



MAX

Essential Eclipse Plug-ins and Tools for Flash Builder Developers

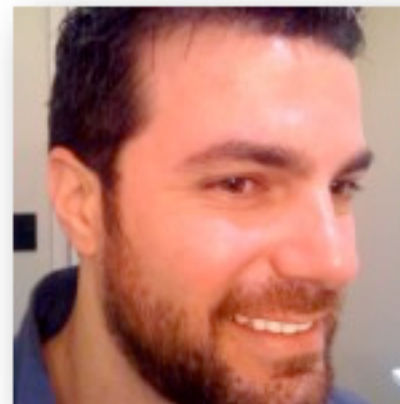
Elad Elrom



Who Am I?



- Senior Flash Engineer & Lead
 - Independent Consultant
 - Authored four books on Flash technology
 - FlashAndTheCity Organizer
 - Adobe Community Professional (ACP)
-
- Where can you find me?
 - blog: elromdesign.com/blog
 - twitter: @EladElrom
 - email: elad.ny@gmail.com



-Elad Elrom





EXPLORE
DISCOVER
CONNECT

JUNE 9-12, 2011
NEW YORK, NY

FLASHANDTHECITY.COM

Session agenda



- How to install Eclipse plugins
- Hidden features in Eclipse
- Planning Plugins
- Code Enhancement Plugins
- Improve Productivity Plugins
- Version Control Plugins
- Continuous Integration Plugins
- Summary
- Questions and Answers



How to install Eclipse plugins



- Understand Eclipse IDE infrastructure
- Find your Eclipse version
- Install using remote site
- Manually install plugin
- Uninstalling a plugin



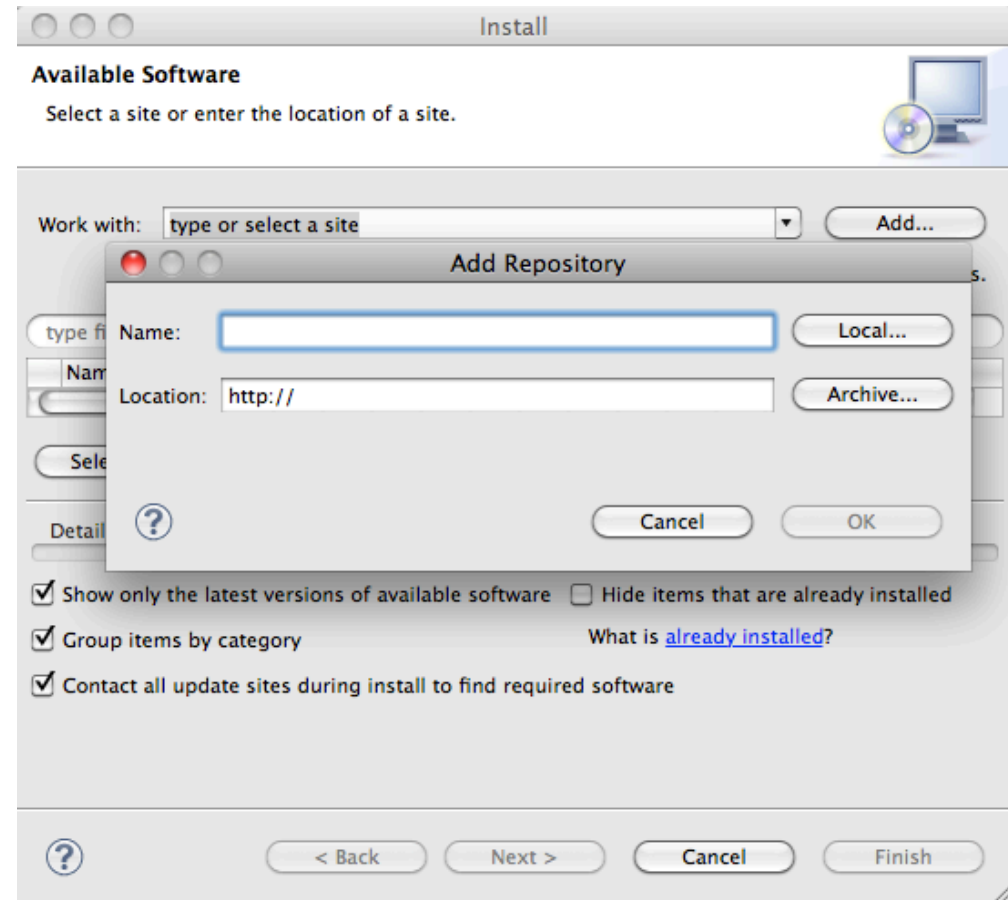
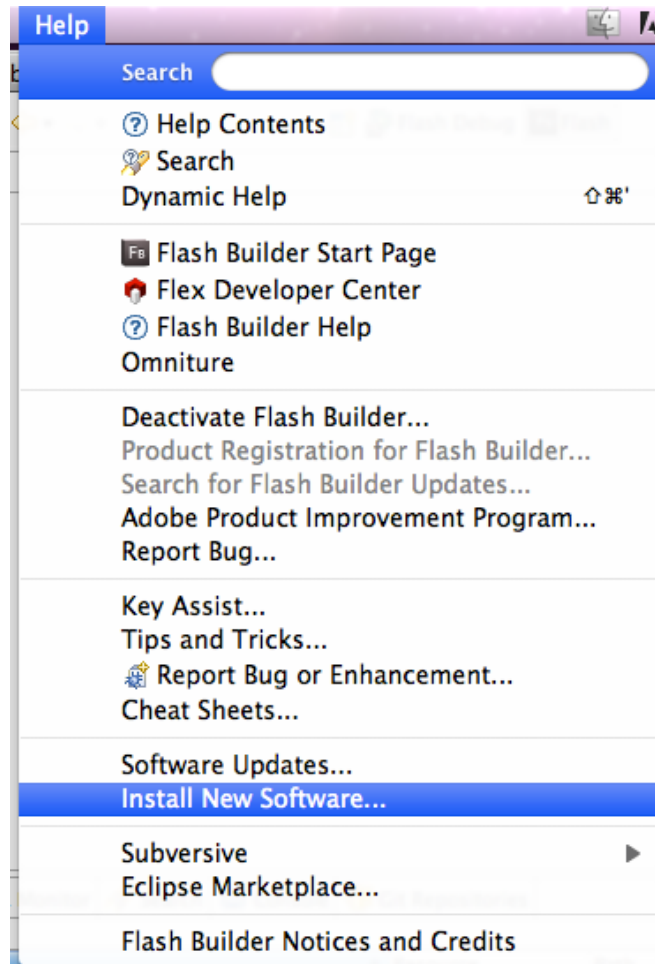
Eclipse IDE infrastructure



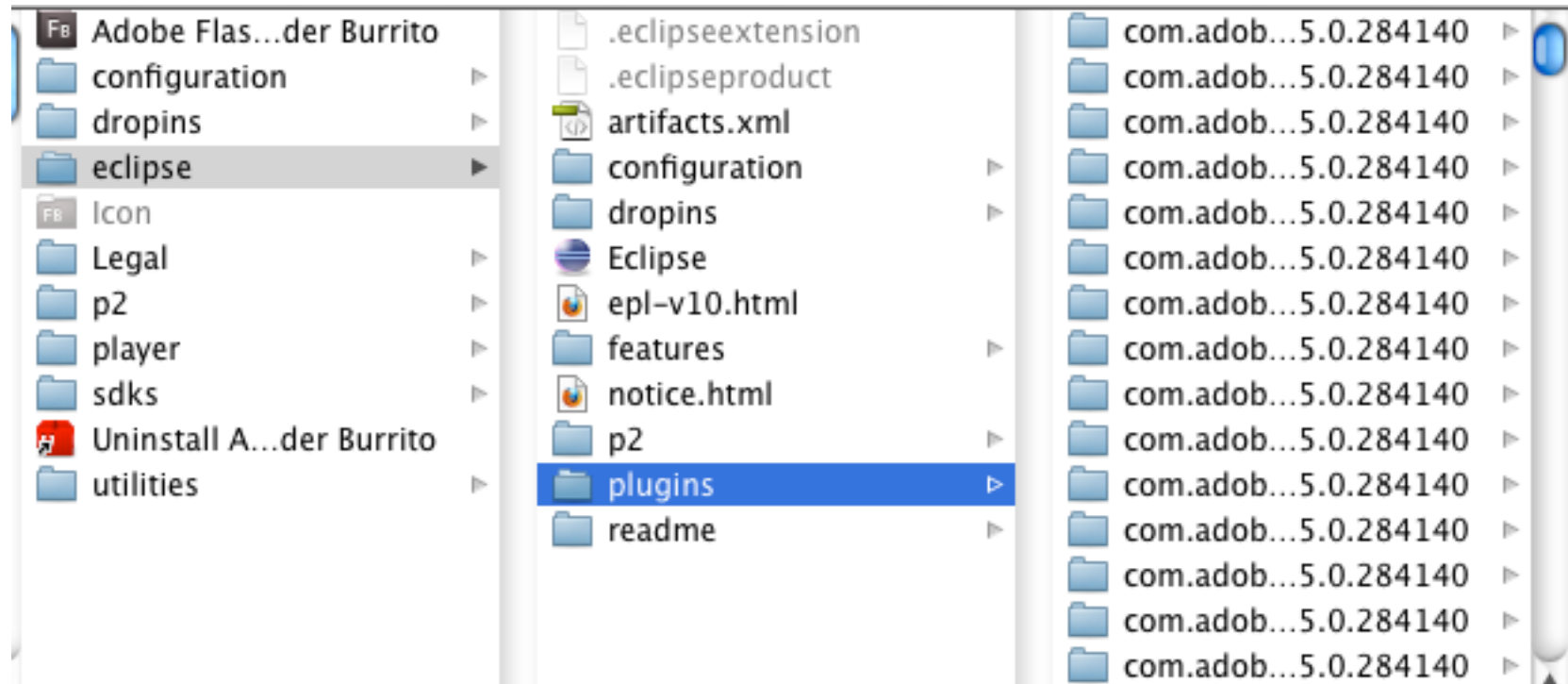
Eclipse is a a plug-in loader kernel it's surrounded by hundreds of plug-ins.



