



The Eclipse Rich Ajax Platform

Frank Appel
RAP Tech Lead
fappel@innoopract.com



Agenda

What is RAP

Demo

The Innoopract Pitch

Eclipse Development Process

Q & A



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What is RAP

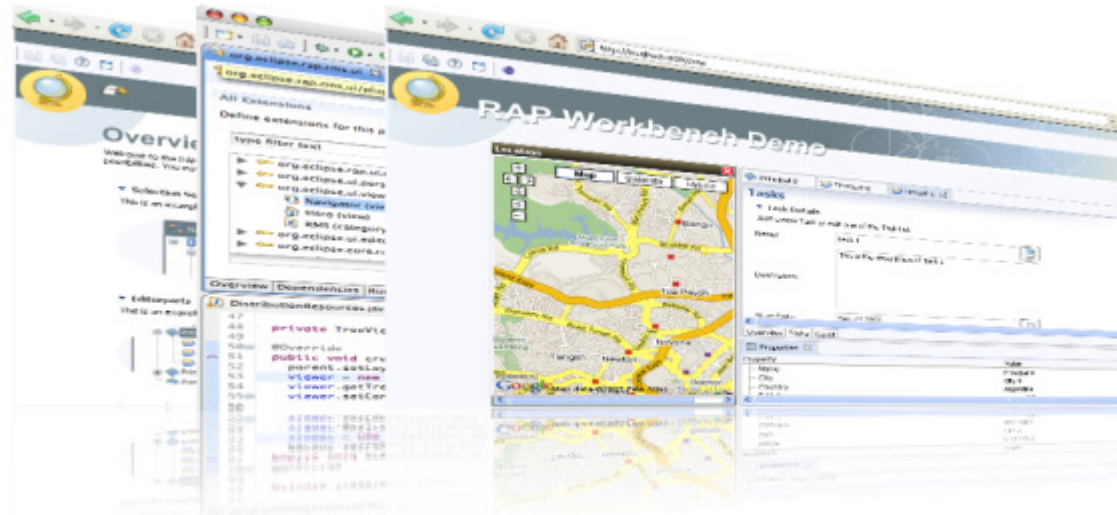
Demo

The Innoopract Pitch

Eclipse Development Process

Q & A

What is RAP?



- Rich Internet Application development platform
- based on the eclipse development model
- single sourcing and reuse of existing RCP Code

What is RAP? (cont'd)



plug-ins, plug-ins, plug-ins – bundles too ...

OSGi specifies a dynamic component model:

- Module – encapsulation and declaration of dependencies
- Life Cycle – API for life cycle management
- Service Registry – providing functionality to other bundles
- Security layer - limit bundle functionality to pre-defined capabilities

The Eclipse OSGi implementation is provided by the Equinox Project

What is RAP? (cont'd)



contribution to a common ui concept

- **Standard Widget Toolkit (SWT)**
 - delivers native widget functionality for the Eclipse platform in an operating system independent manner
- **JFace**
 - sits on top of SWT and provides classes for handling common UI programming tasks
- **Workbench**
 - is responsible for the presentation and coordination of the user interface

What is RAP? (cont'd)



The screenshot illustrates the Eclipse RAP 1.1 user interface with several key components highlighted:

- Workbench Window:** The main container for the application, shown in blue.
- Menu Bar:** Located at the top, highlighted in green.
- Tool Bar:** Below the menu bar, highlighted in yellow.
- Editor:** The central workspace for editing, highlighted in green.
- Page:** The current view or page, highlighted in purple.
- View:** A secondary view or panel, highlighted in red.
- Workbench Parts:** A collection of parts within the workbench, highlighted in red.
- Workbench Page:** A specific page within the workbench, highlighted in purple.
- Dialog:** A modal dialog box for user interaction, highlighted in green.
- Cool Bar:** A toolbar for quick access to frequently used actions, highlighted in yellow.

The interface displays a map of Karlsruhe, Germany, with a "Change User Data" dialog box overlaid. The dialog prompts the user to correct input data and includes fields for:

- Firstname: Frank
- Lastname: Appel
- Street:
- City: Karlsruhe
- Country: Deutschland
- Username: fa
- Password: (masked with dots)
- Confirm Password: (masked with dots)

A message at the bottom of the dialog states: "The password and its confirmation are not the same."

