



Web Tools 1.5 in the Callisto Simultaneous Release Full Release Review

July 27, 2006



Introduction: WTP 1.5 Release Review

- Eclipse Web Tools Platform Project
 - Original project proposal submitted by ObjectWeb
 - Original code contributions from IBM and Eteration (“ObjectWeb Lomboz”)
- Major Milestones and Previous Releases
 - Eclipse Foundation creation review June 2004
 - Full-time development since October 2004
 - WTP 0.7 July, 2005 and subsequent 0.7.1
 - WTP 1.0 December 2005 and subsequent 1.0.1/2/3



WTP Requirements Process

- Requirements group
 - Chaired by Jochen Krause, Innoopract (PMC member)
 - Participation by major WTP developers and consumers
 - IBM, BEA, Oracle, Genuitec, JBoss
 - Periodic telecons open to community; minutes posted to WTP website
 - Delivers WTP requirements document to PMC for each major release, summarizing themes, major goals, supported platforms
 - Planning document provided through Eclipse WTP Wiki
- wtp-requirements@ mailing list created to solicit community requirements
- Detailed requirements, plans tracked via Bugzilla
- Themes and high-level requirements coordinated through Eclipse Requirements Council representation



WTP 1.5 Project Themes

- Coordination with other projects in the Callisto release
- Ongoing API declaration where appropriate
- Quality, reliability, stability
- Large-scale development
- User experience – improved graphical WSDL, schema editors and simplified Web Service wizards
- Responsive UI – improvements to validation infrastructure
- Architectural alignment – integrate with platform's project model, navigator, undo/redo stack, property pane, etc.



Feature Set - WST

- Basic Server Tools
 - Support for server types and server connectivity, including web and DB
 - Configure, publish, start/stop, debug
- Structured Source Editor Framework
- Web Language Tools
 - HTML source editor
 - CSS source editor
 - JavaScript source editor
- XML Language Tools
 - XML source editor
 - XSD editor - Graphical and source editing
 - DTD source editor
- Facets – technique and UI for modeling server features



Feature Set – WST (continued)

- Web Service Tools
 - WSDL Editor
 - Graphical and source modes
 - Integrated XSD editor
 - Web Service Explorer
 - Query and publish to UDDI
 - Dynamically execute WSDL
 - Web Service Wizard
 - Extension points for codegen, deploy, test, etc.
 - WS-I Test Tools - Validate WSDL and SOAP for WS-I compliance
- Data Tools [migrating to DTP]
 - Database server explorer
 - SQL scrapbook
 - Output view
 - RDB and SQL models



Feature Set – JST

- Java EE Core
 - Natures and Builders
 - Java EE Views and Navigators
 - Java EE Models
- Java EE Projects and Modules
 - Support for WAR, EJB-JAR, EAR, etc
 - Models and source editors for deployment descriptors
 - Java EE Navigator view
 - Ability to target on different servers
- Servlet Tools – wizard, “Run As...”
- JSP Language Tools
 - JSP editor including syntax highlighting, code assist for HTML, Java, EL’s, JavaScript, taglibs
 - JSR-45 compliant debugging



Feature Set – JST (continued)

- Java EE Server Tools - extends WST server tools with Java EE deployment
 - Supports deploy, debug, project restart on Java EE runtimes
 - Generic server adapter
 - XML based configuration files for quick setup
 - Includes JOnAS, WebLogic, WebSphere, Oracle Application Server, JBoss
 - Custom (Java) server adapter for total control
 - Includes Tomcat (included), Geronimo adapters (downloadable)
- JavaDoc Annotation Support
 - Extensible facility to define tagsets
 - Code assist in Java Editors + builders for code generation
- EJB – wizard, editing support, JavaDoc annotation support
- Java Web Services
 - Extensible Web service wizard
 - JAX-RPC codegen
 - JSR 109 deployment ready
 - Servlet (or in the future EJB) based
 - Includes Axis support
 - Models and source editors for deployment descriptors
 - Integrated into Java EE Navigator

