

Getting started with Eclipse Accessibility Tools Framework (ACTF)

(October 12th, 2008)

1. What is ACTF?

The Accessibility Tools Framework (ACTF) is an incubation project that is a subproject of the Eclipse Technology Project.

ACTF is a framework that serves as an extensible infrastructure upon which developers can build a variety of utilities that help to evaluate and enhance the accessibility of applications and content for people with disabilities. A collection of example utilities will also be provided which were created on top of the framework such as compliance validation tools, assistive technology simulation applications, usability visualization tools, unit-testing utilities, and alternative accessible interfaces for applications. The ACTF components and the utilities will be integrated into a single tooling environment on top of the Eclipse framework. The framework components will function cooperatively with each other and with other Eclipse projects to provide a comprehensive development environment for creating accessible applications and content.

For more details about the ACTF project, please visit ACTF home page!

<http://www.eclipse.org/actf>

2. How to configure your development environment

2.1 System requirements

- ✓ Operating Systems
Windows® XP or above

- ✓ Software

- **Eclipse**

<http://www.eclipse.org/downloads>

(Eclipse Classic package is recommended)

<http://archive.eclipse.org/eclipse/downloads/drops/R-3.3.2-200802211800/index.php>

(Most tested version is eclipse-SDK-3.3.2-win32.zip from above URL)

- **Java Runtime Environment (JRE) 5.0 or above**

http://java.sun.com/javase/downloads/index_jdk5.jsp

<http://java.sun.com/javase/downloads/index.jsp>

(see <http://www.eclipse.org/downloads/moreinfo/jre.php> for more details)

- Internet Explorer 6.0 or above

- For Flash content access: Adobe® Flash Player, Version 8 or above

<http://www.adobe.com/go/getflashplayer>

- For OOo Editor: OpenOffice.org 2.1.0 or above

<http://www.openoffice.org>

- For Weblo (Web Validation Componentry): XULRunner v1.8.1.3

<http://releases.mozilla.org/pub/mozilla.org/xulrunner/releases/1.8.1.3/contrib/win32>

Install Instruction for 1.8.0.4 can be used for 1.8.1.3.

http://developer.mozilla.org/en/XULRunner_1.8.0.4_Release_Notes

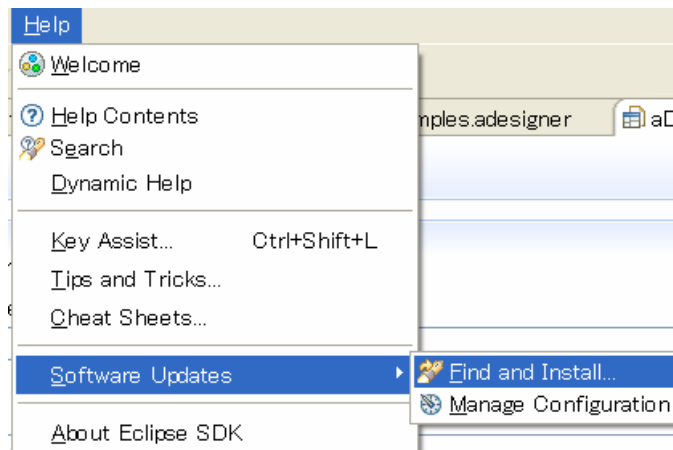
2.2. Installation of ACTF SDKs

2.2.1 Visualization SDK and Alternative Interface SDK

You can install these SDKs by using Eclipse Update mechanism.

3.3.x: **Help -> Software Updates -> Find and Install ...**

3.4.x: **Help -> Software Updates -> Available Software ->Add Site** menu.



Then define a new Eclipse update site with the following location:

<http://download.eclipse.org/technology/actf/0.5/update-site>

Please follow instruction of the update wizard.

2.2.2 Validation SDKs

You can install Validation SDKs by following instruction pages below

Java Validation Componentry (Javaco):

<http://www.eclipse.org/actf/downloads/components/javaco/index.php>

Web Validation Componentry (Webelo)

<http://www.eclipse.org/actf/downloads/components/webelo/index.php>

(These SDKs will be available via Eclipse Update mechanism soon. Please visit and check ACTF Downloads page <http://www.eclipse.org/actf/downloads/index.php> for the update information.)