What is RAP? (cont'd)



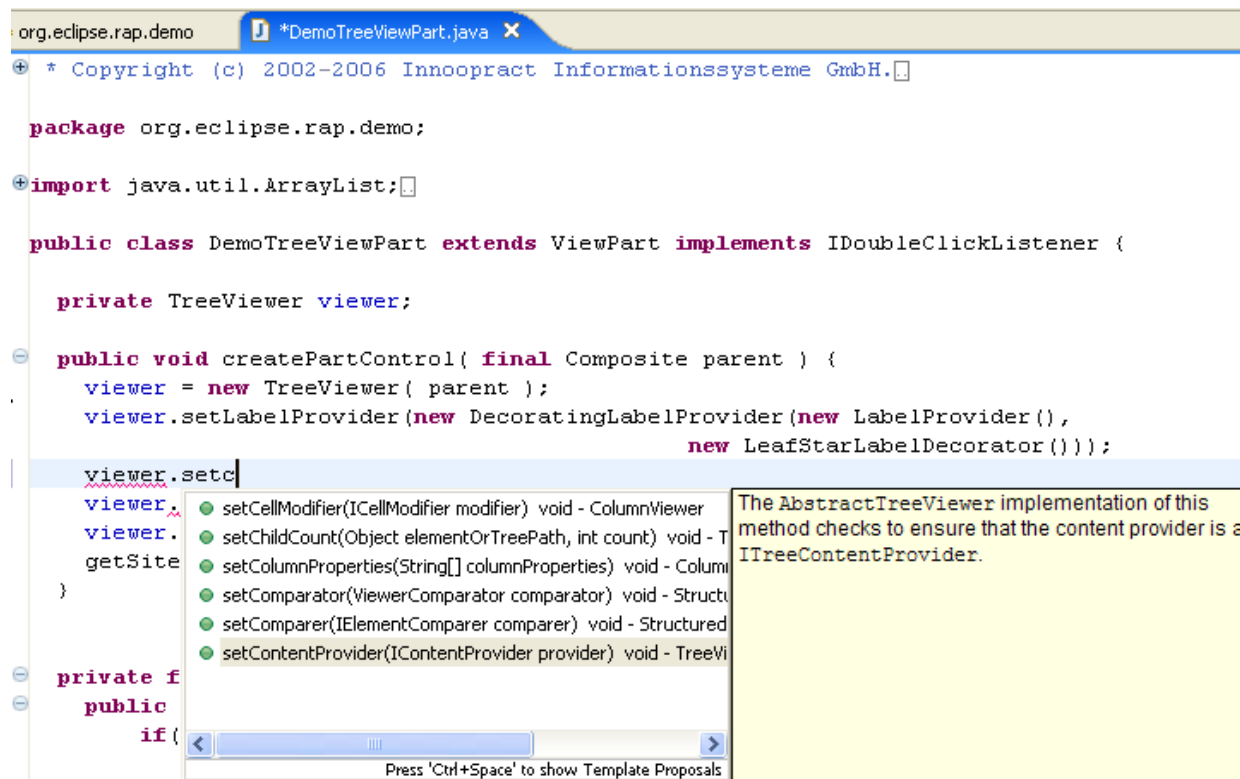
RAP - enabling plug-in reuse

- 70% - 90% reuse is possible
- RAP provides only a subset of RCP!
- needs separation of code that is not compatible
can be addressed with fragments
- application needs to become multi-user enabled

getting all the things we like about Eclipse

Developer's view on a RAP application (cont'd)