Install using remote site



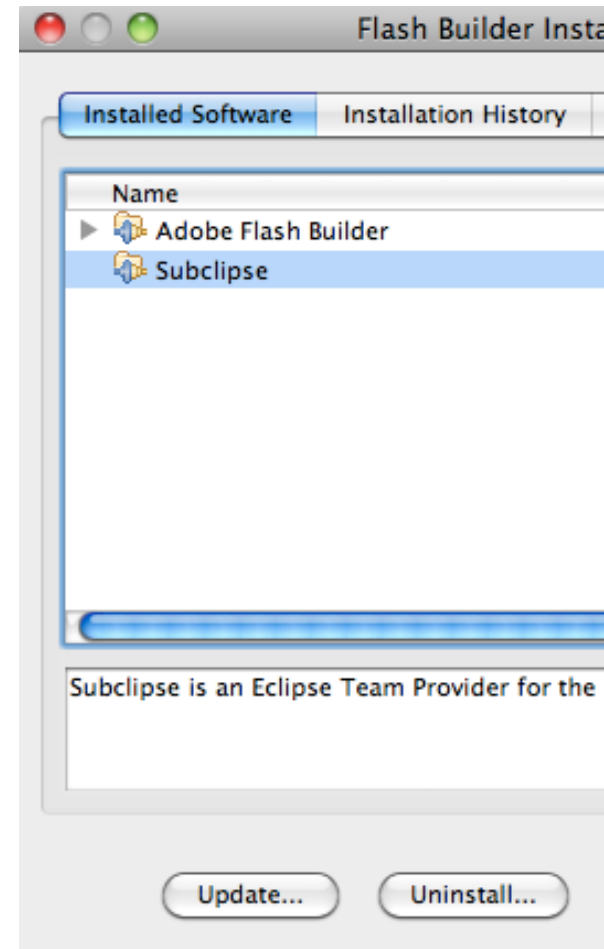
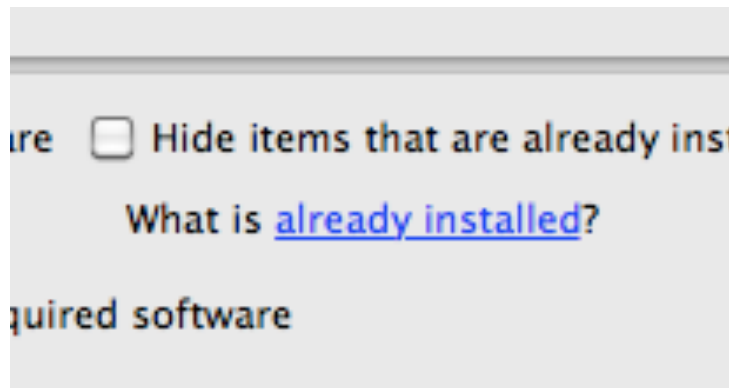
Manually Install Plugins



Uninstalling a Plugin / feature



The same Update Manager you used to install plugin can be used to disable plug-ins by disabling the tool feature.

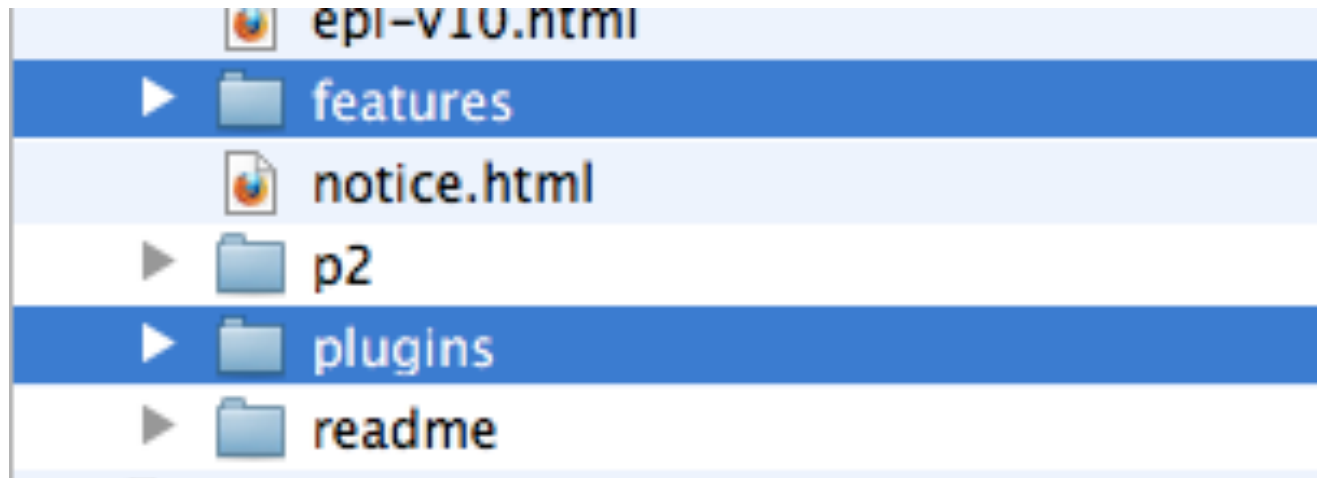


Uninstalling a Plugins



To physically remove a feature and its plug-ins, you will have to manually remove the feature from the Eclipse's directory:

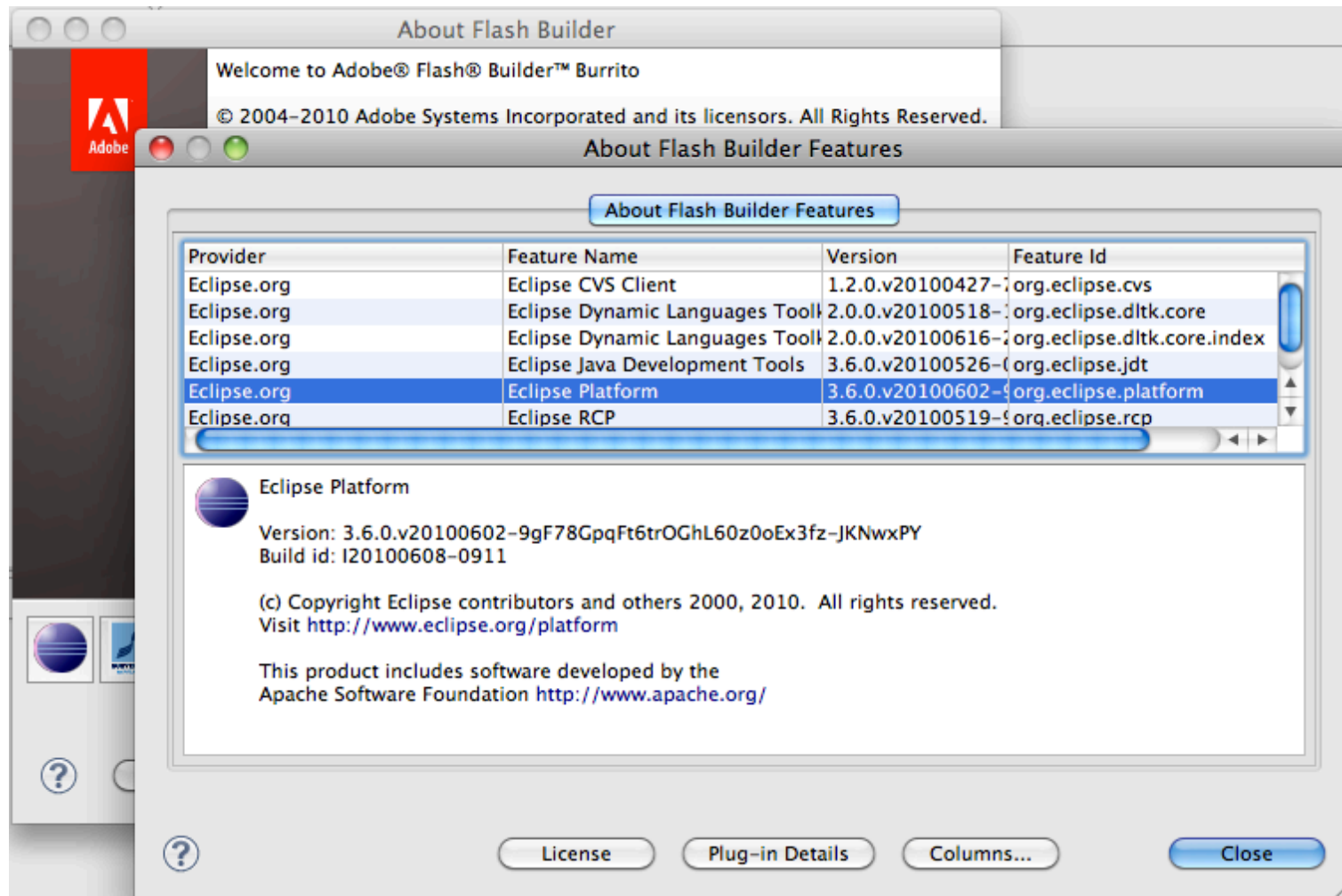
- Remove the feature from eclipse/features directory
- Remove plug-ins from the eclipse/plugins directory.



