



Orion Project 0.2 Release Review

Features



- First incubating release of new web-based tool integration platform
- Tooling user interface written in HTML, JavaScript, and CSS
 - Navigator providing standard file/folder manipulations: create, delete, rename, copy, move, etc
 - High performance editor component supporting many of the same text manipulation commands as the Eclipse desktop editor
 - Basic Git client, sufficient for self-hosted development
 - Search, help system, bookmarks, compare editor
 - Site launching feature for testing and debugging apps
- JavaScript plugin architecture, allowing integration of tools and functionality across domains
- Initial Java-based server, using Jetty and Equinox. Search implementation provided by Apache Solr/Lucene

Non-Code Aspects



- Orion User Guide and Orion Developer Guide included with release. Documentation developed using Mylyn WikiText
- Developer Guide includes server administration guide that describes how to setup and manage the server
- Public beta server hosted by Eclipse Foundation: orionhub.org
- Blog for New and Noteworthy updates: planetorion.org
- Community is very active
 - Mailing list has steady activity
 - Firefox and Firebug investigating Orion adoption and integration
 - Wiki content is growing
 - <http://wiki.eclipse.org/Orion>
 - Orion webinar: <http://live.eclipse.org/node/1006>

Non-Code Aspects



- **Internationalization**
 - No internationalization or localization of messages has been done in this release
 - Editor is capable of displaying non-latin characters and supporting bidirectional text
- **Accessibility**
 - Some accessibility testing done
 - Screen readers handle Orion editor fairly well
 - Some known accessibility bugs: many commands and components are not keyboard accessible

API



- Orion has initial JavaScript API for client side services and components
- HTTP API for accessing server functionality
- No Java API on the server to allow for alternate server implementation languages and technologies
- Client API documented using jsdoc
- No APIs are final while Orion is incubating

Tool Usability



- Major focus on tool usability in this release to support self-hosting
- Task-focused UI design puts different developer tasks on different pages
- Page load and refresh times are critical for web applications: extensive work done on caching and build-time page optimization
- JavaScript tooling support is rudimentary at this point. Lacking strong content assist and refactoring support
- Capable search infrastructure, but missing search & replace functionality is a major drawback at this time

Architectural Issues



- Strong architecture and modularity of Orion client
- CommonJS module format used to facilitate client side reuse
- JavaScript plugin architecture allows for integration via linking rather than a monolithic application: architecture designed for the web
- Editor and “text view” components factored out with minimal external dependencies to enable reuse by other applications
- Modular server using OSGi, Jetty, Servlets, Java SE 6
- HTTP Server API provides maximum flexibility in server implementations
- Need to find ways to leverage/work with JavaScript Development Tools from WTP, such as server side JS analysis
- Targeting modern HTML5-compliant browsers: Opera 11/12, Firefox 4/5, Internet Explorer 9

End of Life Issues



- None.

Bugzilla



- Between January 1, 2011 and June 24, 2011 (RC3)
 - 1,250 reports were created
 - 865 were resolved
- Current state (RC3) is:
 - 0 blockers, 1 critical
 - 0 P1, 6 P2