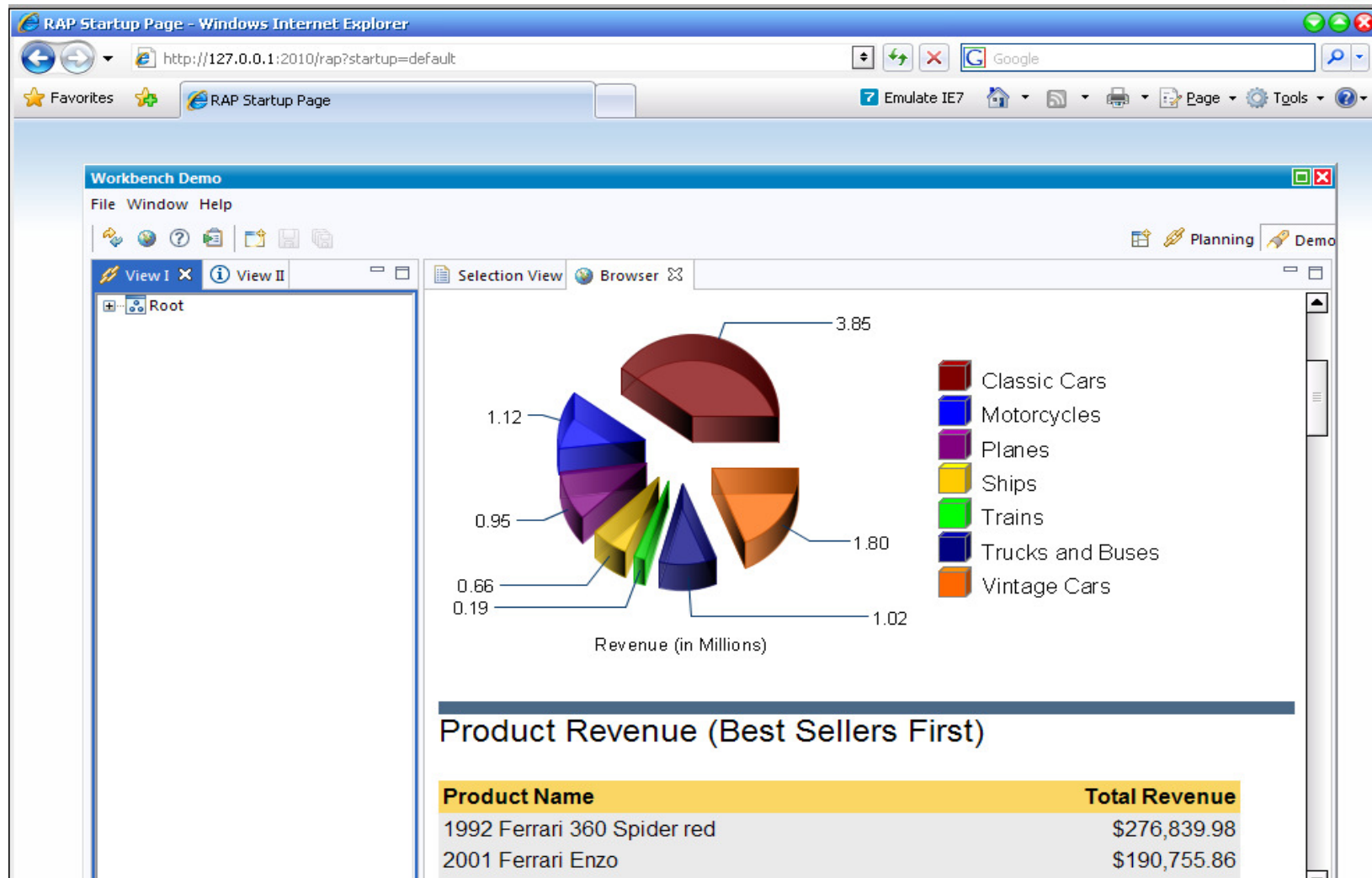
- JDT: content assist, refactoring, etc., PDE, Javadoc available
- developer does not get in touch with Javascript, CSS, HTTP ...



```
org.eclipse.rap.demo  *DemoTreeViewPart.java x
+ * Copyright (c) 2002-2006 Innoopract Informationssysteme GmbH.
package org.eclipse.rap.demo;
+import java.util.ArrayList;
public class DemoTreeViewPart extends ViewPart implements IDoubleClickListener {
    private TreeViewer viewer;
- public void createPartControl( final Composite parent ) {
    viewer = new TreeViewer( parent );
    viewer.setLabelProvider(new DecoratingLabelProvider(new LabelProvider(),
                                                    new LeafStarLabelDecorator()));
viewer.setC|
viewer.
viewer.
getSite
}
- private f
- public
    if(
Press 'Ctrl+Space' to show Template Proposals
```

The AbstractTreeViewer implementation of this method checks to ensure that the content provider is an ITreeContentProvider.

