



# Eclipse™ TPTP 4.0 Release Review

15 June 2005

rev 3

## Eclipse TPTP PMC



# Introduction: TPTP 4.0 Release Review

- Eclipse Test & Performance Tools Platform
  - Previously known as Hyades (Eclipse Tools Sub-Project)
- Major Milestones
  - Project Creation approval August 2004
    - Promotion of Hyades to Eclipse Top-Level Project
  - Prior releases: 3.1 (Sept'04), 3.2 (Dec'04), 3.3 (June'05)
  - Targeting TPTP 4.0 GA for ~June 27 (EP 3.1 + a couple of days)
    - TPTP 4.0 first release following major restructuring
- Continuing to grow contributors and adopters
  - Six organizations now contributing Committers/Developers
  - Most (of 8) participating organizations have released/announced TPTP-based products/projects; Other adopters in the community

# Features: TPTP 4.0 Requirements Process



- Requirements solicited via Bugzilla with deadlines posted on newsgroups and developer mailing lists
- Requirements reviewed for clarity, scope (c.f. charter), alignment with themes, target release and priority by Requirements Group
  - Single representative from each TPTP contributing organizations to avoid large-company dominance
  - Chair (Mike Norman, Scapa Technologies) solicits and represents additional community input
  - Intermediate and final conclusions posted on TPTP website
- Late-breaking exceptions handled through an open exceptions process
- Themes and high-level requirements coordinated through Eclipse Requirements Council representation



# Features: TPTP 4.0 Themes

- Long-term Themes adopted Q4'04 for Release 3.3 onwards
- 74 enhancements categorized in 6 out of 8 Eclipse Themes

TPTP 4.0 Enhancement Alignment to Themes	Primary*	Secondary*
Scaling Up	7	-
Enterprise Ready	6	11
Design for Extensibility: Be a Better Platform	22	9
Simple to Use	29	6
Enable Consistent Multi-language Support	1	1
Appealing to the Broader Community	2	1

\* Number of TPTP 4.0 enhancements aligned primarily / secondarily with Theme



# Features: TPTP 4.0 Key Feature Set

- Plug-in restructuring & renaming
  - TPTP builds and releases as a single project and tests itself using TPTP
- Platform Project
  - Agent Controller API and implementation enhancements (some provisional) to increase scalability
  - Web Services Choreography framework for agent control and integration (provisional)
  - Significant User Interface enhancements for trace, log and statistical data
- Testing Tools Project
  - JUnit support, URL Proxy enhancements, file transfer support, user interface enhancements
- Monitoring Tools Project
  - Additional agents, symptom database migration
- Tracing and Profiling Tools Project
  - Miscellaneous enhancements and preparation for more restructuring (from Platform) and extensions / enhancements in TPTP 4.1

# Features: Responding to Community Feedback

- JUnit
  - < 4.0 JUnit support was weak (discussed at EclipseCon & elsewhere)
  - 4.0+ roadmap published and discussed with community
  - Worked with Eclipse Platform Team to enhance coordination between TPTP and platform JUnit concepts and implementations
- Open Source Community Solidarity
  - MySQL and Apache statistical data collection agents (as well as Linux, Jonas, JBoss)
  - Full Firefox & Mozilla support in URL Test Proxy Recorder
- Sample Tools
  - Long-term fully-agreed objective to produce exemplary tools not just basic sample tools
- And we changed the name to avoid building a secondary “brand”



# Documentation and Examples

- TPTP 4.0 download includes online documentation
  - Created by professional technical writers
- Tutorials and presentation materials available on [www.eclipse.org/tptp](http://www.eclipse.org/tptp)
  - Current: EclipseCon 2005
  - Future: Eclipse World and Software Test & Performance Conference 2005
- TPTP 4.0 Fact Sheet & Screencasts (short demos)
  - To be made available via TPTP website
- TPTP Datasheet
  - Introduction to TPTP, outlining benefits to end-users, contributors
- TPTP Glossary of Terms
  - First draft available on TPTP website, maintenance ongoing
  - TPTP Marketing Group responsible for “branding terms”, e.g. Agent Controller
- Completed TPTP website overhaul – [www.eclipse.org/tptp](http://www.eclipse.org/tptp)
  - Further updates and enhancements planned