Find your Eclipse version



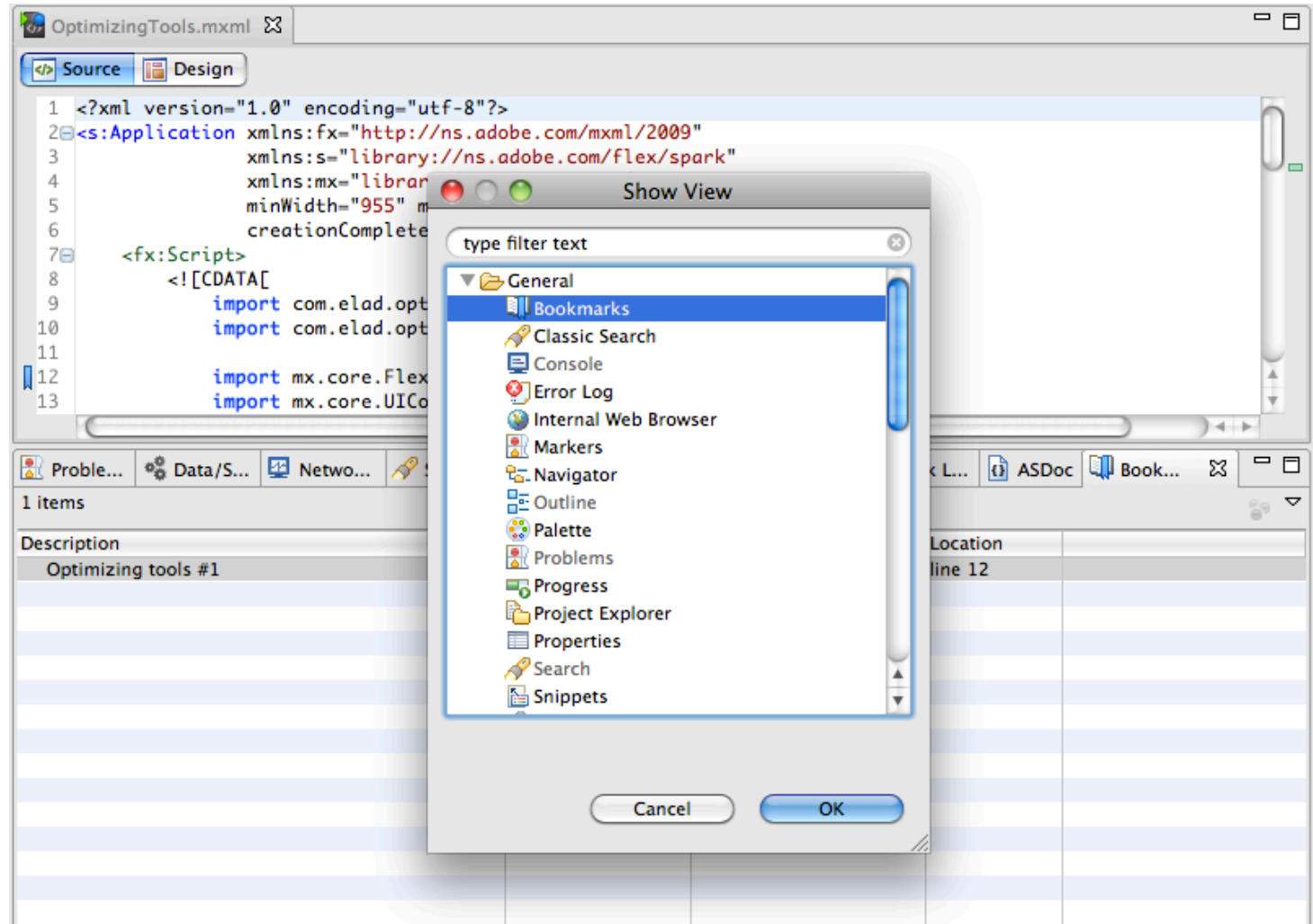
Eclipse installation details view



Hidden features in Eclipse



Bookmarks



Hidden features in Eclipse



Local History

The screenshot shows the Eclipse IDE interface. On the left, the 'Team' menu is open, displaying options: 'Format .mxml/.as', 'Set as Default Application', 'Team' (highlighted), 'Compare With', 'Replace With', 'WikiText', 'Convert' (with a bug icon), 'Open File under Cursor' (with a magnifying glass icon), and 'Open Type under Cursor' (with a folder icon). A submenu is visible for the 'Team' menu, containing 'Apply Patch...', 'Show Local History', and 'Share Project...'. On the right, the 'History' view is open, showing the file 'DesignersEdgeOnline.mxml' with a list of revisions and their timestamps:

Revision	Time
1	10/11/10 12:01 PM
2	10/11/10 11:38 AM
3	10/11/10 11:37 AM
4	10/11/10 11:23 AM
5	10/11/10 10:13 AM
6	10/11/10 9:44 AM

Hidden features in Eclipse



Flash Builder “Burrito” templates feature

```
38 </s:states name="landscape" />
39 </s:states>
40
41 R|
42
43 <!--
44
45 </s:V
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
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97
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99
100
101
102
103
104
105
106
```

Rect - Creates a Rectangle

```
<s:Rect height="100" width="200" >
  <s:stroke>
    <s:SolidColorStroke
      color="0x000000" weight="1"/>
    </s:stroke>
  </s:Rect>
```

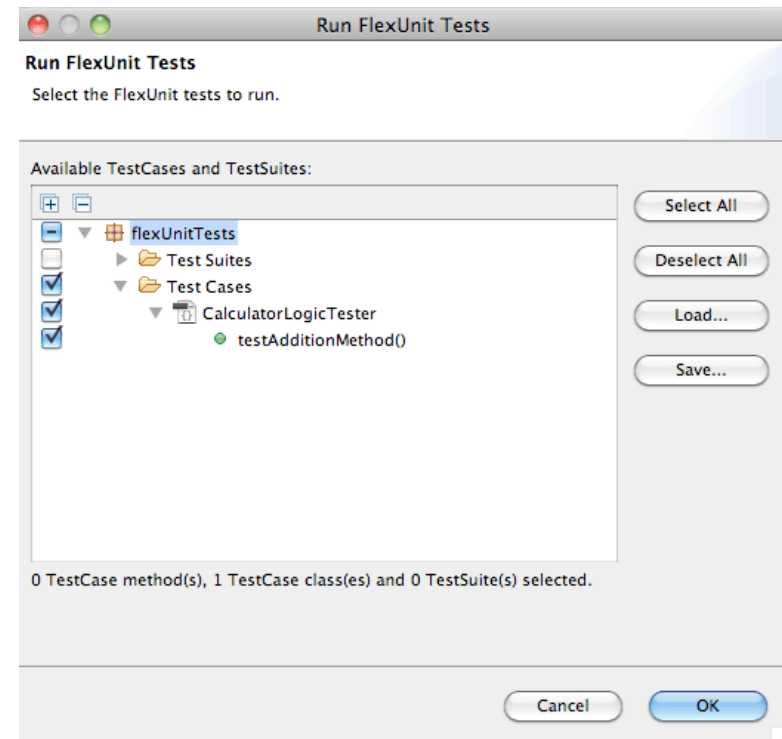
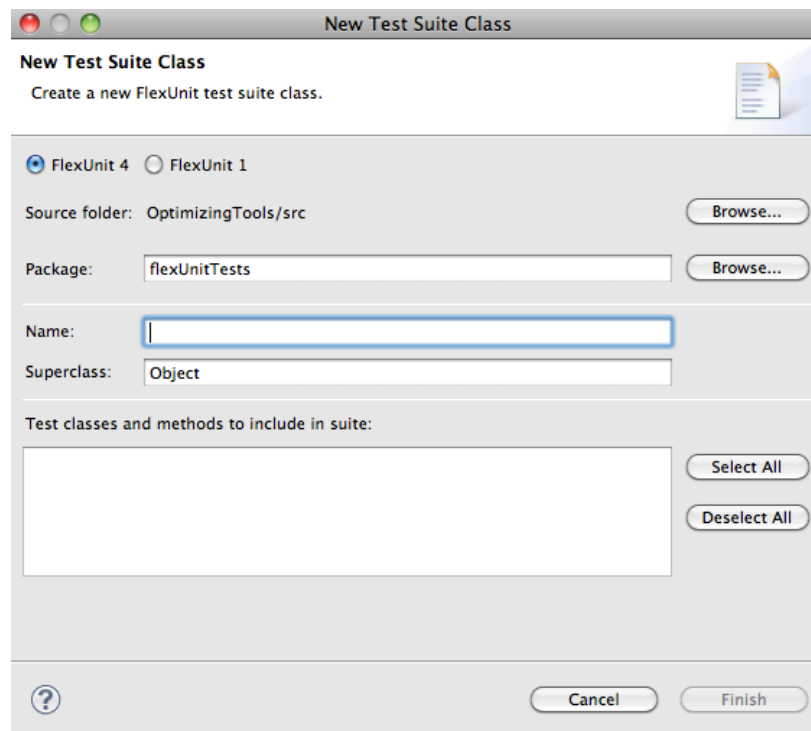
Press 'Tab' or click for focus

```
99
100 <s:Rect height="100" width="200" >
101   <s:stroke>
102     <s:SolidColorStroke color="0x000000" weight="1"/>
103   </s:stroke>
104 </s:Rect>
105
106 <s:Image id="image" x="0" y="0" />
```

Planning - FlexUnit



- FlexUnit is a unit testing framework for Flex and ActionScript 3.0 applications and libraries similar to Junit
 - Home - <http://opensource.adobe.com/wiki/display/flexunit/FlexUnit>
 - Download - <http://opensource.adobe.com/wiki/display/flexunit/Downloads>





- Highlights
 - Easy to create test suite and test cases classes
 - Create test runner & integrate runners from other frameworks
 - Better usage with continuous integration due to automation integration
 - Better handling of Asynchronous tests
 - Better handling of exceptions
 - Framework is Metadata driven
 - Allows User interface testing
 - Ability to create test sequences

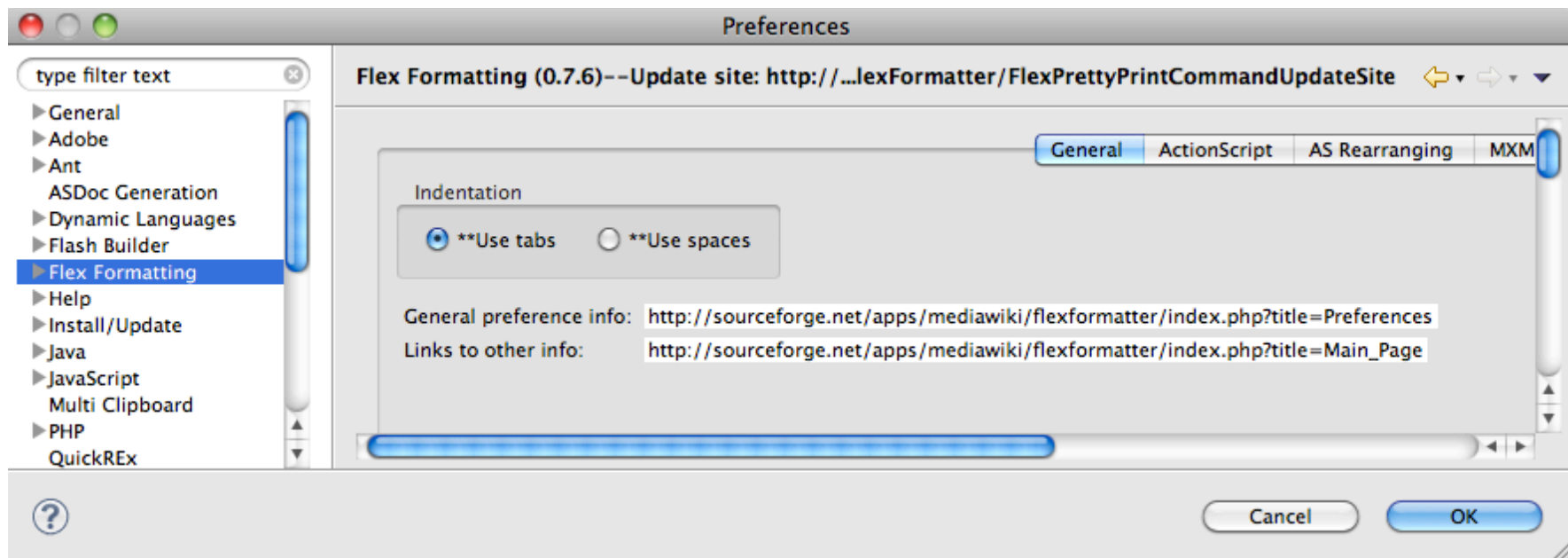
To learn more about FlexUnit visit my Devnet article:

http://www.adobe.com/devnet/flex/articles/flashbuilder4_tdd.html

Code Enhancement - FlexFormatter



- Eclipse plugin that provides mxml/actionscript source code formatting
 - Home - <http://flexformatter.sourceforge.net/>
 - Update site - <http://flexformatter.googlecode.com/svn/trunk/FlexFormatter/FlexPrettyPrintCommandUpdateSite/>