Nice idea – but I don't like RCP in a browser



O.K. - but it does not have to be this way



View I

- Root
 - Locate in browser view
 - EclipseCon location
 - Eclipse Foundation
 - Innooact Inc
 - Parent 2
 - Child X - filter me!

Browser

Revenue (in Millions)

Product Name	Total Revenue
1992 Ferrari 360 Spider red	\$276,839.98

Product Revenue (Best Sellers First)

Product Name	Total Revenue
1992 Ferrari 360 Spider red	\$276,839.98

Agenda – Demo



Name	First name	Company
		Focus Magazin
		Dr. Eckenstein Consult GmbH
Albrecht	Sofie	CAS Software AG
Alt	Marc	Marketing Corporation
Balducci	Graziella	Westautomatik GmbH
Baldur	Edwin-Ralf	
Baldur	Erwin-Ralf	
Bau	Tobias	Franke Unternehmensberatung
Bauer	Markus	CAS Software AG



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The Innoopract pitch



Integration & delivery

Yoxos provides a plugin library and tools that enable enterprises to manage and deliver eclipse technology

Technology

Open Source Project that extends the reach of Eclipse components to the web

Services

Helping corporations to implement Eclipse strategies, offering consulting, development, support and training
We offer

RAP consulting, developer support, production support

The Innoopract pitch (cont'd)



Innoopract @ Eclipse

- founding member of the Eclipse foundation
- lead of the Rich Ajax Platform, Eclipse Packaging Project and contributor to G-Eclipse and Phönix Project
- strategic member
 - Eclipse board of directors representative
 - annual dues of 25 000 USD
 - 8 full time developers

The Innoopract pitch (cont'd)



RAP business model

- developer and production support
- sponsored development
- training and consulting
- Yoxos is build upon RAP/RCP Technology



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Eclipse Development Process



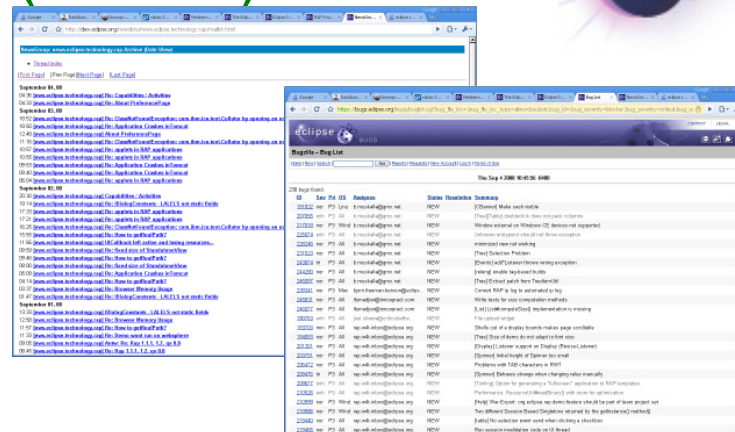
principles

- open source rules of engagement – open, transparent, meritocracy
- Eclipse ecosystem – Eclipse as a brand, Eclipse Foundation
- three communities – contributors and committers, users, adopters

Eclipse Development Process (cont'd)



principles II



- open source rules of engagement
 - core team internal discussions are not reproducible by the community
 - we try to improve the situation by tracing development with bugzilla entries
- Eclipse ecosystem
 - RAP is a sub project of the technology project
- three communities
 - currently 10 committers (two companies), some contributors
 - a vital user community which can be observed in the RAP newsgroup
 - with RAP the distinction of adopters and users is somewhat floating

Eclipse Development Process (cont'd)



structure and organization

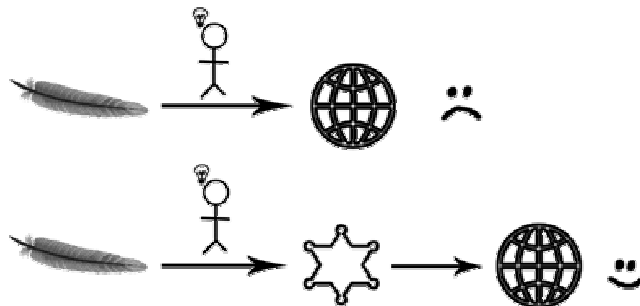
- hierachical project structure – top level and sub projects
- committers – each project has a set of selfmanaging committers
- code and releases – CVS, bugzilla, wiki
- IP records – IP clearance for contributions and third-party libraries
- community awareness – website, mailinglist, newsgroup
- leaders – PMC and sub project leaders
- committers and contributors – development team
- councils – requirement-, planning- and architecture council

