



# AJAX Toolkit Framework (ATF)

Project Creation Review

March 8<sup>th</sup>, 2006

Craig Becker, IBM

# Introduction



- What is AJAX?
  - AJAX: Asynchronous JavaScript And XML
  - XHTML + CSS + JavaScript + DOM + XMLHttpRequest
  - Formalization of technologies that have been around for years

# Goals



An exemplary development environment for AJAX development.

Specifically:

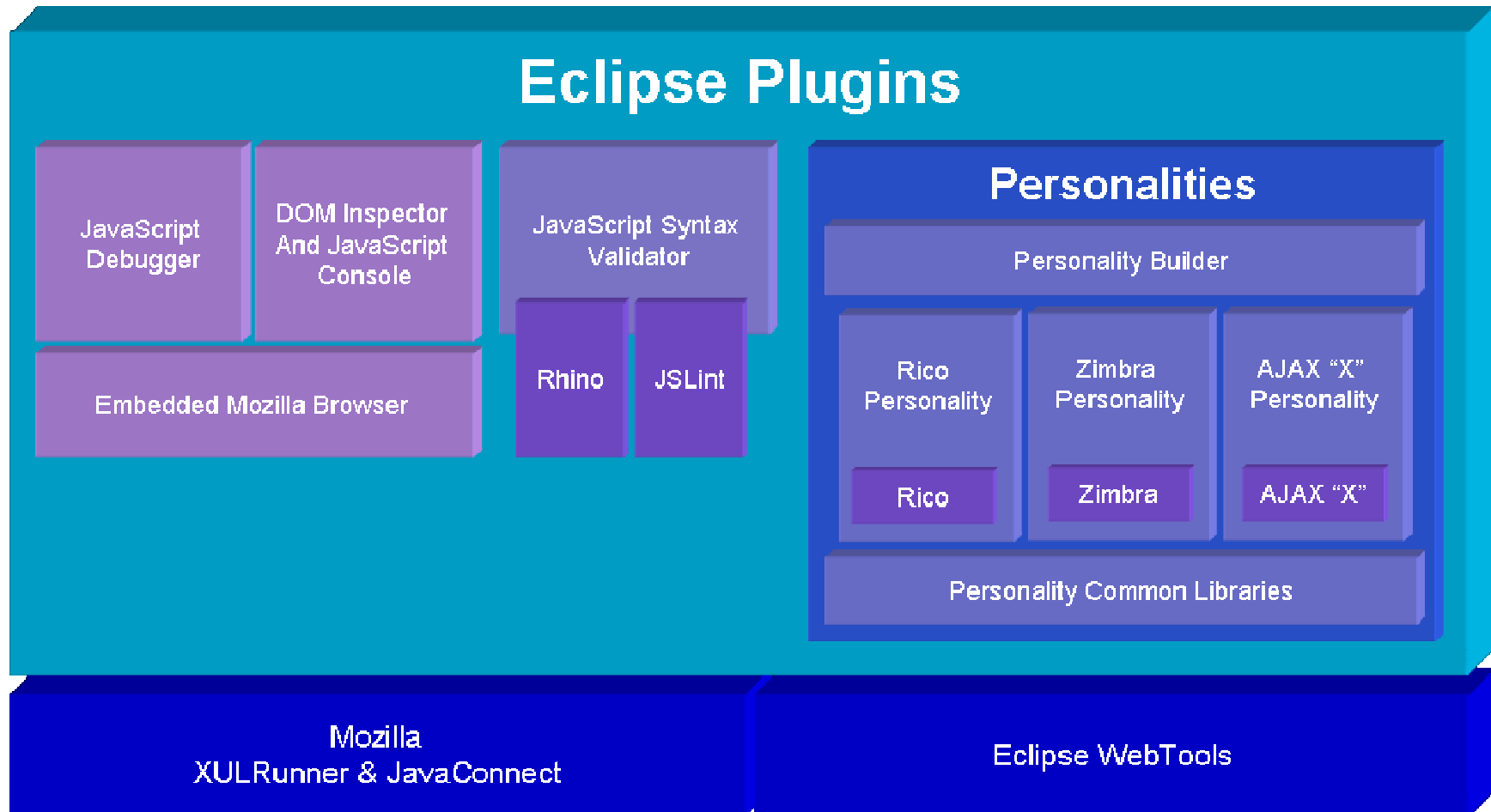
- An extensible platform that supports arbitrary AJAX runtimes, and
- An ever-expanding set of high-function tools for AJAX developers.