Code Enhancement - FlexFormatter



- Highlights
 - Auto-format ActionScript and MXML files, based on the templates you define.
 - Correct spaces, braces, newlines, and a lot more based on your predefined settings.

```
TestAPI.as
1 package
2 {
3     import flash.external.ExternalInterface;
4
5     public class TestAPI extends ExternalInterface
6     {
7         public function TestAPI()
8         {
9             super();
10        }
11    }
12
13    public function someMethod():void
14    {
15    }
16
17 }
```

```
*TestAPI.as
1 package
2 {
3     import flash.external.ExternalInterface;
4
5     public class TestAPI extends ExternalInterface
6     {
7         public function TestAPI()
8         {
9             super();
10        }
11    }
12
13    /**
14     *
15     */
16    public function someMethod():void
17    {
18    }
19
20 }
```

Code Enhancement - SourceMate



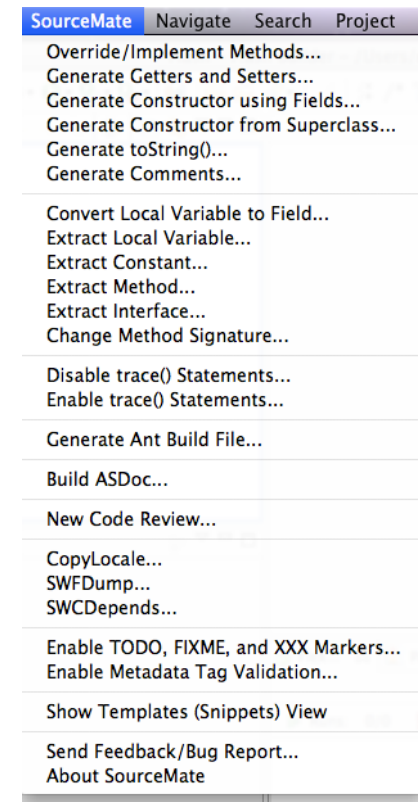
- Eclipse plugin that provides list of features such as code generation, refactoring, code templates, metadata tag support, and more.

- Home - <http://www.elementriver.com/sourcemate/>

- Update site -

<http://updates.elementriver.com/sourcemate/v1>

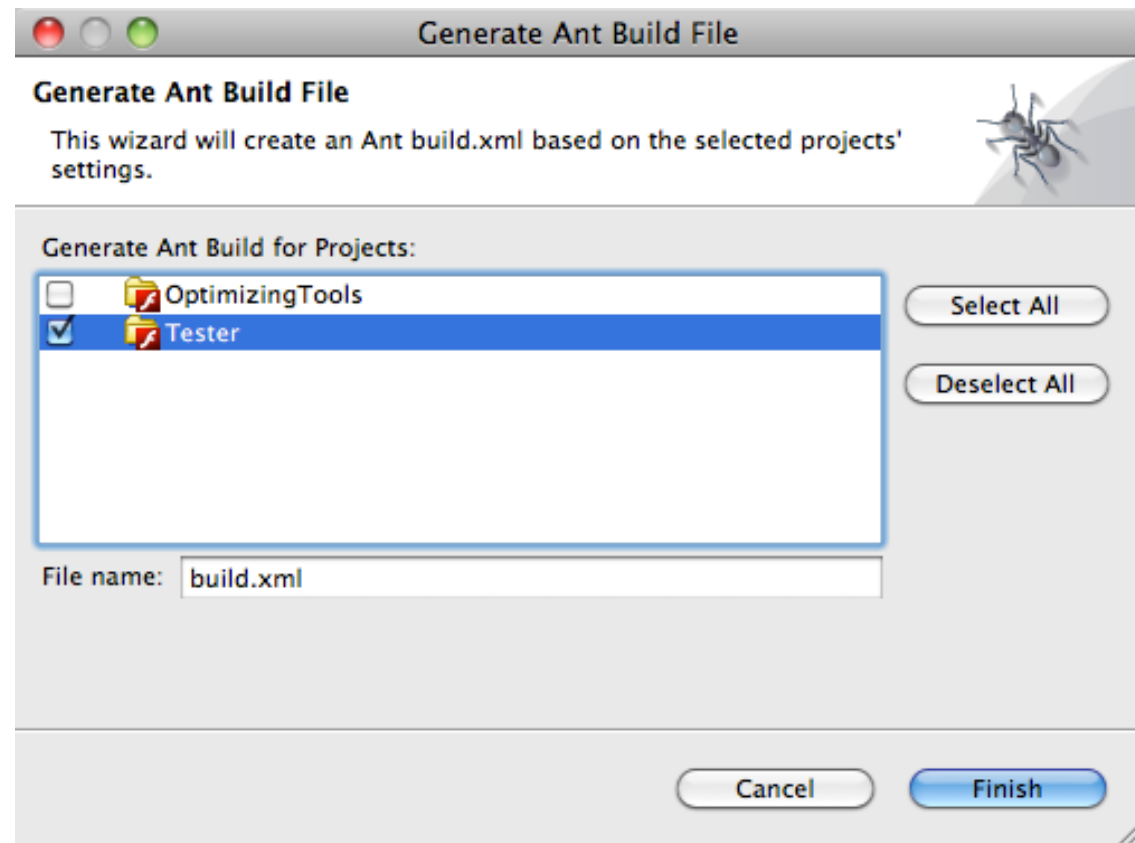
V2 Beta: <http://beta.elementriver.com/sourcemate/v2>



Code Enhancement - SourceMate



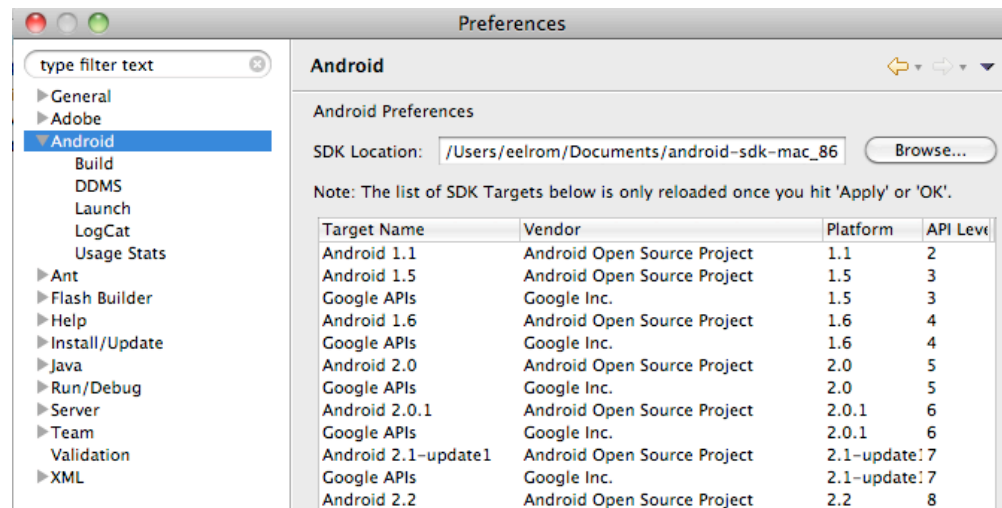
- Highlights
 - Code Generation
 - Code Templates
 - Miscellaneous
 - Refactoring
 - Metadata Features



Code Enhancement - Android ADT



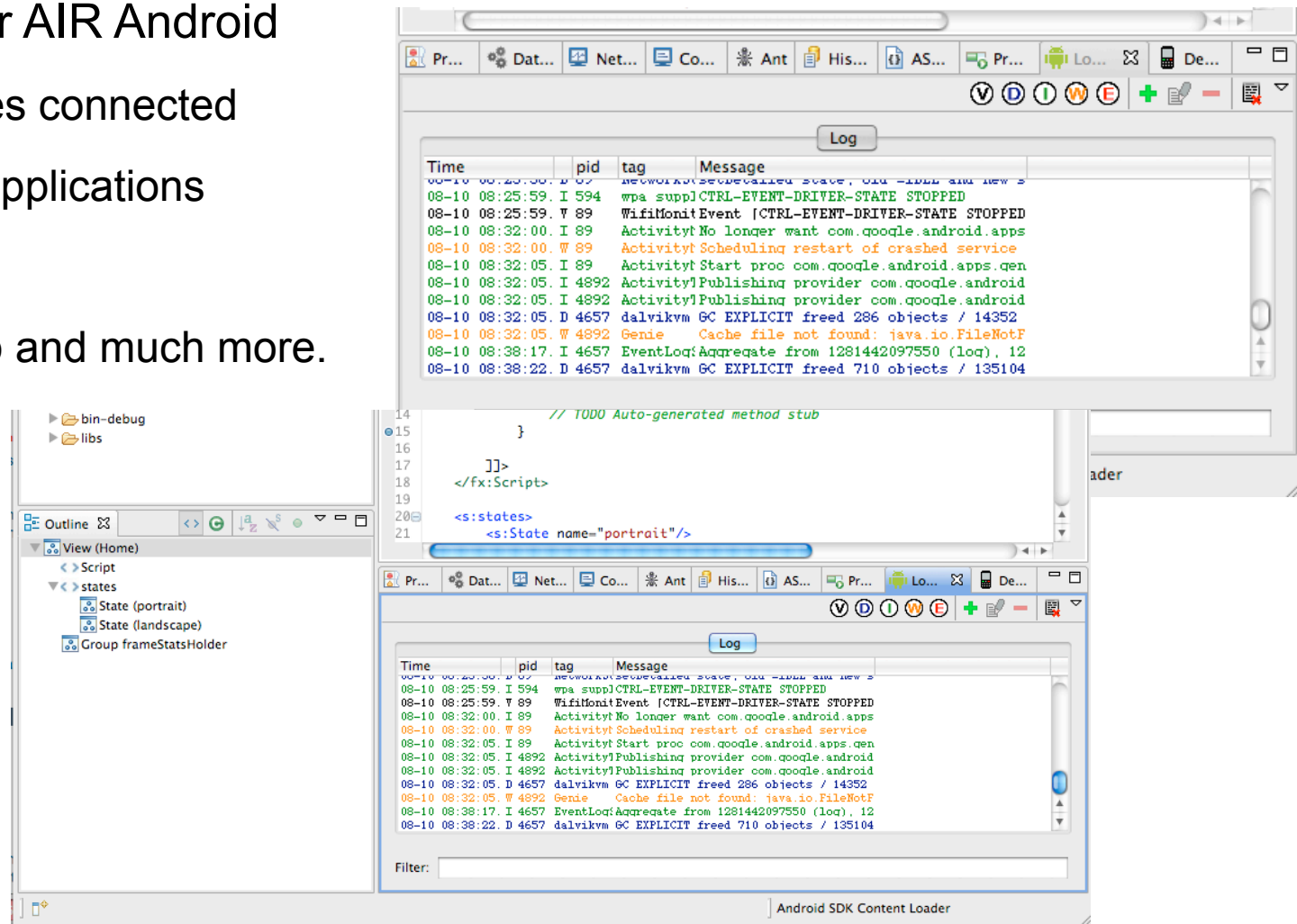
- Android Development Tools (ADT) is a plugin designed to give you a powerful, integrated environment to build Android applications.
- Home - <http://developer.android.com/sdk/eclipse-adt.html>
- Update site -
Galileo - <http://download.eclipse.org/releases/galileo/> (WST)
ADT - <https://dl-ssl.google.com/android/eclipse/>



