Web Tools Platform (WTP) 3.0

for the Ganymede Simultaneous Release Review

Brief Overview Review Materials
June 4, 2008
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Introduction and Purpose

This document is to fulfill the requirements of the <u>Eclipse Release Review</u> [1] for WTP 3.0 planned for release at the end of June, 2008. This is the brief, overview version of the full release materials.

WTP has been active for 4 years, with the first, 0.7, release in 2005. Over the years, WTP has grown (and reorganized) to consist of 10 subprojects: Common Tools, Dali (JPA), EJB Tools, Java EE Tools, JSF Tools, Server Tools, Souce Editing, Web Services, Release Engineering, and several incubating projects and components (ATF, XSL).

Noteworthy Features added for this release

We document all our <u>new and noteworthy items</u>[2] for each milestone, for every release. The following summarizes the new functionality provided by each sub-project this release.

Common Components

- Facets
  This release moved some provisional API to be API, and usability improvements made in the UI for selecting facets for projects.

- Validation Framework
  Added improved preference and user settings. Provided official API this release.

Server Tools

- Several enhancements and improvements to existing functionality.

Source Editing

- JavaScript
  A substantial improvement in JavaScript tools and editing was made in this release. It is a complete replacement for the previous component code with it's own name, JSDT, and already offers far greater functionality than the original component was ever designed to.

- For other languages (XML, HTML, JSP) made improvements in configurable validation and formatting.

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1   http://www.eclipse.org/projects/dev_process/release-review.php
2   http://www.eclipse.org/webtools/development/news/main.php

Web Service Tools

- Several enhancements and improvements to existing functionality.

- Added ability to specify Quality of Service policies (WS-I compliance level).

JEE Tools

- New wizards for creating Web artifacts: Servlet Filters and Application Lifecycle Listeners
- Usability enhancements in the toolbar of the Java EE perspective
- EAR 5 Bundled Libraries support
- Java EE Deployment Descriptor nodes in the Project Navigator view
- Improved Java EE classpath management/UI
- Ability to read Java EE models from binary archives

EJB Tools

- New this release: New wizards for creating EJB 3.0 artifacts: Session Beans and Message-Driven Beans

JSF Tools

- Added support for alternate view description language for JSF

- Provide support for Apache MyFaces Trinidad components

Dali

- Added provisional API for JPA model

- Extensible persistence.xml Editor

- Many new wizards

- Generators on Entity (Type) level

- Project Explorer Content for JPA projects

- Support for adding JPA functionality to a Java project

- Added optional feature to support EclipseLink

APIs

We are aware that we (WTP) still do not provide enough APIs and still have too large a "provisional API debt" but are making progress on providing more API, this release some of the more significant areas being in Facets and Validation frameworks. We have also taken steps to improve our policy on "protected non-API", published in API Policy [3] document, that describes how we protect some non-API so that adopters can invest with some assurance of continuity, but also detail the limits to that policy, so that eventually we can provide complete API.

Another policy change this release which received a lot of discussion was our Policy on Package Visibility [4]. While there is controversy about this policy, it was requested by committers to not have an absolute policy requiring visibility but to allow them to use it as a design principle, just like 'protected', 'private', 'final' aspects of the Java Language. Adopters should "adopt early and adopt often" and file bugs if package visibility impacts them.

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3   http://wiki.eclipse.org/WTP_API_Policy
4   http://wiki.eclipse.org/WTP_Policy_on_Package_Visibility

Quality (Bugzilla)

Our overall bug rate is approximately 80 resolutions per week, on average. We reduced our backlog by around 300 bugs (approximately), which is a reduction of 10% (approximately) The statistics in the following table reflect activity since the previous release (for the period July 1st, 2007 to May 20, 2008)

Bugs opened	3348
Bugs resolved	3639
Fixed	2321
Invalid	201
Wontfix	486
Duplicate	358
Worksforme	245
Not Eclipse	28

Communities

Committers and Contributors

We have a very diverse group of committers, from many companies, that sees a moderate amount of change over the years, (some people leaving, new people come on board). One way we encourage new committers is to have incubating projects, one of those, the XSL incubating component, is quite active.

End-User Community

WTP is one of the most popular downloads. Another way we contribute to the overall usefulness experience to Eclipse end-users is to participate in the EPP packaging project, by "owning" the JEE Developers IDE package. While we admittedly have not done as much in this area as we would have liked, we did expand the JEE Developers IDE to include RSE (Remote System Explorer) this release since it provides SSH/SFTP access to servers, which many web developers need in the course of their work.

Adopter Community

There are many, known adopters, both commercial, other Eclipse Projects, and other open source projects: 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

IP Issues

Our Project IP log [5] is complete and has been reviewed by Eclipse Legal. It includes:

- A list of third party software distributed with WTP, including information on the license and a link to the WTP CQ.
- The name of every committer for this release
- The name of every non-committer who contributed code via Bugzilla entries, with bug numbers.
- Dependencies on third party software that is not re-distributed with WTP.
  In summary: Application Servers, Xdoclet, Axis2 runtime, JSF runtime and component libraries, JPA runtime

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5   http://www.eclipse.org/webtools/iprelated/ip_log.php