



# Eclipse™ WTP 0.7 Release Review

06 July 2005

Eclipse WTP PMC

# Introduction: WTP 0.7 Release Review



- Eclipse Web Tools Platform Project
  - Original project proposal submitted by ObjectWeb
  - Original code contributions from IBM and Eteration (“ObjectWeb Lomboz”)
  
- Major Milestones
  - Eclipse Foundation creation review June 2004
  - Full-time development since October 2004
  - BEA joins project leadership in February 2005
  - Agreement to move data tools into DTP project in March 2005
  - Targeting WTP 0.7 GA for July 29
    - Based on 3.1 platform GA

# WTP Requirements Process



- Requirements group
  - Chaired by Jochen Krause, Innoopract (PMC member)
  - Participation by major WTP developers and consumers
    - IBM, BEA, Oracle, Genuitec, JBoss
  - bi-weekly telecons open to community; meeting minutes posted to WTP website
  - Delivers WTP requirements document to PMC for each major release, summarizing themes, major goals, supported platforms
  - Reviews incoming requirements for clarity, scope (c.f. charter), alignment with themes, target release, and priority
  - Proposes release numbering and interaction with prerequisite releases
- wtp-requirements@ mailing list created to solicit community requirements
- Requirements tracked via Bugzilla
- Themes and high-level requirements coordinated through Eclipse Requirements Council representation



## WTP 0.7 Project Themes

- Built to last - significant focus on (provisional) API definition
- Simple to use – wizards, editing support
- Large-scale development
  - Progress on editing front
  - Flexible project model (multiple modules/project)
- User experience – dynamic help, graphical WSDL editor
- Responsive UI - Eclipse jobs, operations processing for wizards
- Seamless editing of resources
  - JDT-like features applied to other languages (HTML, JSP, XML, ...)
- Flexible project layout
- Vendor ecosystem support – server integration, platform API



## 0.7 Feature Set - WST

- Basic Server Tools
  - Support for server types and server connectivity, including web and DB
  - Configure, publish, start/stop, debug
- Internet Tools (migrated to platform)
  - Web browser
  - Proxy preferences
  - TCP/IP monitor
- 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



## 0.7 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
  - Database server explorer
  - SQL scrapbook
  - Output view
  - RDB and SQL models



## 0.7 Feature Set – JST

- J2EE Core
  - Natures and Builders
  - J2EE Views and Navigators
  - J2EE Models
- J2EE Projects and Modules
  - Flexible directory layout
    - Not just exploded archives
  - Support for WAR, EJB-JAR, EAR, etc
  - Models and source editors for deployment descriptors
  - J2EE 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



## 0.7 Feature Set – JST (continued)

- J2EE Server Tools - extends WST server tools with J2EE deployment
  - Supports deploy, debug, project restart on J2EE runtimes
  - Generic server adapter
    - XML based configuration files for quick setup
    - JOnAS, WebLogic, JBoss configurations included
  - Custom (Java) server adapter for total control
    - Tomcat, JBoss, Geronimo adapters included
- 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
  - Extends Web service wizard
    - JAX-RPC codegen
    - JSR 109 deployment
    - Servlet or EJB based
  - Includes Axis support
  - Models and source editors for deployment descriptors
  - Integrated into J2EE Navigator



# User Documentation and Examples



- WTP 0.7 download includes online documentation
  - Professional technical writer (IBM) contributing to 0.7 documentation
  - Documentation still in progress as of this release
- Tutorials and presentation materials available on [www.eclipse.org/wtp](http://www.eclipse.org/wtp)
- NL-enabled; 0.7 goal is to be fully enabled, but English only
- Ecosystem lead (Lawrence Mandel)
- Website lists WTP events (conferences, etc.)
- Two books in progress, one “JST Pro” from outside the project
- Talks at EclipseCon’05, JavaOne, EclipseWorld, others
- Press releases for 0.7 release planned, starting with JavaOne announcement