Code Enhancement - Android ADT



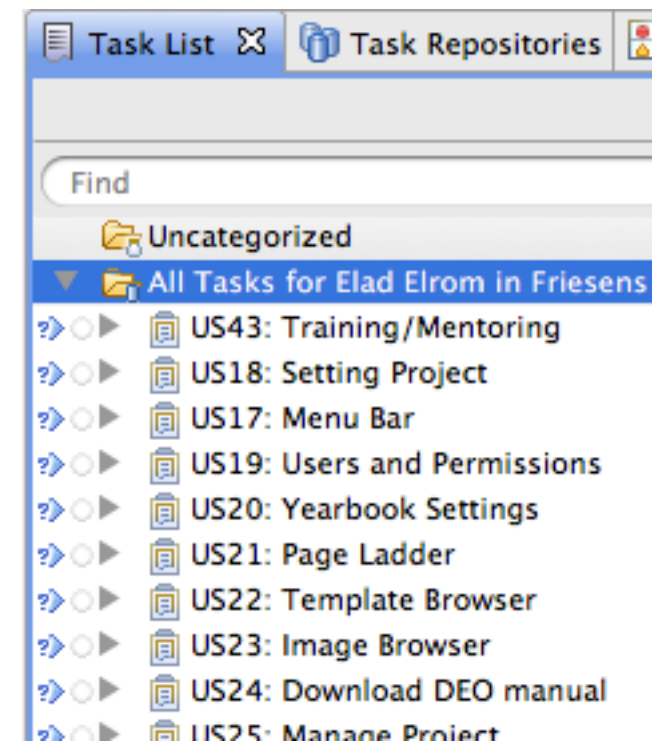
- Highlights for AIR Android
 - View devices connected
 - Terminate applications
 - Filter logs
 - screen grab and much more.



Code Enhancement - Mylyn



- Mylyn is task and application lifecycle management (ALM) framework for Eclipse. Also check tasktop <http://tasktop.com/support/download/>
 - Home - <http://www.eclipse.org/mylyn/>
 - Update site – <http://download.eclipse.org/tools/mylyn/update/incubator>
- Highlights
 - Task management tool
 - Ecosystem of Agile and ALM integrations
 - Collaboration tool
 - Local tasks
 - Integrate with task repository such as JIRA



Code Enhancement - FlexPMD



- FlexPMD is a tool that helps to improve code quality by auditing AS3/Flex code.
 - Home - <http://opensource.adobe.com/wiki/display/flexpmd/FlexPMD>
 - Download URL - <http://opensource.adobe.com/wiki/display/flexpmd/Downloads>
 - Docs:
<http://opensource.adobe.com/wiki/display/flexpmd/Developer+documentation>
 - FlexPMD Ruleset Creator - <http://opensource.adobe.com/svn/opensource/flexpmd/bin/flex-pmd-ruleset-creator.html>

Code Enhancement - FlexPMD



- Highlights
 - Unused code (functions, variables, constants, etc.)
 - Inefficient code (misuse of dynamic filters, heavy constructors, etc.)
 - Over-complex code (nested loops, too many conditionals, etc.)
 - Over-long code (classes, methods, etc.)
 - Incorrect use of the Flex component lifecycle (commitProperties, etc.)
 - Work in command line
 - Integrate with Hudson

Code Enhancement – AS Code Coverage Plug-in



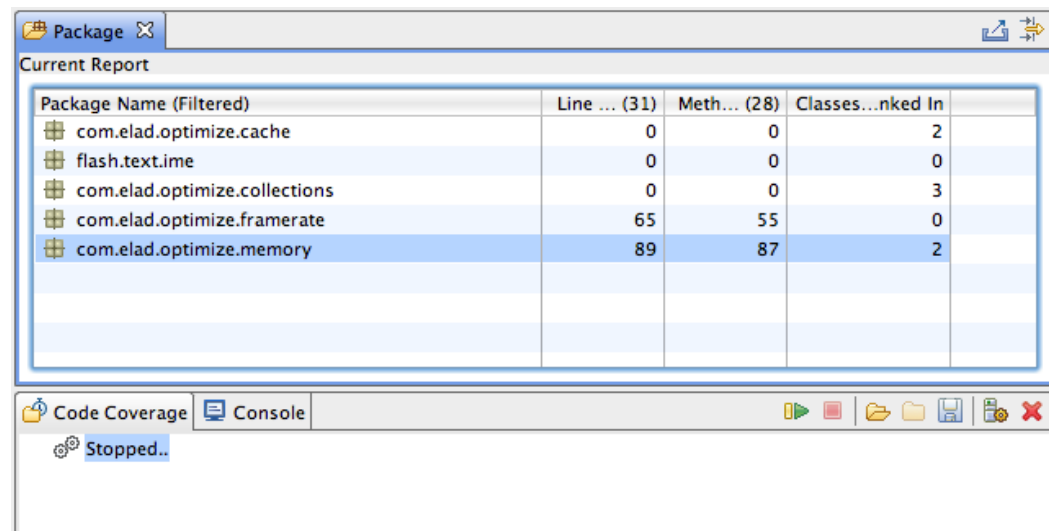
- The tool provides detailed line coverage and method coverage reporting, as well as highlighting classes that are not linked into the application.
- Home - http://labs.adobe.com/technologies/ascode_coverage
- Download URL - http://labs.adobe.com/downloads/ascode_coverage.html



Code Enhancement – AS Code Coverage Plug-in



- Highlights
 - Start/stop the code coverage tool
 - View generated reports
 - Examine source code
 - Save/load reports
 - Highlighting classes that are not linked into the application



Package

Current Report

Package Name (Filtered)	Line ... (31)	Meth... (28)	Classes...nked In
com.elad.optimize.cache	0	0	2
flash.text.ime	0	0	0
com.elad.optimize.collections	0	0	3
com.elad.optimize.framerate	65	55	0
com.elad.optimize.memory	89	87	2

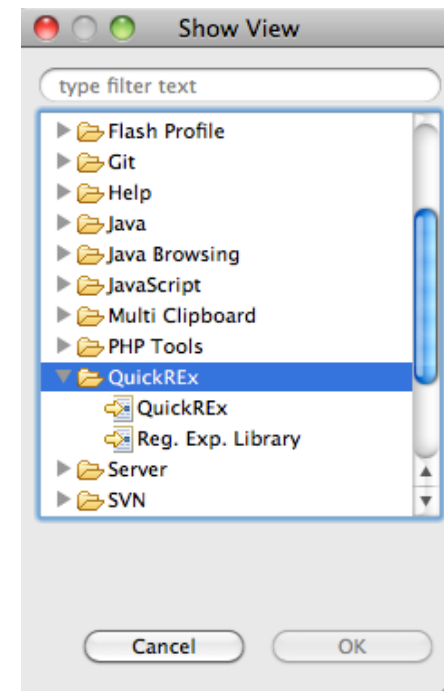
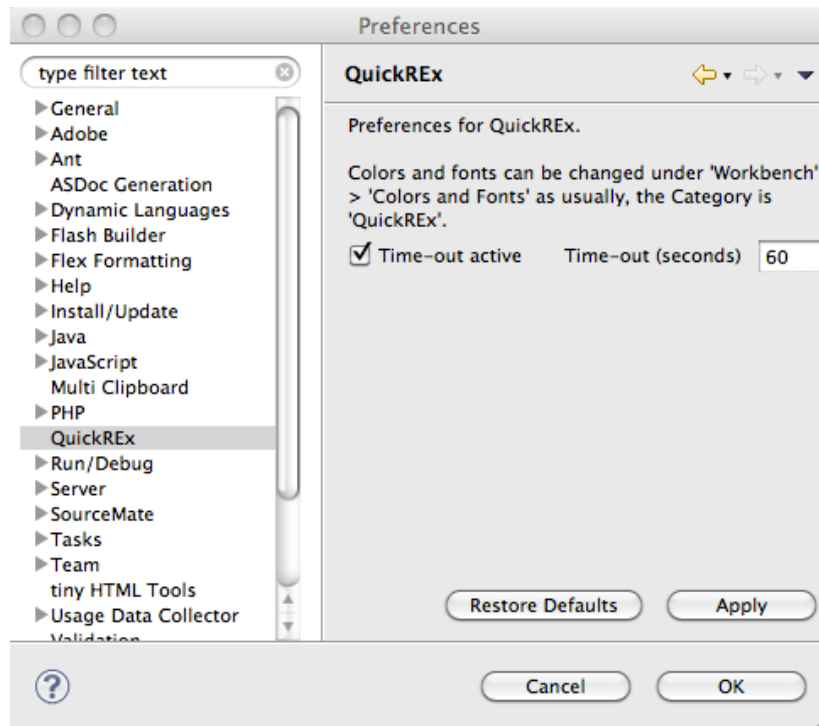
Code Coverage Console

Stopped..

