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 on the wiki and convert to Eclipse help system using Mylyn WikiText

- Blog for New and Noteworthy updates: http://planetorion.org/news/category/new-noteworthy/

- 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, Java EE Servlets
- 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 parsing and 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:
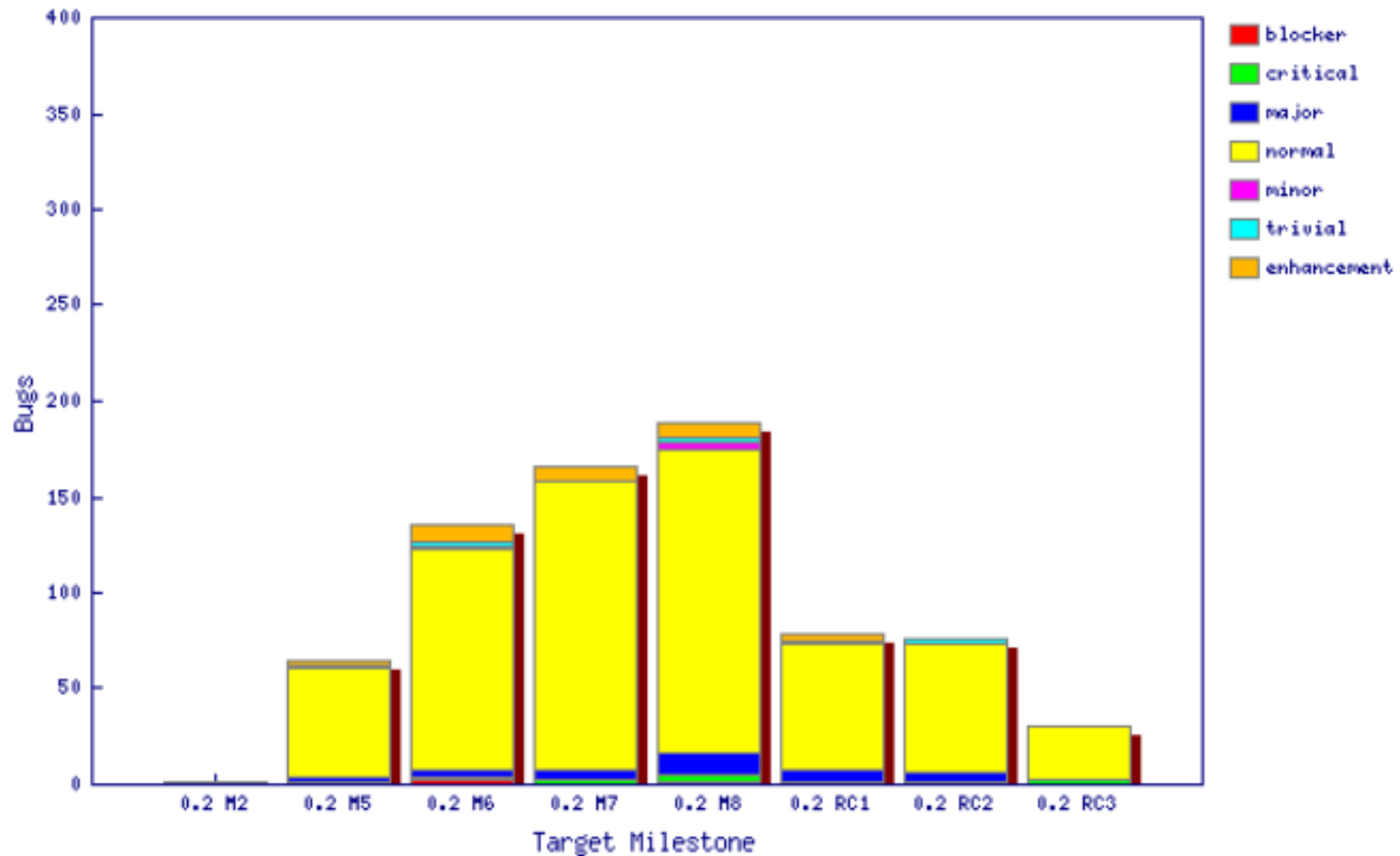 - 0 blockers, 1 critical
  - 0 P1, 6 P2

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	.	.	2	.	1	.	.	.	3
critical	.	1	2	2	4	1	1	2	13
major	.	3	4	5	12	6	5	1	36
normal	1	57	115	151	158	66	68	27	643
minor	.	1	1	.	4	1	.	.	7
trivial	.	.	2	.	2	1	2	.	7
enhancement	.	3	9	8	7	3	.	.	30
Total	1	65	135	166	188	78	76	30	739

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
  - 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://planeteclipse.org
  - Teamis 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