# APIs

- All APIs provisional in 0.7 release
- “component.xml” files determine (future) API status; will transform into “api.xml” in 3.2 timeframe, based on work with platform
- API scanning tool created
  - Detect API use violations within WTP and between WTP and prerequisites. Work with platform (Jim des Rivieres) to clarify “rules”.
  - Track API changes across versions (milestones, releases)
  - Track JUnit coverage – goal is 100% for APIs in 1.0 release
    - Static
    - Dynamic – Using trace component (PIAgent) from TPTP to determine EMF coverage.
  - Track JavaDoc coverage – goal is 100% for APIs in 1.0 release



# Developer/API Documentation

- Project-wide architectural overview (website)
  - Describes nature and relationship of components
- 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
- Work still to be done
  - Complete and link the categories above
  - Additional use-based scenario documentation (how to write a server adapter, e.g.)



# Architectural Issues

- Project boundary alignment (with platform)
  - Operations (WTP, EMF)
  - Undo/Redo (Platform, WTP, EMF, GEF)
  - WTP's Flexible Project (Resource Layer)
  - Extensible Navigator, Tabbed Properties View
  - [WebBrowser, LaunchURL API \(done in 0.7 timeframe\)](#)
- Project boundary alignment (between projects)
  - In discussion with Oracle, Versant, DTP over JSR 220 (ORM) location
  - Validation (WTP, TPTP)
  - TCPIP Monitor (WTP, TPTP)
  - RDB and DTP (WTP and DTP) – moving in 1.5 timeframe
- **LDT – structured source editor future**

# End-of-Life



- This is the initial WTP release; no end-of-life issues with previous releases.

# Defect Statistics as of 6/26/2005



Severity	New/Assigned/Reopened Defects in version 0.7
Blocker	7
Critical	8
Major	54
Normal	218
Minor	15
Trivial	4
Total	306

Release Exit Criteria: zero P1/sev 1 defects & 100% automated test pass rate

- Test results posted with each build
- All tests are in CVS

Bug statistics as of May 08, 2005



# 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
- JST: JCP standards
  - J2EE 1.2 / 1.3 / 1.4
    - Servlet, JSP, EJB, JAX-RPC, JSR109, JSR045
  - JDBC

# 3<sup>rd</sup> Party Software Relationships



- Eclipse Project Prerequisites
  - Platform 3.1
  - EMF SDK 3.1
  - GEF SDK 3.1
  - JEM SDK 1.1M2
- 3<sup>rd</sup> Party Software Used by WTP
  - Axis 1.1 (including commons discovery and logging, JAX-RPC, log4j)
  - Axis-Ant 1.1
  - qname.jar
  - SAAJ 1.1
  - Servlet 2.3.1 (includes JSP 1.2.1)
  - Schemas: datatypes.dtd, http.xsd, soap.xsd, soapenc.xsd, wsdl.xsd, wsdl20.xsd, wsdl-mime.xsd, xml.xsd, XMLSchema.dtd, XMLSchema.xsd, WAP/OMA 1.0/1.3, XHTML 1.0, 1.1, J2EE DTDs
  - wsdl4j 1.4
  - wsil4j 1.0
  - xerces-j 2.6.2
  - DOM,
  - eclipsexslt 1.0.2
  - org.jaxen[.dom] 1.1B4
  - uddi4j 2.0.2



# Update Manager Site Hosted on SourceForge

- <http://eclipseupdates.sourceforge.net>
  - Enables WTP users to easily access WTP prerequisites from SourceForge
- Simplifies acquisition and update processing

# Schedule



- 0.7 release scheduled for July 29, 2005
- 5 milestones (M1-M5) plus GA release (M6)
- Post-0.7 milestones (M8-M10) will lead to 1.0 release

Milestone	Planned Date	Actual Date
M1	October 15, 2004	October 15, 2004
M2	December 24, 2004	December 23, 2004
M3	February 18, 2005	February 26, 2005
M4	April 15, 2005	April 29, 2005
M5	July 1, 2005	June 30, 2005
M6 / GA	July 29, 2005	-