Code Enhancement - QuickRex



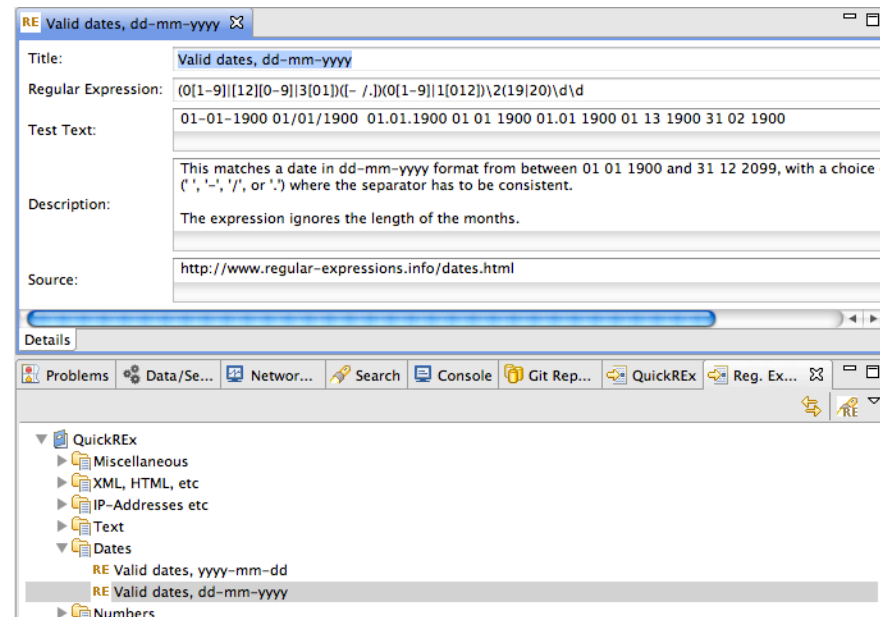
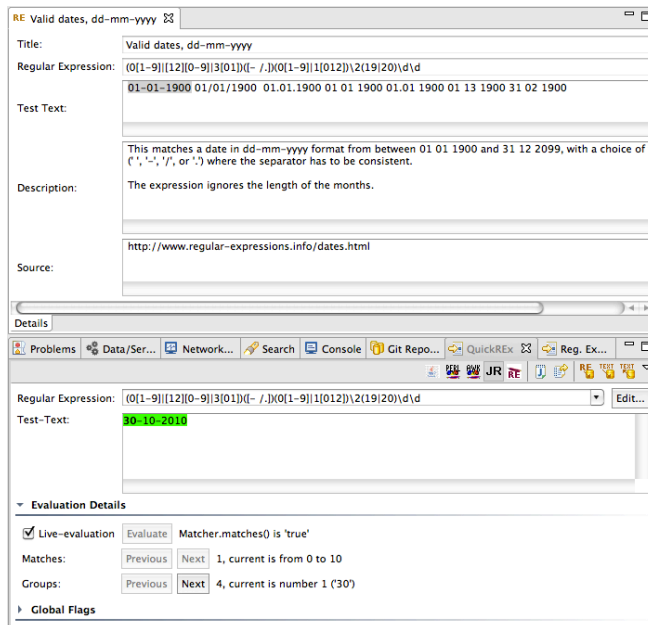
- QuickREx is a regular-expression test plugin.
- Home - <http://www.bastian-bergerhoff.com/eclipse/features/web/QuickREx/toc.html>
- Update site - <http://www.bastian-bergerhoff.com/eclipse/features>



Code Enhancement - QuickRex



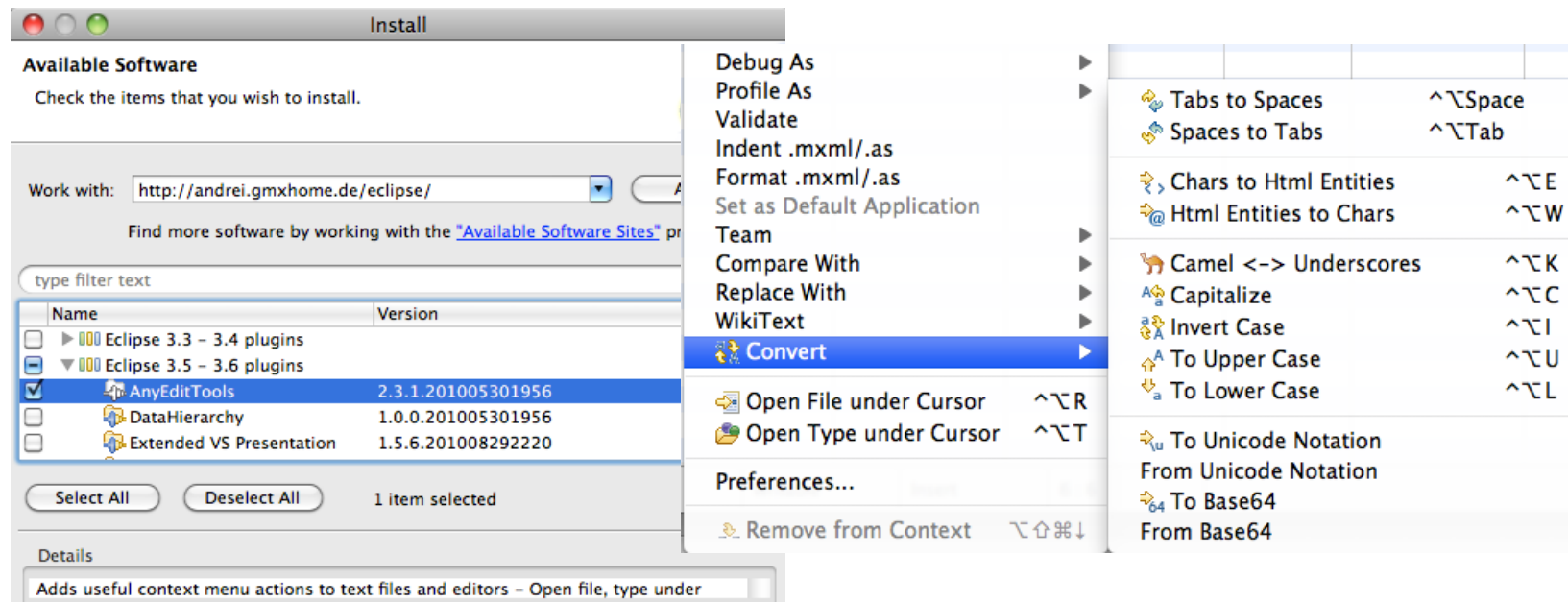
- Highlights
 - Enter test-texts and try regular expressions
 - Expressions are evaluated against the test-text on the fly
 - matches are highlighted
 - You can navigate between matches



Code Enhancement - AnyEditTools



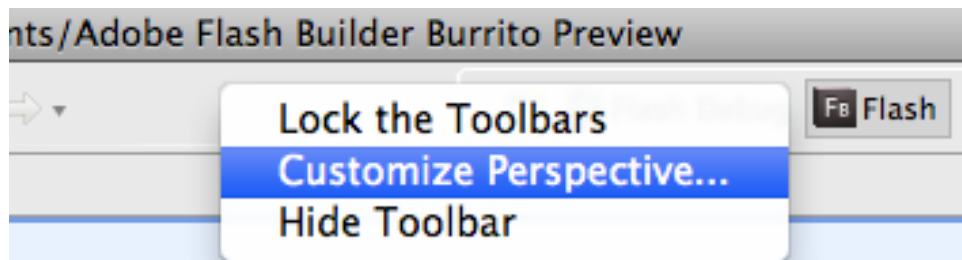
- AnyEdit adds tools to the context menu of text- based Eclipse editors, to output consoles, to Eclipse main menu and editor toolbar as well as additional Import/Export wizards.
- Home - <http://andrei.gmxhome.de/anyedit/index.html>
- Update site - <http://andrei.gmxhome.de/eclipse/>



Code Enhancement - AnyEditTools



- Highlights
 - show whitespace in editors
 - convert tabs/spaces on multiple files or entire directories
 - auto remove whitespaces and/or perform tabs/spaces conversion
 - "Save All", "Open File" and "Show whitespace in editor" buttons to the global Eclipse
 - "Open File", "Open Type" and "Save to file..." actions

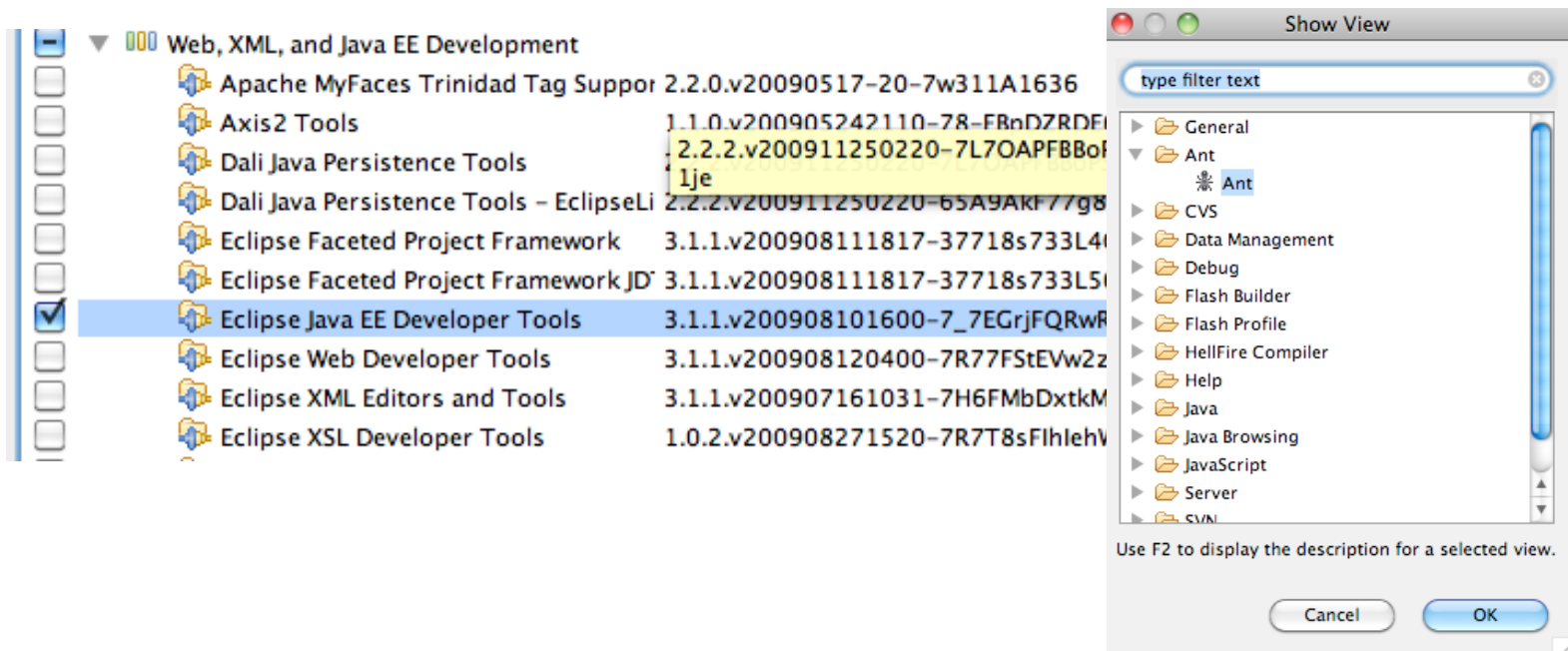


```
TestAPI.as
1 package
2 {
3     import flash.external.ExternalInterface;
4
5     public class TestAPI extends ExternalInterface
6     {
7         public function TestAPI()
8         {
9             super();
10        }
11    }
12
13    /**
14     *
15     */
16    public function someMethod():void
17    {
18    }
19 }
20 }
```

