Rich Ajax Platform (RAP) Project 1.4 Release Review

May 28, 2011, Ralf Sternberg, EclipseSource

Project page: http://eclipse.org/rap

Communication Channel: RAP Mailing List rap-dev@eclipse.org

IP Log: http://eclipse.org/rap/iplog/ - has been sent to the EMO and is awaiting approval

Project Plan: http://eclipse.org/projects/project-plan.php?planurl=http://www.eclipse.org/rap/plan/plan-1.4.xml

New and Noteworthy: http://eclipse.org/rap/noteworthy/

Eclipse Rich Ajax Platform (RAP)

RAP enables developers to build rich, Ajax-enabled web applications by using the Eclipse development model, plug-ins and a Java-only API.

RAP is a runtime technology built on top of Equinox. It
- implements a subset of SWT, JFace, Workbench APIs
- provides the Eclipse extension point mechanism
- is running in server environments
- uses JavaScript to render the UI in the browser

The combination of RCP and RAP allows to develop desktop and web applications from a single code base (single sourcing).

Features

Runtime

- broad coverage of SWT 3.7 APIs
- broad coverage of JFace 3.7 APIs
- includes JFace databinding
- good coverage of Workbench 3.7 APIs
  - org.eclipse.ui.workbench
  - org.eclipse.ui.views
  - org.eclipse.ui.cheatsheets
  - org.eclipse.ui.forms
- support for i18n
- complies with the Servlet specification 2.3 ... 3.0
- RAP applications can be deployed as standard web archives (war)

Tooling

- The tooling includes templates, developer documentation and launcher for RAP applications

Project Health

Committer Activity

- Active comitters: 7
- Continuous committer activity (average 500–1000 commits per month)
- Organizations: EclipseSource, Texas Center of Applied Sciences, Individuals
- 23% of all commits come from individual committers:
  (see http://dash.eclipse.org/dash/commits/web-app/project-diversity.cgi)

Software Quality

- Continuous integration including more than 2500 unit tests
- Additional ~920 JavaScript unit tests for the client
- Strict coding conventions back our code quality (http://wiki.eclipse.org/RAP/CodingConventions)
- Active community of users and testers

Contributers

There are various third-party contributions in the RAP Incubator project such as a CNF port, an experimental GEF port, a file upload component, and more. Moreover, the IP log lists more than 100 patches from external contributors to the RAP project itself.

Community

RAP has an active community that discusses with the RAP team in the newsgroup and reports issues in Bugzilla. The RAP team participates in demo camps and conferences including EclipseCon and Eclipse Summit Europe.

Bug Statistics

Bugs newly reported since June 25, 2010:   802

Bugs RESOLVED FIXED since June 25, 2010:   541

Bugs RESOLVED with 1.4 target milestone: 474

Documentation

- Extensive API documentation available (several thousand javadocs)
- A huge set of resources available for RCP that can be reused for RAP
- See http://eclipse.org/rap/documentation.php for more information

Integration with other Eclipse projects

- EMF provides RAP support
- Riena provides RAP support
- Scout decided to create a RAP client
- The RAP team is currently talking to the Skalli project to evaluate RAP as client technology

Schedule

RAP 1.4 delivered milestone builds every 6 weeks according to the Indigo schedule (M1–M7), see [1]. All

milestones have been delivered on time.

For the end game, our ramp down plan [2] applies.

[1] http://www.eclipse.org/projects/project-plan.php?projectid=rt.rap#release_milestones
[2] http://wiki.eclipse.org/RAP/Ramp_down_plan

Project Plan for RAP 1.5

We plan to provide RAP 1.5 together with Eclipse Juno in June 2012. The plan is still in an early stage, but will likely include:

- Infrastructure changes like moving on to Java 1.5, migrating to Git, moving build to Eclipse.org
- A new client/server protocol to support alternative clients
- Support other frameworks by removing the dependency to the Eclipse workbench

Further Information

- http://eclipse.org/rap - RAP project page
- http://wiki.eclipse.org/RAP - RAP wiki
- http://eclipse.org/rap/demos.php - Demo applications