Equinox Project Juno Release Review

Equinox Project Leadership
Highlights

- New Features in Juno
  - Implement the OSGi R5 Core Framework Specification
  - Implement selected R4.3 Compendium specifications
    - Coordinator, Event Admin, MetaType, Declarative Services
  - Enhanced OSGi console based on Apache Felix GoGo

- API quality
  - High, no breaking changes to Equinox API
  - Binary compatible for compliant bundles

- IP Clearance and Licenses
  - All licenses and about files are in place as per the Eclipse Development Process, the Due Diligence Process was followed for all contributions

- Community and Committer Diversity
  - 42 committers, 22 active in past year
  - Organizations: IBM, EclipseSource, Cloudsmith, Individuals, Prosyst, Sonatype, WeigleWilczek GmbH, Tasktop
  - Geographies: Canada, USA, Germany, Bulgaria, Sweden, France
  - Consumed by all other Eclipse projects
Plan Items

• Robustness
  • Enhanced OSGi console using Apache Felix GoGo Shell
  • Graduated the Equinox Region Digraph

• Consumability
  • Enhanced Metatype service to support schema extensions
  • Upgrade to use Jetty 8 for HttpSession implementation

• Future
  • Participate in OSGi specification process and implement the latest OSGi R5 Core Framework Specification and selected OSGI R4.3 Compendium Service Specifications.

New and Noteworthy

- OSGi Core Release 5
- Updated Declarative Services for OSGi Compendium R4.3
- p2 Publisher Support for Negation Requirements
- Customize storage for preferences scopes
- Update to Jetty 8 and Servlet 3.0
- New OSGi console, based on Apache Felix GoGo
- Migration to git from cvs
Non-Code Aspects

• The Juno release will contain updated User and ISV documentation

• Community is active
  • Mailing lists and newsgroups have steady activity
    - eclipse-dev@eclipse.org, p2-dev@eclipse.org
  • Steady flow of bugzilla reports
  • Presentations and BOFs at EclipseCons
Non-Code Aspects

- **Internationalization**
  - Latin1 and Latin2 locales supported in all operating environments
  - DBCS locales supported on all platforms
  - GB18030-1 Chinese codepage standard is supported on Windows, Linux GTK and Mac

- **Localization**
  - Tested for localization

- **Accessibility**
  - Tested for accessibility, but Equinox has minimal UI.
Platform Quality API

- API quality is a collaborative effort that involves the experience of the developers working on the Equinox project, and feedback from consumers.
- API changes and proposed API additions are often broadcast to mailing lists to raise awareness of the changes and encourage discussion and feedback.
- API changes between Indigo and Juno are checked automatically by API tooling integrated into integration build process.
- No breaking API changes in Juno
- The Equinox leadership is comfortable supporting the API that is in the Equinox project for Juno
Tool Usability

- As part of the RT project, tooling falls outside of the Equinox project mandate
- Some developer tools such as console, and command line tools provided.
- Work closely with the PDE project which provides tooling for Equinox and OSGi
Architectural Issues

- Primary runtime can still run on J2SE 1.4.
- Jetty 8 requires JSE 6
- Many Equinox bundles use JSE 5 syntax but are down compiled (using jsr14) to support J2SE 1.4
- Plans to stop using jsr14 altogether in Kepler
End of Life Issues

• When evolving API the Equinox Project will, whenever possible, deprecate the affected API methods and continue to keep them operational

• Exceptions to this rule are in the 3.7 migration guide
Bugzilla

• Between June, 2012 and May 24, 2012 (RC2)
  • More than 700 reports were created
  • Over 460 were resolved
  • Over 70 were resolved without changing code
    – invalid, duplicate, worksforme, etc...
  • Over 45 were backported to Indigo maintenance
# Bug Resolution During Juno

## Target Milestone

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Standards

• OSGi
  • Core Framework Specification, Release 5
  • Service Compendium, Release 4.3 and Release 4.2
  • Continued development of the next OSGi Specification.
Schedule

- Milestones every 6 weeks, 6 cycle duration
  - API frozen in March (M6), Feature freeze in May (M7)

- Tracked schedule
  - All milestones delivered as promised

- End game (release candidate) milestones for 4 cycles
  - Duration reduced from 2-week to 1-week cycles at RC2 milestone
  - No new features or API allowed without proper approvals
  - Development to end on June 7, 2012
  - Increasingly stringent approval, checking, and change notification requirements in this stage
Process

- The Equinox project is developed using an open, transparent, and inclusive process
- Teams rely on Bugzilla, mailing lists and newsgroups for input
- Weekly planning calls conducted with the component leads
  - Meeting minutes posted on the Equinox wiki page
- Component teams have publicly available milestone plans on the wiki
Community

- Equinox team members are active in Bugzilla, newsgroups, and mailing lists
- Using the equinox-dev IRC channel
  - irc://irc.freenode.net/#equinox-dev
  - also see: http://wiki.eclipse.org/index.php/IRC
- The Equinox team participates in code camps, conference presentations, and tutorials, including
  - EclipseCon, JavaOne, JavaWorld, JAOO, Eclipse Summit Europe, Eclipse Forum Europe, JAX, JAX Asia
- The Equinox team interacts with other open source projects, standards bodies, and other projects on eclipse.org, including
  - OSGi, Apache, JCP
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.
- Draft IP log:
Project Plan for Kepler

- Still in planning stage