APIs



- Some additional API definition in editors relative to 1.0.x releases
- Provisional API where functionality is new or still in flux
 - “No API before its time”; one release provisional required
- API scanning tool used internally and externally
 - Detect API use violations within WTP and between WTP and prerequisites.
 - Track API changes across versions (milestones, releases)
 - Enable adopters to discover, track reliance on provisional API
 - Track JUnit coverage
 - Track JavaDoc coverage



Developer/API Documentation

- Project-wide architectural overview (website)
 - Describes nature and relationship of components
 - Presentations and tutorials provide drill down on selected topics (such as server definition)
- Component overview (website)
 - Describes operation of an individual component and relationships among its parts, lifecycle issues, and other emergent properties of component
- JavaDoc Package documentation
 - Describes contents and inter-relationship of package contents
- Per-file JavaDoc
 - Conventional JavaDoc guidelines apply; scope is the class/interface being documented and its immediate surface area
- Extension point documentation



User Documentation and Examples

- WTP 1.5 download includes online documentation
 - Professional technical writer (IBM) contributing to 1.5 documentation
- Tutorials and presentation materials available on www.eclipse.org/webtools
 - Includes copies of conference presentations (EclipseCon, JavaOne, EclipseWorld), articles, etc.
- Ecosystem lead (Lawrence Mandel) assists with tutorial and other educational collateral
- NL-enabled; non-English language packs included in Callisto
- Two books, one “JST Pro” published by 3rd party, another in progress



Architectural Issues

- Project boundary alignment (with platform) remaining:
 - Internet proxy preferences
- Project boundary alignment (between projects)
 - Validation (WTP, TPTP)
 - TCPIP Monitor (WTP, TPTP)
 - RDB and DTP (WTP and DTP) – moving in 2.0 timeframe



End-of-Life

- None
- Deprecations: Note that RDB tools will be moving to DTP in a subsequent release (currently planned for 2.0/Europa).

Defect Statistics as of 07/27/2006



P1: 3

P2: 143

P3: 1856

P4: 102

P5: 4

Total: 2108



API Delta

- New APIs, API changes, API graduations since WTP 1.0.x
 - See <http://www.eclipse.org/webtools/adopters/1.5APIdelta.html>



Supported Standards

- WST: W3C and OASIS standards
 - HTML 4.01, XHTML 1.0 / 1.1, XML Catalog 1.0, CSS 2.0, ECMAScript 262
 - SQL99 / SQL2003, XML 1.0, XSD 1.0, WSDL 1.1, WS-I Basic Profile 1.1
 - SOAP 1.1, WS-I Attachment Profile 1.0.
- JST: JCP standards
 - J2EE 1.2 / 1.3 / 1.4: Servlet, JSP, EJB, JAX-RPC, JSR109, JSR045, JSR109, JSR921
 - JDBC 2.1



Schedule

- 1.5: Callisto schedule train joined circa January '06
 - WTP is a “level 2 dependency project” in milestone and rampdown plans
 - Maintenance releases (1.5.1, 1.5.2) will synchronize with Callisto
- Tech preview of Dali and JSF coincident with Callisto
- For 2.0: Europa schedule, same plans, matching all milestones beginning with the first
- WTP may elect to deliver additional maintenance, tech preview, or off-cycle releases in addition to the above schedule if adopter or user requests warrant.