Eclipse Development Process (cont'd)



structure and organization II

- committers and contributors – The RAP team has doubled the initial head count
- code and releases – CVS, bugzilla, wiki
- IP records – IP clearance necessary for each qooxdoo update



- community awareness – shift to common namespaces for RAP and RCP

Eclipse Development Process (cont'd)



roadmap process

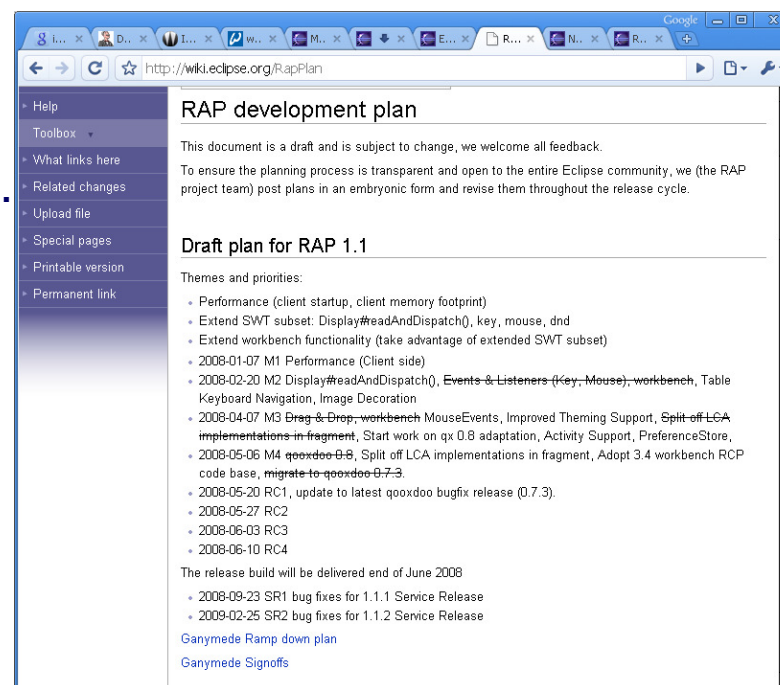
- themes and priorities from the Requirement Council
- project plans from the projects
 - enumerates the areas of change in the frameworks and tools for each proposed Release
 - identifies and accomodates cross-project dependencies
 - advances the Project in functionality, quality, and performance

Eclipse Development Process (cont'd)



roadmap process II

- next release plan for RAP still missing...
- document in project wiki
- easy to change, public available
- links to detail sections or bugentries
- incrementally revisions

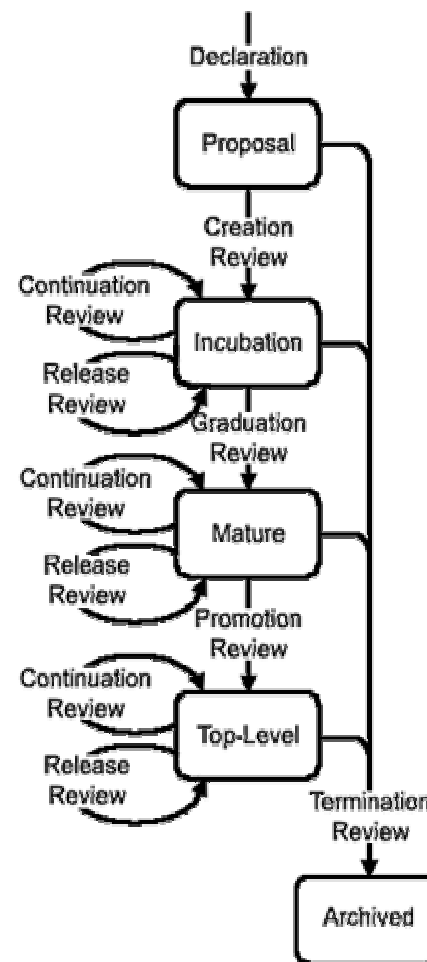


Eclipse Development Process (cont'd)



development process

- mentors
- project lifecycle
- reviews
- releases



Eclipse Development Process (cont'd)



development process II

- Releases are anything that is distributed outside of the Committers of a Project
- Exception 1: nightly and integration builds
- Exception 2: milestone and release candidate builds

Software is from Sirius, Builds are from Venus.