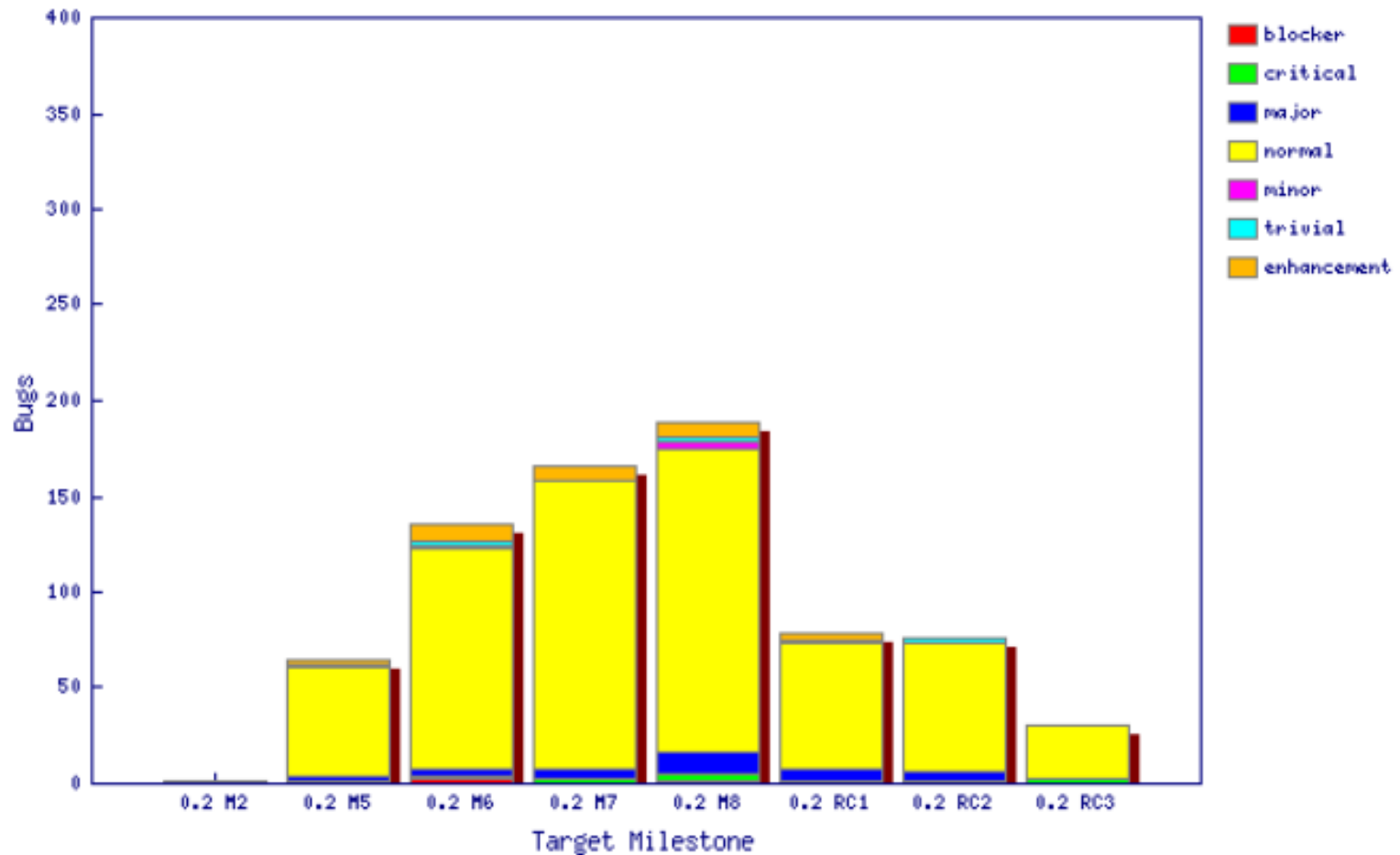
Bugs fixed during 0.2



Target Milestone

Severity		0.2 M2	0.2 M5	0.2 M6	0.2 M7	0.2 M8	0.2 RC1	0.2 RC2	0.2 RC3	Total
	blocker	.	.	<u>2</u>	.	<u>1</u>	.	.	.	<u>3</u>
	critical	.	<u>1</u>	<u>2</u>	<u>2</u>	<u>4</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>13</u>
	major	.	<u>3</u>	<u>4</u>	<u>5</u>	<u>12</u>	<u>6</u>	<u>5</u>	<u>1</u>	<u>36</u>
	normal	<u>1</u>	<u>57</u>	<u>115</u>	<u>151</u>	<u>158</u>	<u>66</u>	<u>68</u>	<u>27</u>	<u>643</u>
	minor	.	<u>1</u>	<u>1</u>	.	<u>4</u>	<u>1</u>	.	.	<u>7</u>
	trivial	.	.	<u>2</u>	.	<u>2</u>	<u>1</u>	<u>2</u>	.	<u>7</u>
	enhancement	.	<u>3</u>	<u>9</u>	<u>8</u>	<u>7</u>	<u>3</u>	.	.	<u>30</u>
	Total	<u>1</u>	<u>65</u>	<u>135</u>	<u>166</u>	<u>188</u>	<u>78</u>	<u>76</u>	<u>30</u>	<u>739</u>

Fixed bugs – 0.2



Standards



- Client components conforming to CommonJS Asynchronous Module Definition (AMD) format
- HTML5 standard source code
- Participating in specification of CrossFire browser debug protocol
 - <http://getfirebug.com/doc/crossfire/crossfire-splash-2011.pdf>

UI Usability



- Eclipse User Interface Guidelines followed where applicable to a web UI
- Orion has a completely new icon set with consistent color themes
- Went through several design iterations with graphic designer to come up with Orion 0.2 look
- Emphasis on allowing browser functionality to show through: using normal links, not hijacking the browser context menu, letting browser manage tabs

Schedule



- Milestones every 6 weeks, 8 cycle duration
 - Became open source shortly after M3
- Tracked schedule
 - All milestones delivered as planned
- End game (release candidate) milestones for 3 cycles
 - Duration reduced from 2-week to 1-week cycles at RC2
 - Relatively short end-game due to Orion being a very new project

Process



- Orion is developed using an open, transparent, and inclusive process
- Teams rely on Bugzilla, mailing lists and newsgroups for input
- Weekly planning calls conducted with all contributors welcome
- Self-hosted development on <http://orion.eclipse.org>
 - Meeting minutes posted to the orion-dev mailing list
- Publicly available milestone plans:
 - http://wiki.eclipse.org/Eclipse/Indigo_Plan
 - http://wiki.eclipse.org/Orion/Milestone_Plan

Community



- Orion team members are active in Bugzilla, newsgroups, and mailing lists
- Held an Orion Planning Summit in Palo Alto, CA (March 2011)
- Blogs started by Orion committers are active:
 - <http://planetorion.org>
 - <http://planetecclipse.org>
 - Team is using the eclipse-orion IRC channel
 - irc.freenode.net/#eclipse-orion
 - also see: <http://wiki.eclipse.org/index.php/IRC>
- The Orion team participates in code camps, conference presentations, and tutorials, including
 - EclipseCon 2011, What's Next Conference, jsconf, Eclipse Indigo Demo Camps
- The Orion team interacts with other open source projects, standards bodies, and other projects on eclipse.org, including
 - Mozilla, Dojo Foundation (Dojo framework, Maqetta), jGit, Mylyn, jsdoc, Firebug

IP Issues



- All significant and third party contributions have been reviewed and approved by Eclipse legal.
- About files and license files are complete and correct.
- Client code (JavaScript) is dual-licensed with EPL and EDL
- Approved 0.2 release log:
 - <http://www.eclipse.org/eclipse/development/project-log-files/eclipse-orion-creation-release-0-2-log.pdf>

Future Plans



- Shift to 3 or 4 month release cycle to keep up with pace of development in the web community. For example with new browsers shipping every 3 months we can't ship Orion once a year and expect to be current
- Aiming for a 0.3 incubating release in October 2011
- Focus on enabling richer integration, filling in gaps in self-hosting usability