# PR and Analyst Interaction



- TPTP articles
  - Dr Dobbs' Journal – August issue
  - Eclipse Corner – Articles under development
- Press Relations / Promotion
  - TPTP 4.0 Press Release
  - TPTP 4.0 Fact Sheet & Screencasts (short demos) via TPTP website
- Analyst Interaction
  - Recent Forrester Research briefing, May 10th 2005
  - Planned Gartner briefing

TPTP 3.0  
2005 Jolt Finalist



***“[TPTP] will reshape the testing and monitoring tools market.***

***As more vendors standardize on [TPTP], the result will be better tool integration, easier tool customization, increased tool choice, and less vendor lock-in. This will be a boon for users and a force for change in the industry.***

***Users should expect – and demand – that their tools use [TPTP].”***

Carey Schwaber, Forrester Research, Inc., October, 2004.

# APIs: Status of new 4.0 content



Name	project	Doc Status	Test Cases	# of Clients	Backward Compatible	Maturity
Charting service	Platform javadoc provisional	Usage, Examples & javadoc	Yes	3 Test reports plus consumers	new	3 years SVG 3 years SWT
Agent Controller	Platform package provisional	Overview, How To and doc	Yes	Scheduled 4.1	yes	High
BPEL service	Platform package provisional	Overview Examples & javadoc	Yes	1 external	new	12 months but an experienced team

## Two styles of provisional being applied to new functional areas:

API is stable and will maintain binary compatibility forward

- javadoc with provisional tag
- Provide contract description and samples
- Risk is implementation reliability

API is what is believed to be needed but is not 100% guaranteed however is available for usage

- Not part of standard package so it requires an explicit download
- Provisional package name
- Contract and samples provided



# Architectural Issues

- Linkage to JDT JUnit support initiated – migration in 4.0
  - Discussion of tighter extension/integration under way for 4.1 & 4.2
- TPTP charting service was restructured at api and function level in order to create an opportunity to alternately integrate with BIRT.
  - Common SVG support being put in place with BIRT
- TCP monitor introduced in WTP will be reconciled with TPTP 2H05
- WTP web services validation will be migrated to TPTP analysis framework 2H05
- Launch and control linkage to JDT/CDT... workgroup to be established
- Previous feature requests for linkage to requirement/defect artifacts is on hold until there is team support for record resources in the workbench platform
  
- Plug-in restructuring in order to significantly reduce the number of plug-ins. 76 became 48 including new features.
  - All preserved api remains org.eclipse.hyades.\*
  - All new/revised api is org.eclipse.tptp.\*
  
- At the time of this report not all api is yet fully documented but that will be resolved by GA
  - WTP API testing tools have adopted TPTP runtime and are being put into use to assess TPTP



# End-of-Life

- All APIs and features from previous releases of Hyades / TPTP are being preserved in 4.0
- Some of the EMF xmi resource formats have been extended in 4.0 but automatic forward and backward compatibility continues to be in place from 1.0 onward
- SVG charting examples have been promoted to the charting service and made provisional