Improve Productivity - Ant



- Apache Ant is a Java tool for automating software build processes. Ant uses XML to describe the build process and its dependencies.
- Home - <http://ant.apache.org/manual/index.html>
- Update site - <http://download.eclipse.org/releases/galileo/>
Web, XML, and Java EE development > Eclipse Java EE developer Tools



Improve Productivity - Ant



- Highlights
 - Cross-platform and open source - works almost the same way on all platforms and machines
 - Integrates well with other tools and Eclipse plugins
 - Ideal for build process & automation

The screenshot shows an IDE window with a file named 'generate-swc-and-asdoc.xml'. The file contains an Ant build script. The script defines a project named 'ASDoc build' with a default target of 'main'. It includes a taskdef for 'flexTasks.jar' and a property for 'asdoc.properties'. The 'main' target depends on 'clean-asdoc-directory', 'create-docs', and 'clean-swc-directory'. The 'clean-asdoc-directory' target deletes the output directory and creates it. The 'clean-swc-directory' target deletes the swc directory and creates it. The 'main' target is the default target. The 'swc-generator' target is also defined.

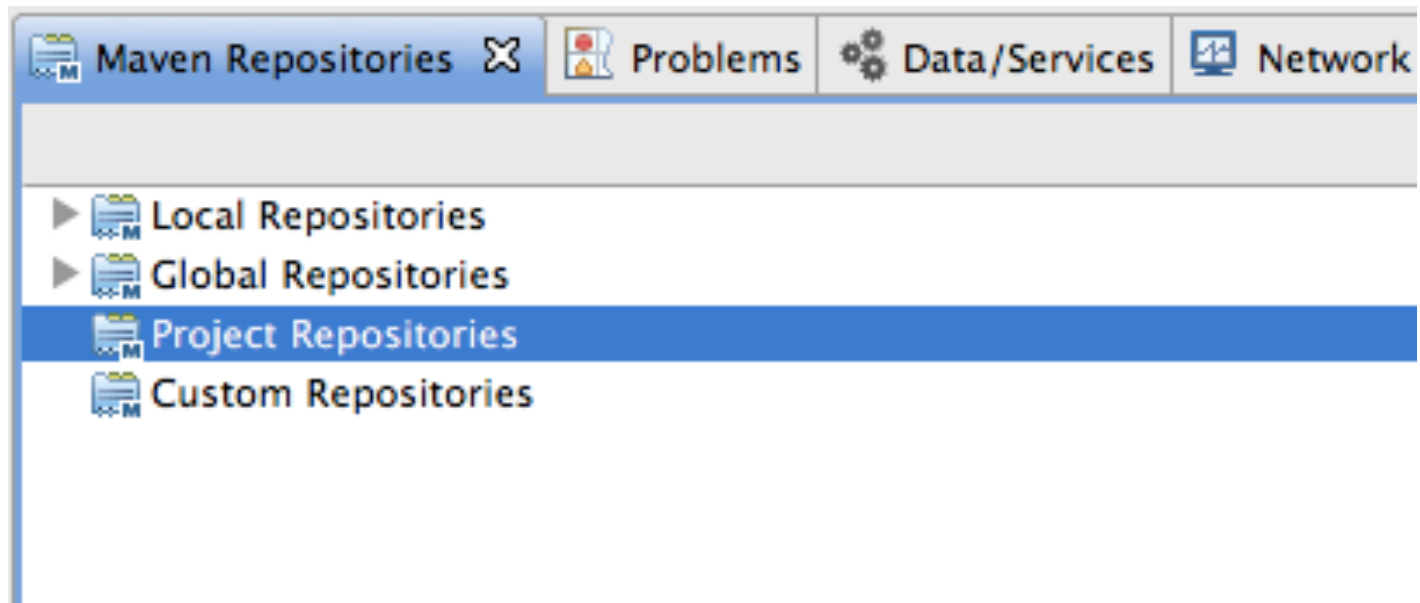
```
1 <project name="ASDoc build" default="main" >
2   <!-- make sure that flexTasks.jar which is located in skd/ant/lib/flexTasks.jar otherwise you'll get an
3   <taskdef resource="flexTasks.tasks" classpath="flexTasks.jar" />
4   <!-- defines all values for the ASDoc compiler -->
5   <property file="asdoc.properties" />
6   <!-- main target: cleans and compiles ASDocs -->
7   <target name="main" depends="clean-asdoc-directory, create-docs, clean-swc-directory" />
8   <!-- deletes and recreates the asdoc directory -->
9   <target name="clean-asdoc-directory" >
10    <delete dir="${output.dir}" />
11    <mkdir dir="${output.dir}" />
12  </target>
13  <!-- deletes and recreates the swc directory -->
14  <target name="clean-swc-directory" >
15    <delete dir="${swc.dir}" />
16    <mkdir dir="${swc.dir}" />
17  </target>
```

The right sidebar shows the 'Ant' view with a tree structure for the 'ASDoc build' project. The targets listed are: clean-asdoc-directory, clean-swc-directory, create-docs, main [default], and swc-generator. The 'main' target is selected.

Improve Productivity - m2eclipse



- Maven integration for Eclipse.
- Home - <http://m2eclipse.sonatype.org/>
 - Remote Site location: <http://m2eclipse.sonatype.org/sites/m2e>
 - m2eclipse Extras Update Site: <http://m2eclipse.sonatype.org/sites/m2e-extras>



Improve Productivity - m2eclipse

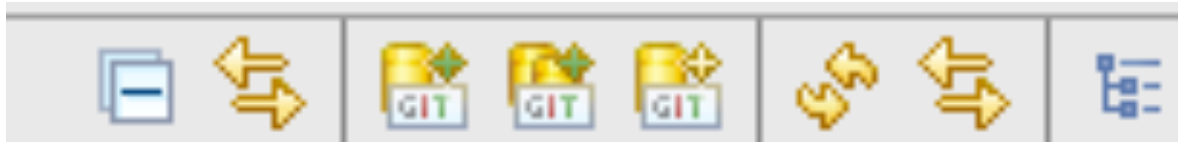
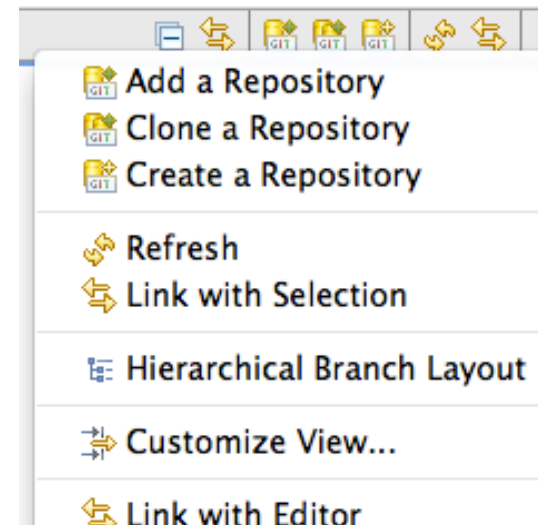
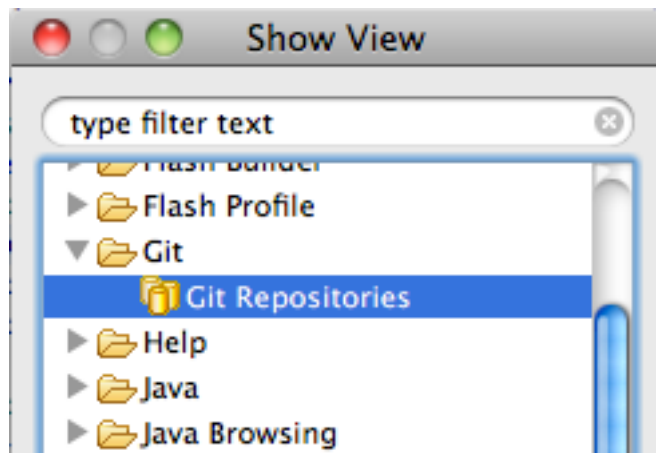


- Highlights
 - Creating/importing/browsing Maven projects
 - Dependency management and integration with Eclipse classpath
 - Automatic dependency downloads and updates
 - Javadoc and source resolution
 - Creating projects with Maven Archetypes
 - POM Editor and management
 - Checking Maven project from several SCM repositories
 - Adapting nested multi-module Maven projects to the Eclipse IDE
 - Integration with Web Tools Project (WTP), Mylyn, Subclipse and Subversive
 - GUI of Dependency Graphs, Tree and Resolved Dependencies

Version control - eGit



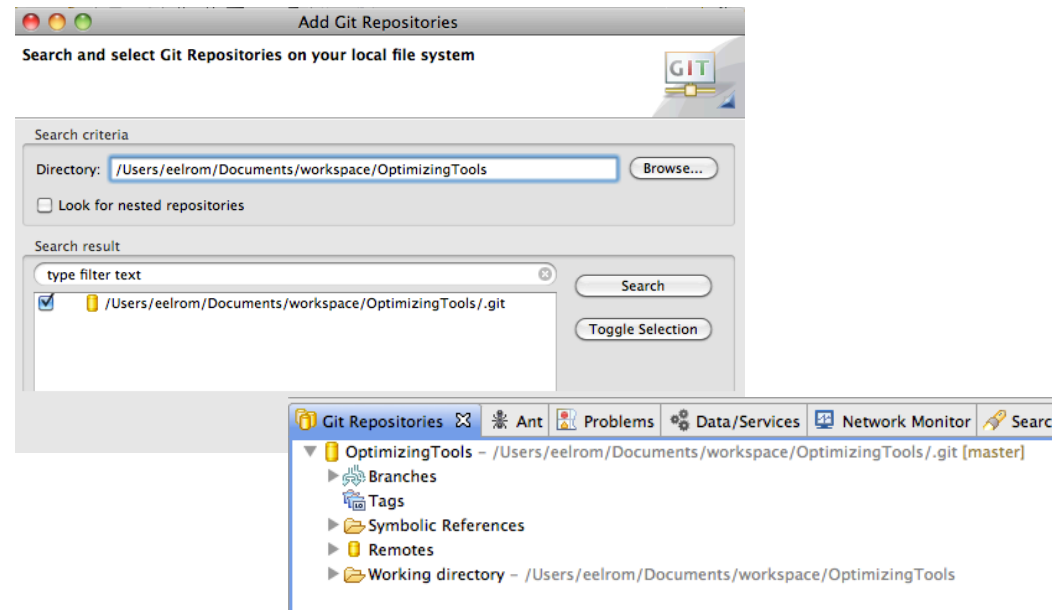
- EGit plugin for Git version control (VC) system.
- Home - <http://www.eclipse.org/egit/>
- Update site - <http://download.eclipse.org/egit/updates>