# Project Principles

- Inklusivity and permeability
  - Leverage Eclipse ecosystem
  - Welcome participants, ideas, and contributions.
  - Build committer community that spans companies and target products
- Architectural alignment with other Eclipse projects
  - Build on top of WTP infrastructure for deployment, editing, project model
  - Augment functionality to host (WTP) project
  - Deliver APIs to downstream projects coordinated with WTP
- Deliver both exemplary tools and a platform (framework)

# Architecture





# Functional Areas and Scope 1

## ***ATF Tools***

- Enhanced JavaScript Editing Features
  - Batch and as-you-type syntax validation
- JavaScript Debugger
  - Tight integration with Eclipse debug UI to provide flow control in browser runtime and the ability to examine JavaScript code and variables
- Embedded Browser
  - Access to browser's DOM, e.g., Mozilla XPCOM
- DOM Inspector / JavaScript Console
  - Mozilla tools integration for DHTML developers as Eclipse Views
- AJAX XMLHttpRequest Monitor
  - Monitors AJAX Request / Response headers and bodies

# Functional Areas and Scope (cont'd)



## ***ATF Personality Framework***

*A Personality is a collection of IDE features targeted to a certain AJAX Runtime Library.*

### ▪ **Browser Embedding Framework**

- A prototype API for embedding high-function web browsers within the ATF framework

### ▪ **Personality Builder Framework**

New Extensions - Extensions to newly defined Extension points:

- Wizard Models: for contributing new AJAX application wizards
- Snippet Models: for contributing new code snippets
- Nature Artifacts: to define the source of AJAX runtime artifacts
- Variable Factory: for contributing new variable types in wizardModel and snippetModel
- Variable Renderer Factory: for contributing new variable renderers
- Operation Factory: for contributing new wizard operations

### ▪ **Integrated Deployment**

- Using Eclipse APIs ATF will support J2EE / JSP and Apache / PHP - ATF will be 'server agnostic'

# Current Status



- IBM has functioning source code it is ready to contribute to seed the project:
  - Personality Builder
  - Personalities for
    - OpenRico
    - Zimbra
    - Dojo
  - JavaScript editing w/ edit-time syntax checking
  - Embedded Mozilla web browser
  - Embedded DOM browser
  - Embedded JavaScript debugger
  - AJAX XMLHttpRequest monitor
- Binary-only distribution of code is currently available on IBM alphasworks
- Eclipse.org will release ATF using all normal Eclipse conventions WRT EPL licensing, IP policies, and standard delivery mechanisms



# Schedule / Timeline



- January 19<sup>th</sup>, 2006: Project proposal posted
- March 8<sup>th</sup>, 2006: Creation review
- March 20-23<sup>rd</sup>: Demonstrations and community building at EclipseCon
- Fall 2006: Technology preview release
  - Pre-1.0 release
  - Provisional APIs only
  - Coordinated with WTP 1.5.1 release
- Subsequent releases TBD based on project resources and WTP schedule

# Initial Project Team



- IBM Emerging Technologies, Software Group:
  - Craig Becker (contact: [jpgicard@us.ibm.com](mailto:jpgicard@us.ibm.com))
  - Leugim Bustelo
  - Javier Pedemonte
  - Adam Peller
  - Donald Sedota
  
- Additional resources are being actively solicited

# Community Involvement and Feedback



- Much positive feedback and interest
- Interest and support has been indicated from the following companies:
  - BEA
  - C1 SetCon GmbH
  - Genuitec
  - Gobernalia Global Net S.A.
  - IBM
  - InterAKT Online
  - Laszlo
  - Nexaweb Technologies, Inc.
  - Novell
  - Oracle
  - RedHat
  - Salesforce
  - TIBCO General Interface
  - Vertex Logic
  - Yahoo
  - Zend
  - Zimbra
- Newsgroup: [eclipse.webtools.atf](mailto:eclipse.webtools.atf)



# Q&A