### Target Milestone

# Defect Statistics

	---	3.3	3.3 i1	3.3 i2	3.3 i3	4.0	4.0 i1	4.0 i2	4.0 i3	4.0 i4	4.1	4.2	future	Total
NEW	56	.	.	.	3	.	.	<u>1</u>	8	55	52	.	<u>25</u>	<u>200</u>
ASSIGNED	4	.	.	.	.	.	.	.	1	46	49	<u>1</u>	<u>4</u>	<u>106</u>
REOPENED	.2	.	.	.	.	.	.	.	.	3	.	.	.	5
RESOLVED	<u>141</u>	<u>1</u>	<u>77</u>	<u>94</u>	<u>147</u>	<u>4</u>	<u>22</u>	<u>120</u>	<u>119</u>	131	6	<u>2</u>	<u>38</u>	902
VERIFIED	3	.	<u>3</u>	<u>2</u>	<u>2</u>	.	<u>1</u>	.	3	.	.	.	<u>2</u>	<u>16</u>
CLOSED	<u>36</u>	.	<u>48</u>	<u>59</u>	82	.	7	29	<u>44</u>	<u>17</u>	<u>1</u>	.	<u>14</u>	<u>337</u>
Total	<u>242</u>	<u>1</u>	<u>128</u>	<u>155</u>	<u>235</u>	<u>4</u>	30	<u>150</u>	<u>175</u>	<u>252</u>	108	<u>3</u>	<u>83</u>	<u>1566</u>

Release Exit Criteria = 0 high severity defects & 100% test attempt / pass (95% on early iterations)

- Test results posted; All exceptions reviewed before deferral / discharge
- All tests are in CVS as TPTP manual and JUnit tests

TPTP 3.3 – 578 defects closed to-date (also included in 4.0)

- 63 feature enhancements integrated

TPTP 4.0 – 29 high severity of 146 defects will go into 4.0 I4 – 591 closed to-date

- 65 feature enhancements integrated plus 17 feature enhancements provided with provisional API

Bug statistics as of May 08, 2005



# Code Contribution and Statistics

- Active contribution from CA, Fokus, IBM, Intel, OCS and Scapa
  - Fokus, OCS and CA all began during 3.3 / 4.0 and are working towards earning Committer status
- Approximately 1 million lines of code
- Currently leveraged open source
  - Jakarta Log4J, Commons Logging, Xerces-C, Batik, JUnit
- All new code is within previous charter and extensions of previous code bases
- Contribution of translated files for the following languages is provided
  - Brazilian Portuguese, French, German, Italian, Japanese, Korean, Spanish, Simplified Chinese, Traditional Chinese, Czech, Hungarian, Polish, Russian



# Standards

- Provide implementations of
  - JSR 47 logging implementation
  - OMG UML2 Test Profile (pre-approval level)
    - Alignment to approved level is under assessment
  - Oasis common base event (pre-approval level 1.0.1)
    - WEBM/CIM proposal recently approved
  - Provisional BPEL engine
- Provide a common engine for the use of
  - The above standards
  - JVMPI – to be replaced by JVMTI
  - Extend JUnit with TPTP test tracking capabilities
  - SVG for charting

# Schedule



- TPTP 4.0 (supporting EP 3.1) developed in parallel with TPTP 3.3 (supporting EP 3.0)
  - TPTP 3.3 provided for consumers not yet able to move to Eclipse 3.1;
  - In retrospect, parallel releases not wise ☹ - competing demands impacted perf.-to-schedule
- Entering last stages of TPTP 4.0 final iteration and GA declaration
  - 6-week development iterations (4 for TPTP 4.0 and 3 for TPTP 3.3) - final iteration = stabilization
  - Closely aligned with Eclipse 3.1 builds - Targeting TPTP 4.0 GA “within days” of EP 3.1 GA

