



# Eclipse™ TPTP 4.2 Release Review

May 31, 2006

rev 3

## Eclipse TPTP PMC

# Introduction: TPTP 4.2 Release Review



## ■ Major Milestones

- Current release: 4.2 (June 30) (based on EP 3.2)
- Prior releases: 4.1 (Nov'05), 4.0 (July'05), 3.3 (June'05), 3.2 (Dec'04)
- Next release: 4.3 (Oct'06) (based on EP 3.2.1)

## ■ Release alignment

- Moved to bi-annual releases in 2006 (vs. quarterly releases)
  - TPTP “major” releases aligned with Eclipse “release train”
  - TPTP “minor” releases ~5 months later
  - TPTP maintenance releases aligned w/ Eclipse Platform maintenance releases

# Features: TPTP 4.2 Requirements Process



- New approach for 4.2
  - In  $\leq 4.1$ , RG review preceded Architecture and Resource constraints application
  - In 4.2 preliminary resource constraints applied first, then AG direction, then requirements confirmed (Avoids overloading the process!)
- Determine Community Requirements through voting against Bugzilla enhancements
- Determine Resource Availability
- Determine Contributor's Requirements
- AG Determine Architectural Direction
- Lead Committers Confirmation of Bugzilla Prioritizations
- Lead Committers Prioritize Candidate Requirements by Component Lead
- Leads Consolidate Project-wide Prioritized Candidate Requirements
- Produce consolidated cross-component proposals into project summary.
- Requirements Group Review
- Announce PMC/RG approval of TPTP 4.2 candidate requirements list

# Features: TPTP 4.2 Themes



- Adopted Eclipse Themes & Priorities Q4'04 for TPTP 3.3 onwards
- Planning to adopt updated Eclipse Themes & Priorities for 4.3
- Examples by theme:
  - Ease Of Use – Through Enhanced UI and Simplified User experience, Improved Documentation, Better Editors, Simpler authentication, etc.
  - Scaling Up – Through performance improvements, agent-side aggregation, log data filtering
  - Appealing to Broader Community – through additional platform support, interaction with additional standards (JMX, ARM, Java Logging)
  - Improving TPTP as a platform - through Agent APIs, extensibility to the static analysis framework and programmability of the Generic Log Adapter framework

# Features: TPTP 4.2 Key Feature Set



- Dynamic Probes
- Data aggregation in Java trace collector.
- Java 2 SE code analysis tool
- Support for new target platforms
  - Windows (64-bit) on EM64T and Itanium Processor Family
  - New versions of existing supported platforms
- Test tool UI enhancements
- GUI test macro editor
- Generic log adapter enhancements & Java logging support
- Symptom database enhancements
- Profiler support for JVMTI (Tech Preview)
- ARM/JMX agents (Tech Preview)
- Resource Explorer (Tech Preview)

# Features: Responding to the Community



- Java Logging into TPTP Logging Framework
- JMX & ARM
  - alignment against key community standards
- ICU4J Support
  - Supporting Eclipse wide change
- Online Help Changes
  - User/Consumer separation
- Profiler
  - JVMTI support (Tech Preview)
- Callisto Alignment
  - Callisto Milestones retro-fitted to existing 4.2 schedules

# Non-Code Aspects: Documentation & Examples

- TPTP 4.2 download includes online documentation
  - Created by professional technical writers
- Tutorial & presentation materials available on [www.eclipse.org/tptp](http://www.eclipse.org/tptp)
  - Current: EclipseCon 2006 & 2005, Eclipse World 2005, ST&P 2005
  - Future: Eclipse World 2006, ST&P 2006
- TPTP 4.2 New&Noteworthy & Screencast (short demo)
  - To be made available via TPTP website
- TPTP Datasheet
  - Introduction to TPTP, outlining benefits to end-users, contributors
  - To be updated for 4.2 (last updated for 4.1)
- Continuing incremental improvements/updates to TPTP website
  - [www.eclipse.org/tptp](http://www.eclipse.org/tptp)

# Non-Code Aspects: Communications



- Article Placement
  - Eclipse Corner – Article
    - [Java Application Profiling using TPTP](#)  
Valentina Popescu, February 21, 2006
- Conferences
  - EclipseCon 2006: Presented 3 tutorials, 5 long talks, 2 short talks, 3 posters, 2 demos, 1 BOF
- Community outreach for 4.2 release
  - Callisto PR campaign
  - News alert on TPTP website
  - Postings on popular Eclipse websites and blogs