# Process: Committer and Contributions

- 62 contributors (25 active committers) from 9 companies
  - Committer elections and removals have followed charter principles
  - Continuing to recruit additional contributors (organizations and individuals)
  - <http://eclipse.org/webtools/people/index.html>
- Open communications via 5 WTP mailing lists, plus newsgroup
  - PMC, overall dev, WST, JST, and requirements mailing lists
  - Committer responsiveness to newsgroup has suffered during crunch times – looking to improve
- Meetings, meeting, meetings – numerous, open, and documented
  - Weekly PMC, weekly dev status, bi-weekly requirements, bi-weekly architecture
  - PMC minutes available on website:  
[http://www.eclipse.org/webtools/development/pmc\\_call\\_notes.html](http://www.eclipse.org/webtools/development/pmc_call_notes.html)
- 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, weekly integration builds, and release builds available to the community
- Coordination/cooperation between other Eclipse projects
  - Platform, DTP, TPTP
- Leveraging other open source in the project

# Process: Community



- Substantial WTP download activity for milestones – over 42K for M4
- 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
  - Multiple commercial implementations, more coming...
  - Working with Eclipse and industry press to promote WTP
  - Presence at EclipseCon + upcoming: Eclipse World, Colorado Software Summit, BEAworld, others
  - Books – two in preparation

# Contributing Organizations



- BEA
- Eteration
- Exadel
- IBM
- Inoopract
- JBoss
- ObjectWeb
- SAS
- Thales
- Turkcell
- University of Karlsruhe



## Commercial Product Adopters

- IBM – Rational Application Developer
- BEA – WebLogic Workshop
- Eteration – Lombos
- Genuitec – myEclipse
- Innoopract – Yoxos
- Exadel – Exadel Studio
- JBoss – JBoss IDE
- SAP – NetWeaver Studio
- Working with WTP on future product offerings:
  - Borland
  - Oracle



# Supported Servers

- Open Source
  - Apache Tomcat
  - Apache Geronimo
  - Apache Derby
  - JBoss
  - ObjectWeb JONAS
- Commercial
  - IBM WebSphere
  - BEA WebLogic

# Intellectual Property



- Accepting Contributions (In-Bound Licensing)
  - All new code provided under [Eclipse Public License \(EPL\)](#)
  - Redistribution of 3<sup>rd</sup>-party (non-EPL) components approved by EMO
  - DTD and schema download licensing has been added
  
- Licensing Contributions (Out-Bound Licensing)
  - WTP 0.7 provided under EPL
  - “about.html” / licenses: 3PC listed, standard “about.html” creation in flight; will complete in advance of release
  
- Due Diligence and Record Keeping
  - All WTP Committers completed Committer Agreement & approved by PMC/EMO
  - EMO maintains list of all 3<sup>rd</sup>-party (non-EPL) components used by WTP
  - EMO completed source scan and due diligence to confirm contributions
  
- Reviews
  - Creation Review approved July 2004
  - Release Review scheduled for July 6, 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

- WTP 0.7 scheduled for July 29, 2005, based on platform 3.1
- Aligning future release cycles with platform
  - Align with Eclipse Platform releases starting mid-2006
  - Additional maintenance releases as needed
- Targeting WTP 1.0 for December 2005
  - Hardening release, focusing on APIs / WTP-as-a-platform
  - Work on flexible project model, “server features”
  - [http://www.eclipse.org/webtools/development/eclipse\\_WTP\\_project\\_plan\\_1\\_0.html](http://www.eclipse.org/webtools/development/eclipse_WTP_project_plan_1_0.html)
- Targeting WTP 1.5 for June 2006
  - Based on / shipped coincident with platform 3.2
  - Major themes: J2EE 1.5, additional servers, update standards, architectural alignment with platform, JSF component (Oracle)

# 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=WTP](https://bugs.eclipse.org/bugs/enter_bug.cgi?product=WTP)
- **Submit questions / issues in the WTP Newsgroup:**  
<news://news.eclipse.org/eclipse.webtools>
- **Engage with the WTP devs to contribute:**  
[wtp-dev@eclipse.org](mailto:wtp-dev@eclipse.org)