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# NetBeans

# Rich Client Platform

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# What is it ?

## NetBeans IDE

- **Java SE**
- **Web & Java EE**
- **Mobility**
- **UML**
- **SOA**
- **Ruby**
- **C / C++**
- **Glassfish / Tomcat**

## NetBeans RCP

- **Generic Application**
- **Common Services**
- **UI Consistency**
- **Solid Codebase**
- **Modular Architecture**

# Examples (1)

The screenshot displays the MC4J 1.2 beta 5 interface with several panels:

- MC4J Connections:** A tree view on the left showing connections to JBoss 3.2.3, JBoss 3.2.3 Jetty, JBoss 4.0 DR2, and MC4J Local JVM. The Local JVM is expanded to show memory usage pools and threading.
- Eden Space Memory Pool Graph:** A line graph titled "Eden Space Memory Pool Graph" showing memory usage for a JRE 1.5 Memory Pool. The Y-axis represents memory usage (0 to 2,000,000) and the X-axis represents time (18:03:30 to 18:04:20). The graph shows a fluctuating yellow line for "Used" memory, with a red line for "Committed" and a blue line for "Initial".
- Perm Gen Memory Pool Graph:** A line graph titled "Perm Gen Memory Pool Graph" showing memory usage for a JRE 1.5 Memory Pool. The Y-axis represents memory usage (0 to 70,000,000) and the X-axis represents time (18:03:30 to 18:04:20). The graph shows a relatively flat yellow line for "Used" memory, with a red line for "Committed" and a blue line for "Initial".
- Memory Usage Pools:** A pie chart titled "JVM Memory Pool Usage" showing the distribution of memory usage pools: Perm Gen (46%), Tenured Gen (24%), Eden Space (2%), Code Cache (6%), and Survivor Space 1 (24%).
- Threading:** A panel on the right showing live thread states and stacks. The list includes threads such as Reference Handler (Waiting), Finalizer (Waiting), JDWP Transport Listener, and various AWT and Swing threads.

At the bottom, the status bar indicates "Loading nodes: [MC4J Local JVM] 0 of 17".

# Examples (2)

The screenshot displays the V-Builder software interface for a VoiceXML application. The main workspace shows a flowchart with three steps: 'Welcome', 'The welcome prompt', and 'CleanUpAndExit'. The 'Design Properties' panel on the right is active, showing the 'Actions' table and the 'Action Steps' list.

Description	Condition	Action Steps	Destination
The welcome prompt	Edit by selecting, then typing in the field(s)	Prompt "Welcome"	Go to page CleanUpAndExit