Process: Committers and Activities

- Many active committers from several companies (including individuals)
 - Committer elections and removals have followed charter principles
 - Continuing to recruit additional contributors (organizations and individuals)
 - <http://www.eclipse.org/webtools/people/contributors.html>
- Open communications via 5 WTP mailing lists, plus newsgroup
 - PMC, overall dev, WST, JST, JSF, ATF, Dali, Requirements mailing lists
 - 2.0 plans available:
http://wiki.eclipse.org/index.php?title=Web_Tools_Requirements_2.0
- Meetings, meeting, meetings – numerous, open, and documented
 - Weekly PMC, weekly dev status, requirements as needed, bi-weekly architecture
 - PMC minutes available on website:
http://www.eclipse.org/webtools/development/pmc_call_notes.html
 - Weekly status telecon minutes available on website:
<http://www.eclipse.org/webtools/development/status-telecons/>
- Open and inclusive release planning and tracking processes
 - Bugzilla used to request and track all defects, enhancements, and milestone plans
 - Additional reports (defect summaries, test stats, etc) used to enhance planning / tracking
- All contributions made directly to Eclipse CVS
 - Nightly, weekly integration builds, and release builds available to the community
- Coordination/cooperation with other Eclipse projects
 - Platform, DTP, TPTP, EMF, GEF, VE
- Leveraging other open source technologies in the project



Process: Community

- Substantial WTP download activity for milestones and releases
 - WTP is one of the most popular downloads
- Substantial website content
 - Download links, New & Noteworthy, mailing lists, presentation DB
 - Tutorials, documentation, presentation summary,
 - “people pages”
- Evangelism and outreach in the market & broader community
 - Ecosystem lead (Lawrence Mandel)
 - Website lists WTP events (conferences, etc.)
 - Multiple commercial implementations
 - Working with Eclipse and industry press to promote WTP
 - Presence at EclipseCon, Eclipse World, Colorado Software Summit, BEAworld, others
 - Blogs, articles, press releases, etc. to promote and educate



Process: Incubation and Fostering

- Java Server Faces (JSF)
 - First technology preview coincident with Callisto (0.5 release)
 - Planning to exit incubation and ship 1.0 as part of Europa
- Dali (JPA)
 - First technology preview coincident with Callisto (0.5 release)
 - Planning to exit incubation and ship 1.0 as part of Europa
- AJAX Tooling Framework (ATF)
 - Gathering additional community
 - Planning technology preview (0.5 release) now

Contributing Organizations (current and previous)



- BEA
- Eteration
- Exadel
- IBM
- Innoopract
- JBoss
- ObjectWeb
- Oracle
- SAS
- Thales
- Turkcell
- University of Karlsruhe
- SAP
- Sybase



Commercial Adopters

- IBM – Rational Application Developer
- BEA – WebLogic Workshop and WebLogic Studio
- Eteration – Lomboz
- Genuitec – MyEclipse
- Innoopract – Yoxos
- Exadel – Exadel Studio
- JBoss – JBoss IDE
- SAP – NetWeaver Studio
- Borland



Supported Servers

- Open Source
 - Apache Tomcat
 - Apache Geronimo
 - Apache Derby
 - JBoss
 - ObjectWeb JONAS
 - Glassfish: <https://glassfishplugins.dev.java.net/>
- Commercial
 - IBM WebSphere
 - BEA WebLogic
 - Oracle Application Server



Intellectual Property: Processes

- **Accepting Contributions (In-Bound Licensing)**
 - All new code provided under [Eclipse Public License \(EPL\)](#)
 - Redistribution of 3rd-party (non-EPL) components approved by EMO
 - DTD and schema download licensing available
- **Licensing Contributions (Out-Bound Licensing)**
 - WTP 1.0 provided under EPL
 - “about.html” / licenses: 3PC listed, standard “about.html” completed
- **Due Diligence and Record Keeping**
 - All WTP Committers completed Committer Agreement & approved by PMC/EMO
 - EMO maintains list of all 3rd-party (non-EPL) components used by WTP
 - Source scan and due diligence requested of EMO
- **Review History**
 - Creation Review approved July 2004



IP Cleanliness

- About files and license files are complete and correct: Yes
- All significant and third-party contributions have been reviewed by Eclipse Legal
 - *Yes: See project log for complete list*
- Project log complete and has been reviewed by Eclipse Legal
 - The URL is
http://www.eclipse.org/webtools/development/ip_log.html

Thanks and...



Feedback, Feedback, Feedback!

https://bugs.eclipse.org/bugs/enter_bug.cgi?product=WTP

<news://news.eclipse.org/eclipse.webtools>

wtp-dev@eclipse.org