Key Dates	
<b>Jan, 2005</b>	▪ Commenced TPTP 4.0 (and TPTP 3.3) development
<b>Feb, 2005</b>	▪ Completed TPTP 4.0 (and TPTP 3.3) Iteration 1
<b>Mar, 2005</b>	▪ Released TPTP 3.0.2 GA (Maintenance release aligned with Eclipse Platform 3.0.2)
<b>Mar, 2005</b>	▪ Released TPTP 3.2A GA (Maintenance release)
<b>Apr, 2005</b>	▪ Completed TPTP 4.0 (and TPTP 3.3) Iteration 2
<b>May, 2005</b>	▪ Completed TPTP 4.0 Iteration 3 (Based on Eclipse Platform 3.1 M7)
<b>June, 2005</b>	▪ Target (6/24) for TPTP 3.3 GA (Based on Eclipse Platform 3.0.2)
<b>June, 2005</b>	▪ Target (6/27) for TPTP 4.0 GA (Supporting Eclipse Platform 3.1, currently RC1)
<b>Nov, 2005</b>	▪ Target for TPTP 4.1 GA (Supporting Eclipse Platform 3.1)
<b>June, 2006</b>	▪ Target for TPTP 4.2 GA (Supporting Eclipse Platform 4.2)



# Process: Committer and Contributions

- > 60 contributors (48 Committers; 14 Developers) from 6 companies
  - Committer elections and removals have followed charter principles
  - Continuing to recruit additional contributor (organizations and individuals)
- Open communications via 5 TPTP mailing lists and newsgroup
  - One mailing list for PMC/general, and one each for each sub-project
  - Committer responsiveness to newsgroup has suffered during crunch times – looking to improve
- Meetings, meeting, meetings – numerous, open, and documented
  - Quarterly F2F PMC+, Weekly PMC+, MG, RG, AG, PG, Project, Component, etc.
- Open and inclusive release planning and tracking processes
  - Bugzilla used to request and track all defects and enhancements
  - Additional reports (defect summaries, test stats, etc) used to enhance planning / tracking
- All contributions made directly to Eclipse CVS
  - Nightly, stable/iteration, and release builds available to the community
- Coordination/cooperation between other Eclipse projects
  - Platform, BIRT (assigned TPTP Committer to BIRT), DSDP, WTP
- Leveraging other open source in the project where possible



# Process: Community

- Substantial TPTP downloads activity
- Project mailing lists and newsgroup restructured in Q4'04
  - [tptp-pmc@eclipse.org](mailto:tptp-pmc@eclipse.org) - PMC, Groups, coordination, announcements, etc.
  - Separate Committer mailing lists for each TPTP project
  - TPTP newsgroup active – working to increase Committer responsiveness
- TPTP evangelism and outreach in the market & broader community
  - Driving adoption across other Eclipse projects and industry
  - Working with industry press and analysts to promote TPTP
  - Presence at EclipseCon, Linux World & upcoming: Eclipse World, ST&P



# Intellectual Property

- Accepting Contributions (In-Bound Licensing)
  - All new code provided under [Eclipse Public License \(EPL\)](#)
    - All prior CPL contributions re-contributed under EPL
  - Inclusion of 3<sup>rd</sup>-party (non-EPL) components approved by EMO
  
- Licensing Contributions (Out-Bound Licensing)
  - TPTP 4.0 provided under EPL
  - about.html / licenses are in place
  
- Due Diligence and Record Keeping
  - All TPTP Committers completed Committer Agreement & approved by PMC/EMO
  - EMO 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
  
- Technology Reviews
  - Creation Review approved July 2004
  - Release Review scheduled for June 2005

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)