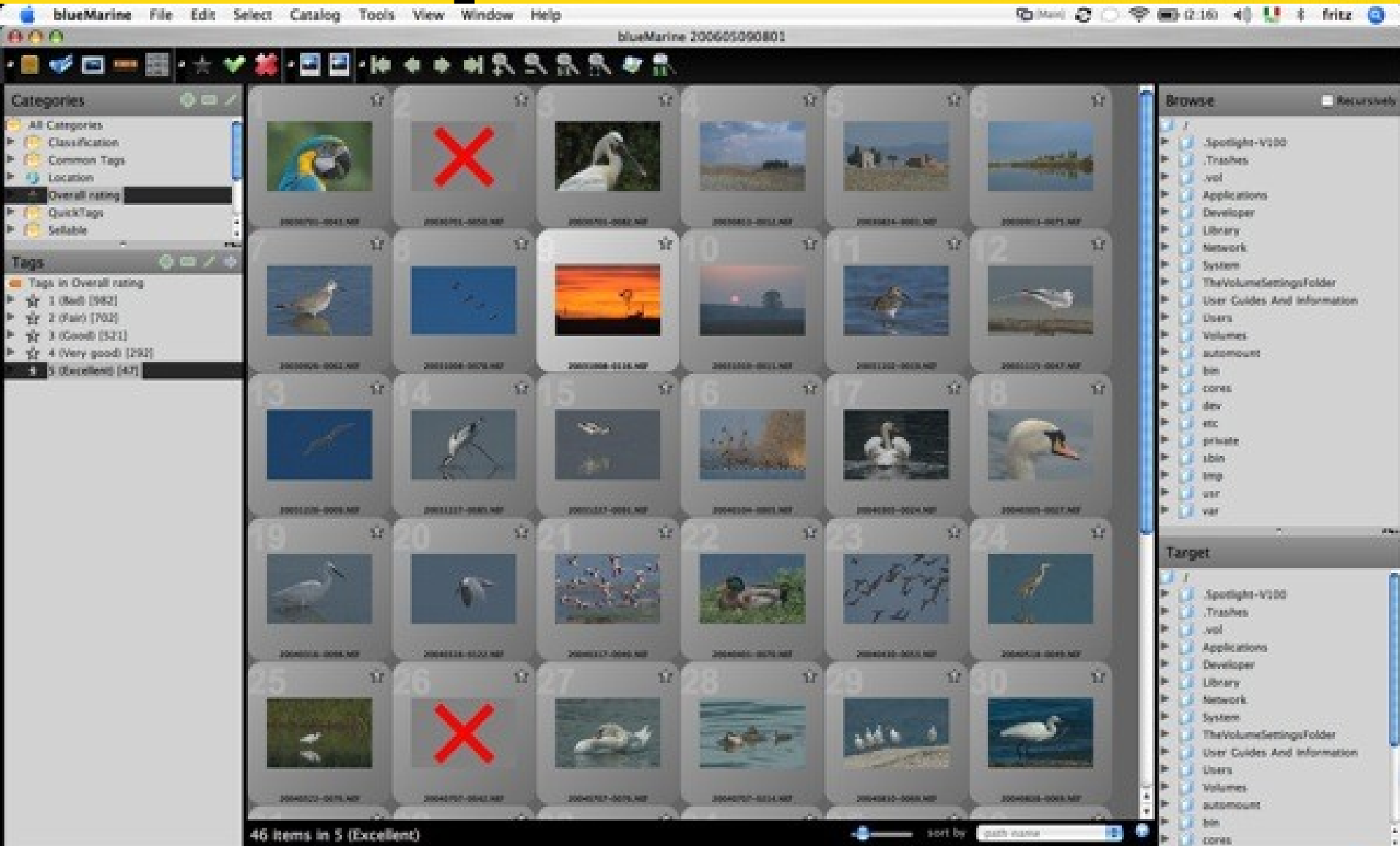
The 'Action Steps' list contains one step: 'Prompt "Welcome"'. The 'Action Step' configuration panel shows the following settings:

- Prompt Content:  Simple  Concatenated  Random
- Simple: File: Start\_Welcome, Transcript: Welcome, Instructions: (empty)
- Prompt Information: Barge-in:  Barge-in Type:  Speech  Hotword, Timeout: (empty), Language: (empty)

At the bottom, a waveform player shows a waveform with the following details: Length: 0.686 Position: 0.0, Transcript: Welcome, Instructions: (empty), TTS Generation: en-US.default.

Start\_Welcome.prompt saved.

# Examples (3.1)





# It's All About the \$\$\$

## Ups :

Reuse Swing Apps & Components

Reuse Swing Skills

Seamless Deployment & Updates

## Plugins

- Customize the IDE
- Common Libraries

## RCP Apps

- Generic Application
- Common Framework

**Downs:** Learning Curve

# Rubber Meets Road 1

**Demo 1 :**

**Creating an Empty RCP App**



# Basic Concepts

- **Definitions**
  - **Module**
  - **Suite**
  - **Cluster**
- **App Branding**
- **Platform Selection**
- **Selecting Modules / Clusters**
- **Window Management**