# APIs: Status of TPTP 4.2 Content



Name	API Type	Doc Status	Test Cases	# of Clients	Backward Compatible	Maturity
Agent Controller	Platform	Overview, How To and doc	Yes	TPTP via compatibility layer	Yes (Moved from Provisional in 4.2)	High Main stream on Windows
JVMTI agent	Platform package Provisional	Overview Examples & javadoc	Yes	Under review	New	6 months incubation
BPEL service (in process of transitioning source code to Eclipse STP project)	N/A	N/A	N/A	N/A	N/A	N/A

**3 internal api uses [126575](#) [126584](#) [126585](#) – action plans in place in target components**

**All new API typically go through at least 1 release of Provisional status**

**Two styles of Provisional being applied to new functional areas:**

- API is stable and will maintain binary compatibility forward
  - [Platform javadoc Provisional](#) - javadoc with provisional tag, Provide contract description and samples, Risk is implementation reliability
- API is deemed final, but is not 100% guaranteed, however is available for usage
  - [Platform package Provisional](#) - Not part of standard package - requires an explicit download, Provisional package name, Contract and samples provided



# Architectural Issues

- Continuing incremental migration (4.0/4.1/4.2) of linkages to JDT JUnit
  - Discussion of tighter extension/integration underway for beyond 4.2
- Optional function now dependant on WTP and BIRT
- Working on reconciling more reuse with WTP
  - TCP monitor
  - WTP web services validation
  - Web services explorer
- Launch Config underwent major rework to integrate with JDT
  - More refinement in future releases for features like code coverage
- Introduced defect linkage to test logs with a Bugzilla example. Looking for more life cycle integration points.

# End-of-Life



- All APIs and features from previous releases of Hyades / TPTP are being preserved in 4.2
- Some of the EMF xmi resource formats have been extended in 4.2, but automatic forward and backward compatibility continues to be in place from TPTP 1.0 onward

# Bugzilla Statistics



## Target Milestone

Defects	4.2	4.2i1	4.2i2	4.2i3	4.2i4	---	4.2.1	4.3	future	Total
NEW	3			131	42	69	3	94	79	421
ASSIGNED				91	46	3	10	46	68	289
REOPENED				6	1			1	3	14
RESOLVED	71	271	355	443		103			5	1250
VERIFIED		1	10	4						15
CLOSED	20	97	76	55		13				261
<b>Total</b>	<b>94</b>	<b>369</b>	<b>441</b>	<b>730</b>	<b>89</b>	<b>188</b>	<b>13</b>	<b>89</b>	<b>155</b>	<b>2250</b>

Bug statistics as of May 22, 2006

## Release Exit Criteria

- No high severity defects & 100% test attempt / pass (95% pass on early iterations)
- Test results posted; All exceptions reviewed before deferral / discharge
- All tests are in CVS as TPTP manual and JUnit tests

## TPTP 4.1/4.2 stats

- 1526 bugzilla defects resolved / verified / closed – double the 4.1 fix rate
- 66 feature enhancements integrated – double the 4.1 volume

## Standards (additions since TPTP 4.1)




- Provide exploitation of
  - JMX
  - ARM
  - WSDM
- Provide a common engine for the use of
  - The above standards
  - JVMTI – to replace JVMPI

# Schedule



- About to start TPTP 4.2 final iteration leading to GA declaration
  - Release consisted of three 6/7-week development and one 5-week shut-down iterations
  - Two pre-iterations were used to align with Callisto Simultaneous Releases

Key Dates	
<b>Jan 9, 2006</b>	Commenced TPTP 4.2 development
<b>Feb 2, 2006</b>	Released TPTP 4.10.1 GA and TPTP 3.3.0.2 GA (Maintenance releases)
<b>Feb 23, 2006</b>	Release TPTP 4.0.1.2 GA (Maintenance release)
<b>Mar 3, 2006</b>	Completed TPTP 4.2 Iteration 1 (vs. 2/24 scheduled)
<b>Apr 20, 2006</b>	Completed TPTP 4.2 Iteration 2 (vs. 4/14 scheduled)
 <b>May 26, 2006</b>	TPTP 4.2 Release Review
<b>May 26, 2006</b>	TPTP 4.2 Iteration 3
<b>Jun 30, 2006</b>	TPTP 4.2 GA (Supporting Eclipse Platform 3.2)
<b>Aug 11, 2006</b>	Target for TPTP 4.3 Iteration 1 Completion
<b>Sep 22, 2006</b>	Target for TPTP 4.3 Iteration 2 Completion
<b>Sep 29, 2006</b>	Target for TPTP 4.2.1 GA (Supporting Eclipse Platform 3.2.1)
<b>Oct 27, 2006</b>	Target for TPTP 4.3 GA (Supporting Eclipse Platform 3.2.1)

\* "4.3 I1" is for bug fixes only. TPTP 4.2.1 stream will be forked after completion of 4.3 I1 and will contain additional targeted bug fixes.

