

creation review:
eclipse rich ajax platform (rap)

June, 21 2006

overview

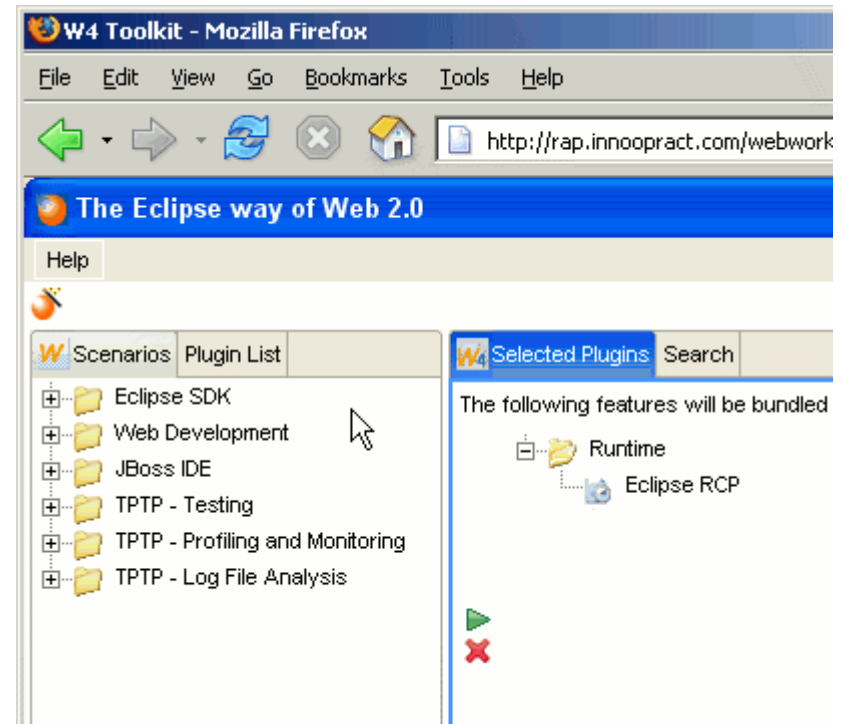
- the most commonly applied technology for developing user interfaces in the past decade, templating for (simple) HTML, is getting replaced by two new major trends:
 - rich client applications (with concepts for keeping the client up to date)
 - rich internet application, with a strong focus on ajax technologies
- eclipse plays a significant role in the rich client world, providing advanced concepts and technologies that can be easily built upon - and „enforcing“ solid architecture patterns in application development.
- the ajax world to date is very colorful, with many very promising technologies and projects. Most of the effort seems to be focused on providing client-side widget toolkits and a communication layer to the server.

rap enables developers to employ the eclipse concepts for developing ajax applications, leveraging the advanced eclipse programming model

scope

build a platform that enables **AJAX** development based on **eclipse** concepts:

- **plugin concept** – based on osgi, implemented by Eclipse Equinox
- **workbench concept** – a powerful UI metaphor that facilitates providing a consistent user experience
- a **widget toolkit** that encapsulates all ajax technologies behind Java objects and rendering kits
- extensibility for the widget toolkit: allow creation of custom widgets with javascript and ajax
- explore the possibility to use the swt api for the widget toolkit



participants

- Initial committers (Innoopract)
 - Frank Appel
 - Rüdiger Herrmann
 - Jochen Krause
 - Jordi Böhme-Lopez
- interested parties
 - Stephan Wilczek – iMedic
 - Gunnar Wagenknecht
 - Rahul Mehrotra
- make it easy and worthwhile to contribute extensions, ideas and implementation
 - Initial developer community will include interested parties and individuals who have expressed interest in extending

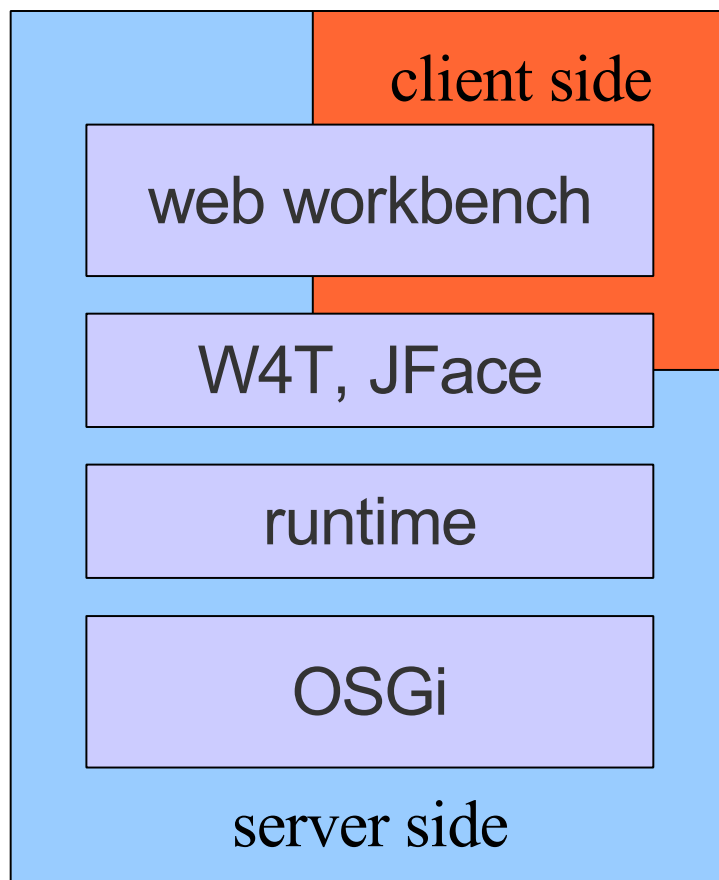
community

- approx. 10.000 visitors on the rap demo application
- the rap proposal has won a european innovation award



- many positive comments on blogs, news channels

rap architecture overview



→ selection service, action sets, viewparts

→ widget toolkit, mvc, handling of distributed environment

→ extension points

→ modularity, dependency management (bundles / plugins)
based on standard jee technology

code contribution

- large portions of W4Toolkit, a widget toolkit for web development by Innoopract will be contributed to the rap project
- the code contribution provides:
 - a set of UI components
 - event-driven program control
 - a generic mechanism for updating arbitrary UI elements of a web UI based on AJAX
 - a Lifecycle handling comparable to the one used in Java Server Faces.
 - rendering kits for Internet Explorer, Firefox (NoScript, Script, AJAX).

plan

- 2006-06 v0.1: Java component library for UI development
- 2006-09 v0.2: Basic WebWorkbench implementation, exemplary web applications using OSGi inside selected open source servers
- 2007-02 v0.5: Provide all API for Release 1.0
- 2007-06 v1.0: Release 1.0