# Rubber Meets Road 2



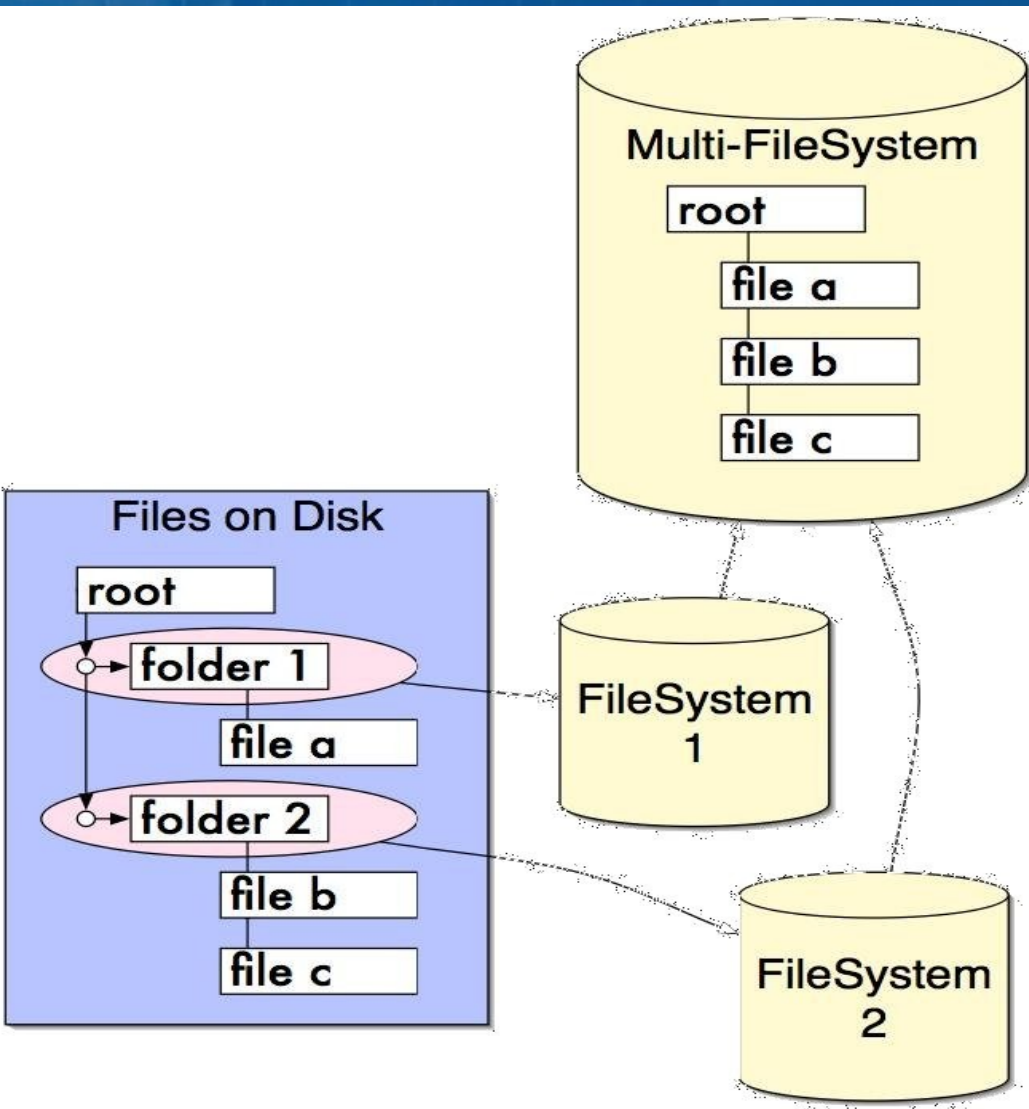
## Demo 2 : Creating a Simple Plugin: Google Toolbar Tutorial

<http://platform.netbeans.org/tutorials/60/nbm-google.html>

# Modular Architecture

- **Module Properties**
  - **Versioning**
  - **Public/Private API**
  - **Loading Type**
- **Module Types**
  - **UI**
  - **Library**
  - **Modular Library (api/spi)**

# XML Layers



## Modules Add:

- Configuration
- Data

## Platform:

- Merges New Modules XML
- Removes when modules uninstalled

# More Goodies

- **Service Registration & Discovery**
- **Lookup**
- **Filesystems**
- **Window System**
- **Nodes & Explorer Views**
- **Syntax highlighting & Code Completion**
- **Annotations**
- **Options**
- **Helpsets**      Geertjan Wielenga
- **Update centers**
- **Modeling**

# Resources

- **NetBeans Platform Home**  
<http://platform.netbeans.org/>
- **NetBeans RCP Tutorials**  
<http://platform.netbeans.org/tutorials/index.html>
- **Javadocs**  
<http://www.netbeans.org/download/dev/javadoc/>
- **Developer Documentation**  
<http://wiki.java.net/bin/view/Netbeans/DeveloperDocumentation>
- **Blogs:**
  - **My Blog:** <http://akochnev.blogspot.com>
  - **Geertjan:** <http://blogs.sun.com/~geertjan>
  - **Planet NetBeans:** <http://www.planetnetbeans.org>
- **Books:**
  - **"Rich Client Programming: Plugging into the NetBeans Platform"**

# Questions

- **Ask Now**

- **Ask Later**

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