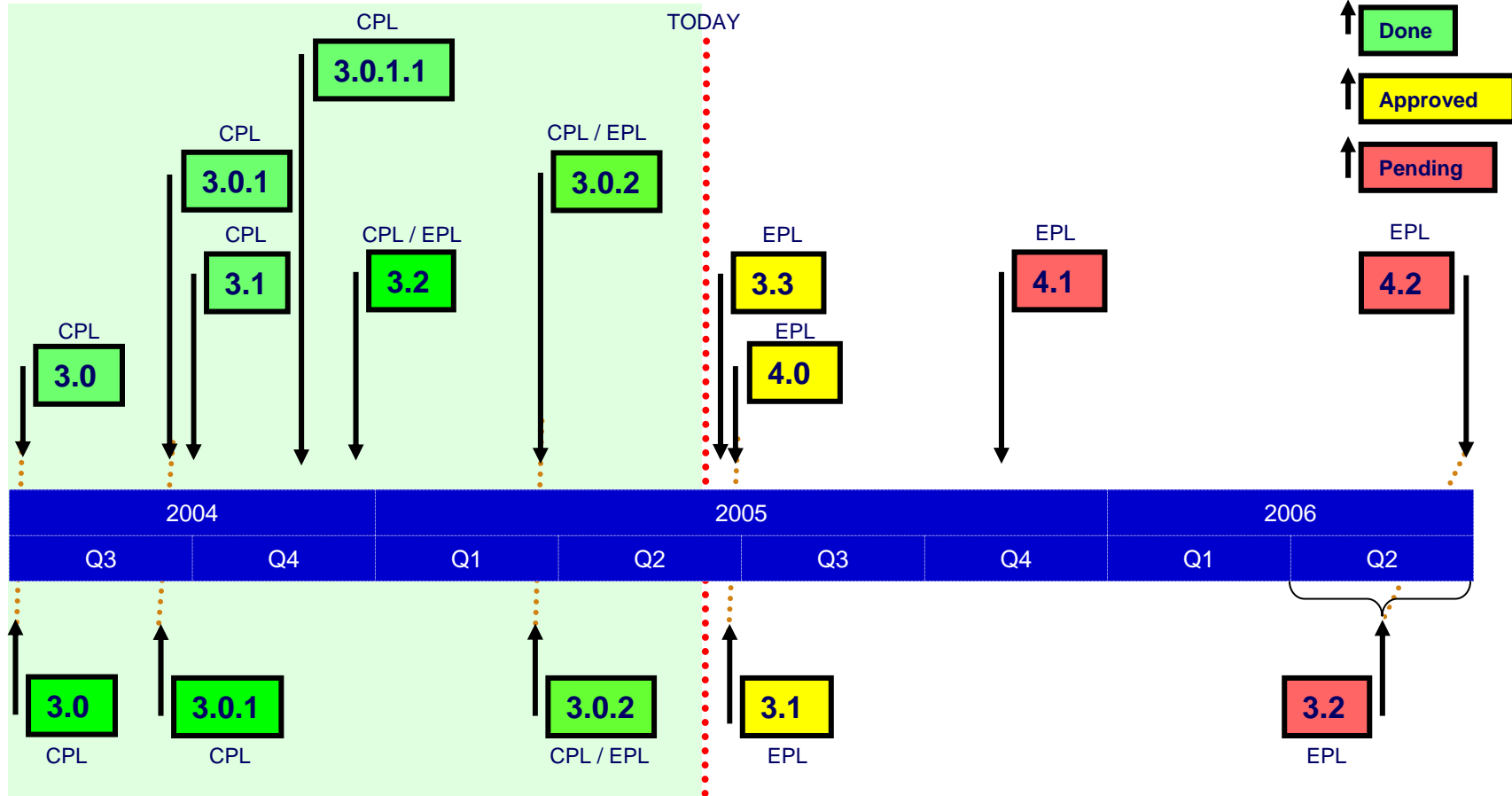
# Forward Project Plan

- TPTP 4.0 scheduled for June 2005
  - Support for Eclipse Platform 3.1
  
- Realigning future release cycles
  - Continuing to align with Eclipse Platform releases in Q2
  - Additional annual feature releases in November (vs. prior quarterly)
  - Additional maintenance releases as needed
  
- Targeting TPTP 4.1 for November 2005
  - Previously tentatively targeted for September 2005
  - Expecting to finalize plan June 2005 (development to commence in July)
  
- Targeting TPTP 4.2 for June 2006
  - Commencing planning in July 2005, development to commence January 2006

# TPTP Roadmap



Test & Performance  
Tools Platform



- TPTP 3.x and 4.x releases are based on Eclipse\* Platform 3.0.x and 3.1.x respectively
- CPL / EPL notations refer to the license(s) under which the release will be made

# 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>