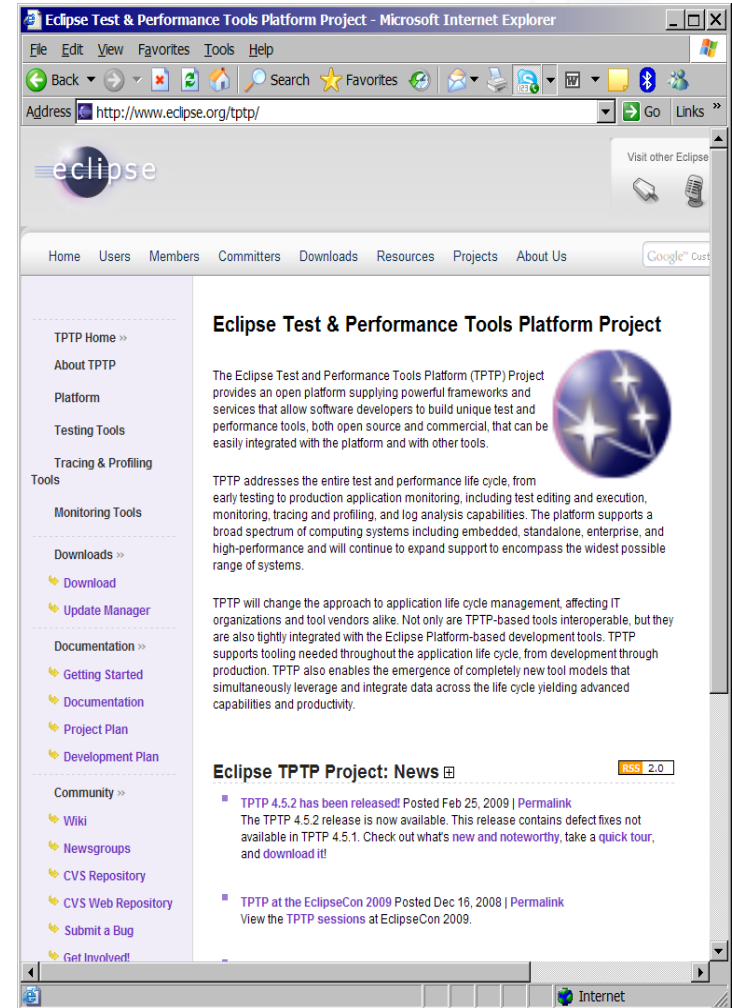
June 1, 2009

Eclipse TPTP PMC & Planning Group

# TPTP Overview



- Test and Performance Tools Platform (TPTP) was created as an Eclipse top-level project in August of 2004
  - TPTP is a continuation of Hyades project (created in December 2002) with expanded scope
- Offers a generic, extensible, standards-based tool platform for test and performance tracing tools
- Aims to bring software test and performance tools into the Eclipse environment in a consistent way that maximizes integration with tools used in the other processes of the software lifecycle
- Reduce the cost and complexity of implementing effective automated software quality control processes
- TPTP contributors: Intel®, IBM®, OCSystems





# Functionality offered by TPTP

- Testing tools and framework
  - TPTP JUnit & JUnit Plugin tests, URL test, remote test execution and test log/report
- Profiling using JVMPI and JVMTI
  - Memory analysis
  - Execution analysis
  - Thread analysis
  - Method code coverage
- Static and Dynamic Instrumentation using Probekit
- Monitoring and Managing Java Application with Common Base Event and JMX



# What's new in TPTP 4.6

- Building all projects with Java 5.0. Exploiting Java 5.0 functions.
- Removing support for Java 1.4.
- Rebuilding all models with EMF 2.5.
  
- **Platform Project :**
  - Display current Agent Controller status on preference page
  
- **Test Project:**
  - Shortcuts for test navigating
  - Usability improvements to wizards
  - Open source action for TPTP URL tests and HTTP requests
  - Test Log Search action for test logs
  - Test log editor displays large test logs
  
- **Trace Project:**
  - Drastically simplified external Java Profiling agent environment variable set up