Version control - eGit



- Highlights
 - Repository view
 - Check a new project into git
 - Checkout existing project
 - Create a Git repostitory for multiple projects
 - Basic operations
 - Merging
 - View resource history



Version control – Subversive / Subclipse



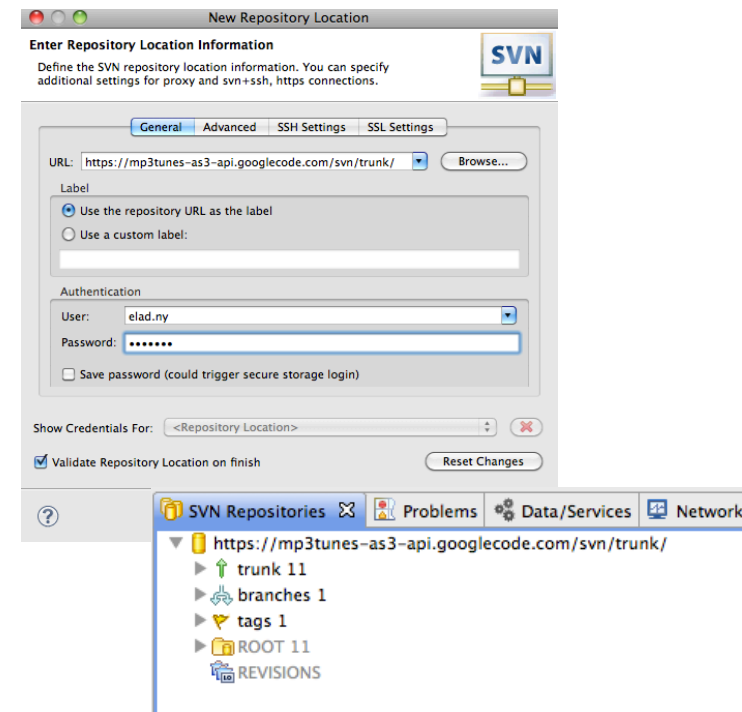
- Subversive SVN plugin. Subversive standard provided by Eclipse
 - Home - <http://www.eclipse.org/subversive/>
 - Update site - <http://download.eclipse.org/technology/subversive/0.7/update-site/>
- Subclipse SVN plugin.
 - Home - <http://subclipse.tigris.org/>
 - Update site - http://subclipse.tigris.org/update_1.6.x



Version control – Subversive/ Subclipse



- Subversive Highlights
 - Browse remote repository
 - Share project to the repository and checkout projects from the repository
 - Synchronize project to see incoming and outgoing changes
 - Commit, update and revert changes
 - See resource change history
 - Merging
- Subclipse Highlights
 - Same as Subversive
 - CollabNet merge client tool available from Subclipse 1.6.x



Continuous Integration - Hudson-eclipse



- Monitor Hudson build status from Eclipse.
 - Home - <http://code.google.com/p/hudson-eclipse/>
 - Update site - <http://hudson-eclipse.googlecode.com/svn/trunk/hudson-update/>
- Highlights
 - Task repository
 - Task query
 - Hudson issue tracker
 - Integrate Mylyn with Hudson issue tracker

Project	Build	Date and Time	Status	Health
Tester	#1	Oct 19, 2010 1	!	🔴
Tester2	No build	No build	🕒	

Continuous Integration - CruiseControl



- Edit and test CruiseControl configuration files. Includes wizards, an XML based editor, a CruiseControl console and access to the CruiseControl Build Results website.
 - Home - <http://cruiseedit.sourceforge.net/>
 - Download URL - <http://sourceforge.net/projects/cruiseedit/files/>
- Highlights
 - Monitoring of Cruise Control projects
 - JMX View - provides information about the build process using RMI connector.
 - Rss Feed View - provides information about the build process using the HTTP Adapter.



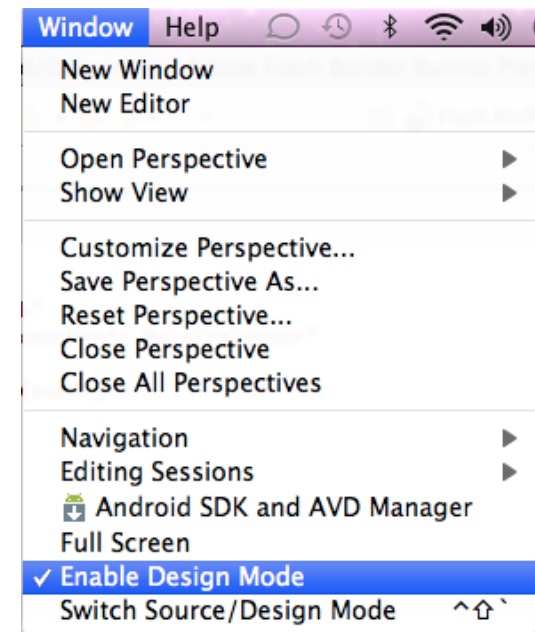
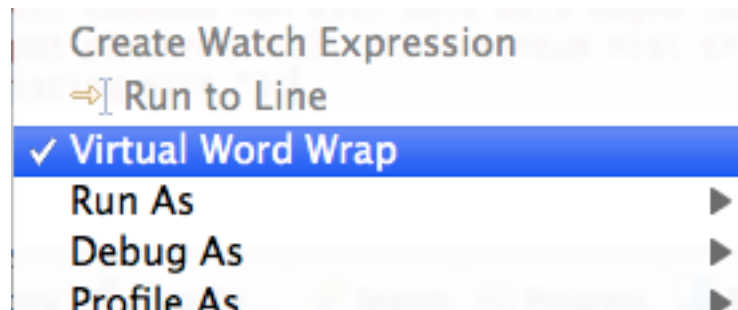
- Full Screen

- Download URL -

http://eclipse-fullscreen.googlecode.com/files/eclipse-fullscreen_1.0.7.zip

- Virtual Word Wrap

- Update URL - <http://ahtik.com/eclipse-update/>





Quick recap:

- install Eclipse plugins
- Hidden features in Eclipse
- Planning Plugins
- Code Enhancement Plugins
- Improve Productivity Plugins
- Version Control Plugins
- Continuous Integration Plugins

Questions and Answers





- Top Eclipse plugins
http://eclipse-plugins.2y.net/eclipse/ratings_overview.jsp
- Creating an Eclipse plugin
<http://www.eclipse.org/articles/Article-Your%20First%20Plug-in/YourFirstPlugin.html>
- Creating your custom plugin for Eclipse
<http://ondemand.yoxos.com/geteclipse/start>
- Download session
<http://elromdesign.com/blog/AdobeMAX2010>
- Elad's Blog
<http://elromdesign.com/blog>

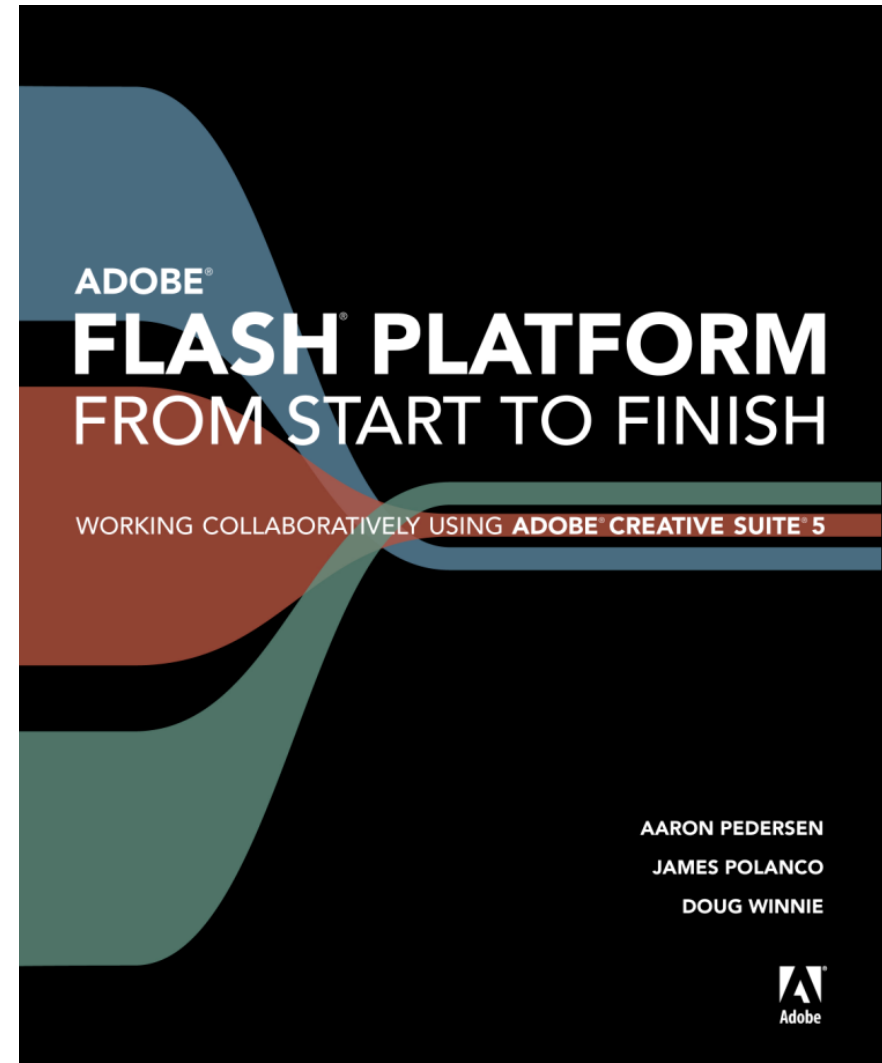
Turn in your Surveys for a chance to WIN!



- Hand in your surveys to the room monitors
- One survey will be selected as a winner of the Adobe Press e-book

***Adobe Flash Platform from
Start to Finish: Working
Collaboratively Using Adobe
Creative Suite 5***

- Winners will be notified via e-mail at the end of each day



MAX
CONNECT. DISCOVER. INSPIRE.