# Process



- ~64 Committers plus a few Developers from 4 organizations
  - Committer elections and removals have followed charter principles
  - Continuing to recruit additional contributor (organizations and individuals)
- Open communications via 6 TPTP mailing lists and newsgroup
  - Project activities communicated via mailing lists for PMC/general, one each for each sub-project, and low-noise news only mailing list.
- Meetings, meeting, meetings – numerous, open, and documented
  - Quarterly F2F PMC+PG, Weekly PMC+PG, MG, AG, Project, Component, etc.
- Open and inclusive release planning and tracking processes
  - Bugzilla used to request and track all defects and enhancements
  - Additional reports (defects, tests, etc.) used to enhance planning / tracking
- All contributions made directly to Eclipse CVS
  - Nightly, stable/iteration, and release builds available to the community

# Community



- Open communications via 6 TPTP mailing lists and newsgroup
  - Low-noise news only list: [tptp-news@eclipse.org](mailto:tptp-news@eclipse.org)
  - PMC, Groups, coordination, announcements, etc.: [tptp-pmc@eclipse.org](mailto:tptp-pmc@eclipse.org)
  - Separate Committer mailing lists for each TPTP project: [tptp-platform-dev](mailto:tptp-platform-dev), [tptp-testing-tools-dev](mailto:tptp-testing-tools-dev) , [tptp-tracing-profiling-tools-dev](mailto:tptp-tracing-profiling-tools-dev), [tptp-monitoring-tools-dev](mailto:tptp-monitoring-tools-dev)
  - Improved Committer responsiveness to newsgroups
- Open and inclusive release planning and tracking processes
  - Bugzilla used to request and track all defects and enhancements
  - Additional reports (defects, tests, etc) used to enhance planning / tracking
- Coordination/cooperation between other Eclipse projects
  - Platform, BIRT (assigned TPTP Committer to BIRT), WTP, DSDP
- TPTP evangelism and outreach in the market & broader community
  - Continuing to drive adoption across other Eclipse projects and industry
  - Presence at EclipseCon 2006, and upcoming Eclipse World & ST&P



# Intellectual Property



- Accepting Contributions (In-Bound Licensing)
  - All new code provided under [Eclipse Public License \(EPL\)](#)
  - Inclusion of 3<sup>rd</sup>-party (non-EPL) components approved by EMO
    - OpenGroup ARM 4.0 Java Language Interface
    - ICU4J 3.4.4.1 for bundling with agent controller and standalone GLA
    - **MX4J version 3.0.1 is requested; pending approval by EMO**
    - Xerces-C updated for this release (to version 2.7 from version 2.6)
    - Xerces-J updated for this release (to version 2.8 from 2.3?)
    - Apache Jakarta Commons Logging updated for this release (to version 1.0.4 from version 1.0.3)
    - Batik updated for this release (to version 1.6.0 from 1.5.1)
- Licensing Contributions (Out-Bound Licensing)
  - TPTP 4.2 provided under EPL
  - about.html / licenses are undergoing replacement to confirm to new template
    - To be completed for RC5 (June 20)
- Due Diligence and Record Keeping
  - All TPTP Committers completed Committer Agreement & approved by PMC/EMO
  - PMC maintains list of all 3<sup>rd</sup>-party (non-EPL) components used by TPTP
  - EMO completed source scan and due diligence to confirm contributions