All	S	W	Job	Last Success	Last Failure	Last Duration
			Discovery Client	11 months (#215)	N/A	42 seconds
			Discovery Web	10 months (#382)	10 months (#371)	1 minute
			RAP Demo WAR	5 minutes (#40)	N/A	4 minutes
			RAP Integration	9 days (#36)	N/A	10 minutes
			RAP Milestone	16 hours (#87)	16 hours (#84)	9 minutes
			RAP Nightly	14 minutes (#695)	17 hours (#694)	9 minutes
			RAP Tooling	1 month (#62)	15 hours (#64)	1 minute
			Yexos Provisioning Extensions	18 hours (#570)	N/A	1 minute
			edm.rcp	2 months (#23)	3 months (#20)	3 minutes
			integrationtests.framework.build	27 days (#74)	1 month (#67)	2 minutes
			integrationtests.profiles.execute	1 month (#18)	27 days (#27)	2 minutes
			qxd	1 month (#49)	N/A	10 minutes
			sammy.rcp	3 months (#79)	3 months (#78)	1 minute
			xfi	26 days (#31)	1 month (#24)	1 minute
			vim.rcp	18 hours (#2018)	N/A	3 minutes
			vim.rcp	18 hours (#2266)	N/A	3 minutes

Eclipse Development Process (cont'd)



RAP house rules for development

- A bug entry for each task
- Test first
- One task at a time
- Favour pairing
- Design for the moment
- Keep CVS stable
- Sustainable pace



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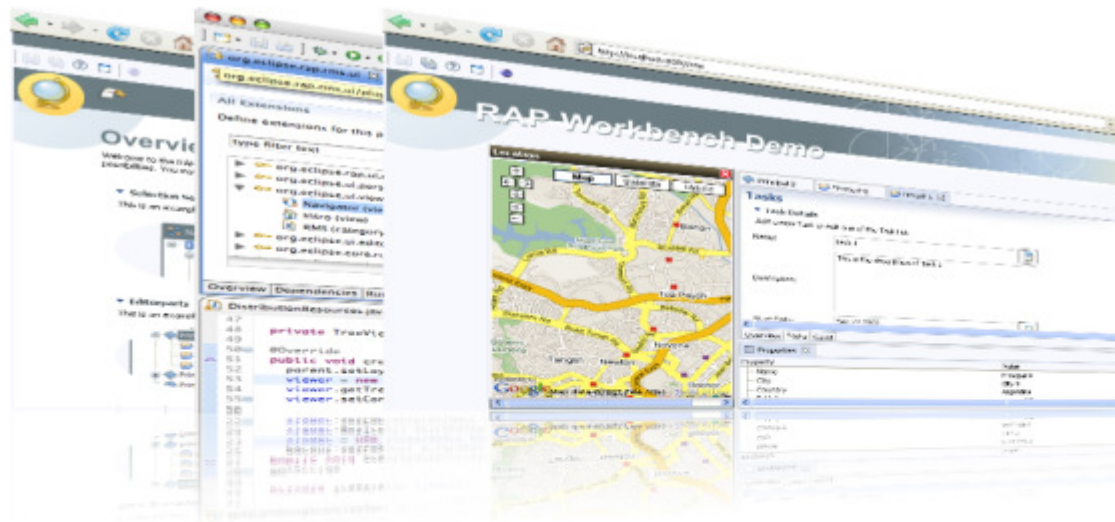
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Get the RAP - <http://eclipse.org/rap>



Demos

See some demos here

Downloads

Get the latest RAP release

The RAP project enables developers to build rich, Ajax-enabled Web applications by using the Eclipse development model, plug-ins with the well known Eclipse workbench extension points, JFace, and a widget toolkit with SWT API (using **qooxdoo** for the client-side presentation). The project has graduated from incubation and released its 1.0 release.

[Learn more ...](#)