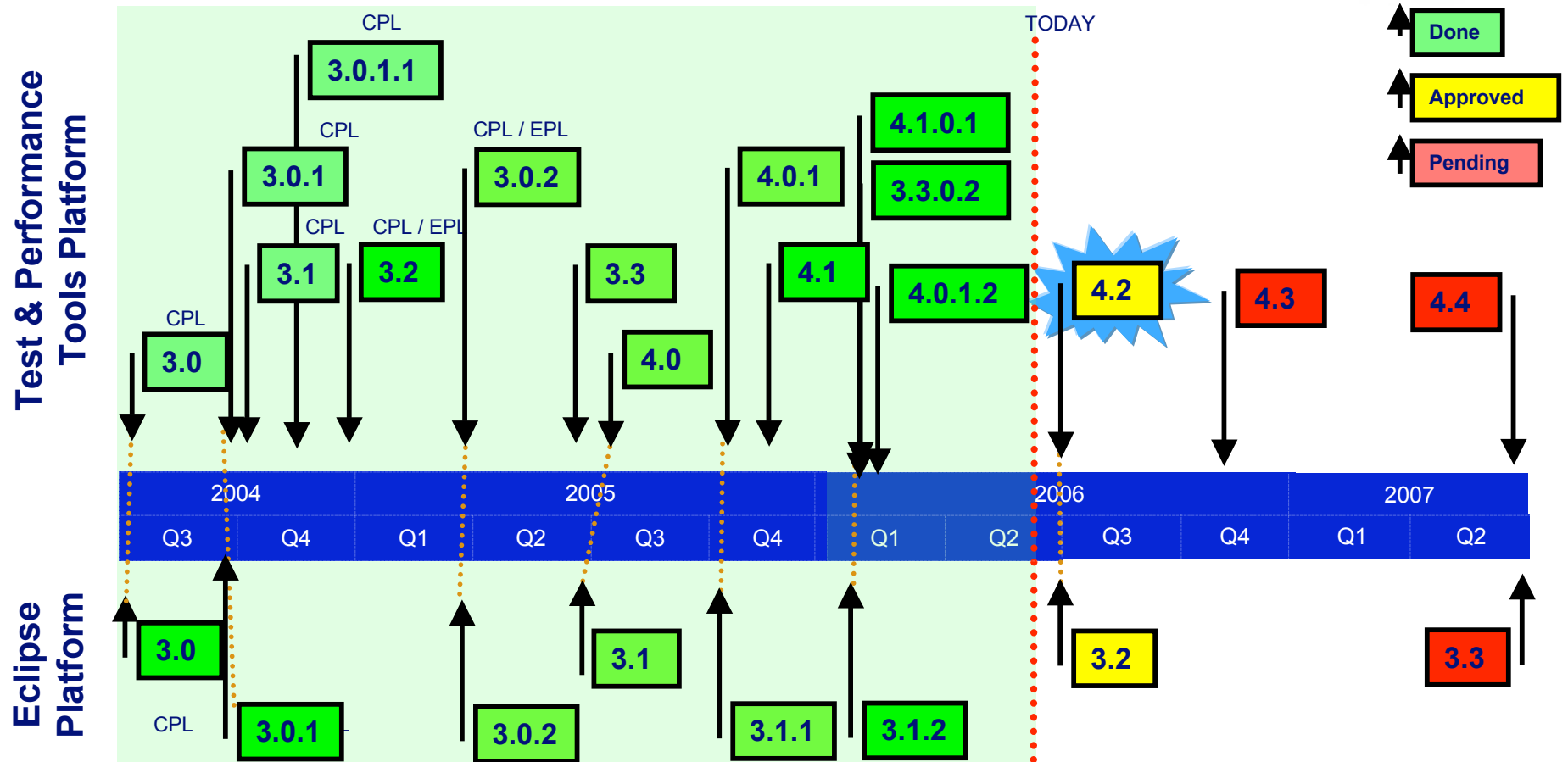
Eclipse Foundation IP Policy: [http://www.eclipse.org/org/documents/Eclipse%20IP%20Policy2003\\_12\\_03%20Final.pdf](http://www.eclipse.org/org/documents/Eclipse%20IP%20Policy2003_12_03%20Final.pdf)

# Project Plan



- TPTP 4.2 scheduled for Jun 2006
  - Based on Eclipse Platform 3.2
  
- TPTP 4.2.1 maintenance releases targeted for Sep 2006
  - Aligned with Eclipse Platform 3.2.1 maintenance release
  
- Targeting TPTP 4.3 for Oct 2006
  - Expecting to finalize plan Jun 2006 & commence development Jul 2006
  
- Targeting TPTP 4.4 for Jun 2006
  - Commencing planning in Q3'06 and development Nov 2006
  - Aligning with Eclipse “release train”

# Project Plan: TPTP Roadmap



- TPTP 3.x, 4.[0|1].x and 4.[2|3].x releases are based on Eclipse Platform 3.0.x, 3.1.x and 3.2.x respectively
- CPL / EPL notations refer to the license(s) under which the release will be made; TPTP 3.3 and EP 3.1 and later are EPL only

# Thanks and...



## Feedback, Feedback, Feedback!

- **Please provide us with your feedback, requirements, issues**
- **Submit enhancement requests / defects in Bugzilla**  
[https://bugs.eclipse.org/bugs/enter\\_bug.cgi?product=TPTP](https://bugs.eclipse.org/bugs/enter_bug.cgi?product=TPTP)
- **Submit questions / issues in the TPTP Newsgroup:**  
<news://news.eclipse.org/eclipse.tptp>
- **Engage with the PMC to contribute:**  
[tptp-pmc@eclipse.org](mailto:tptp-pmc@eclipse.org) or individual PMC members at  
<http://www.eclipse.org/tptp/groups/PMC/pmc.html>