3. Getting started with ACTF SDKs

3.1 Visualization SDK and Alternative Interface SDK

1. Download zipped Team Project Set file for examples.

<http://www.eclipse.org/downloads/download.php?file=/technology/actf/psf/anonymous/actf-examples.zip>

2. Unzip the downloaded file and import Team Project Set file (*.psf) from Eclipse's 'File' -> 'Import' -> 'Team' -> 'Team Project Set' menu. (id: anonymous, password: "")(null))

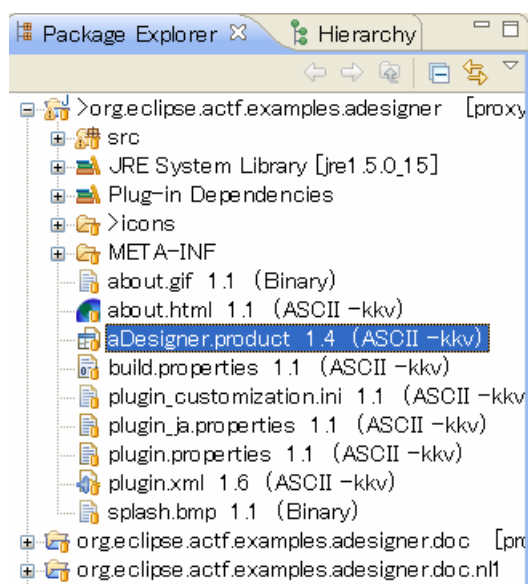
3. Launch example applications

Select and open one of example application project below:

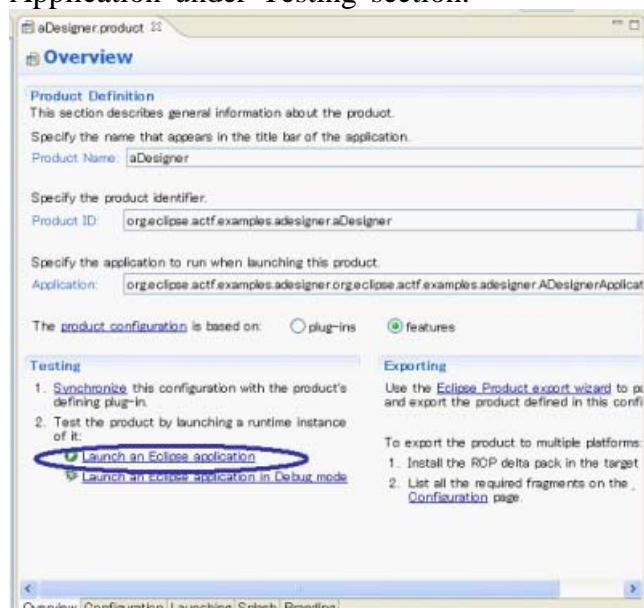
org.eclipse.actf.examples.adesigner : accessibility visualization tool aDesigner (with Help)

org.eclipse.actf.examples.aibrowser : accessibility internet browser for multimedia aiBrowser (with Help)

org.eclipse.actf.examples.simplevisualizer : visualization example application



Then, select (double click) *.product file and open it in a product editor. In the editor, select 'Launch an Eclipse Application' under 'Testing' section.



(For more details about example applications, please see presentation charts. Online-help is also included in aDesigner/aiBrowser applications. Please select 'Help' menu of these applications.)

4. Build examples

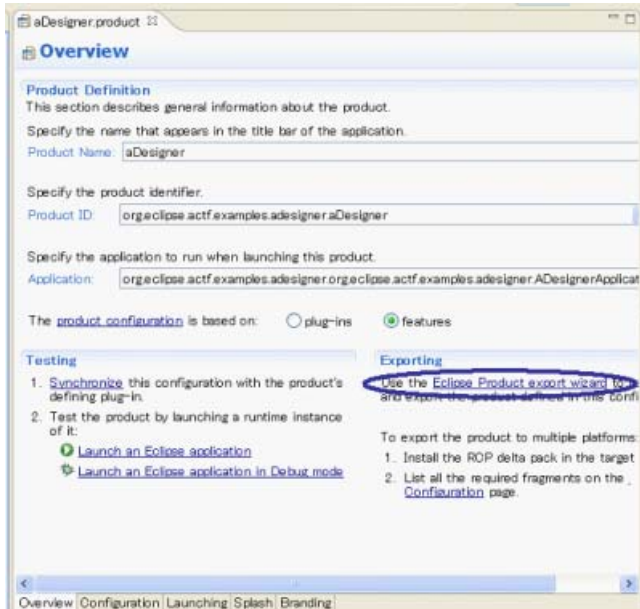
Select and open one of example application project below and select *.product file as in step 3.

org.eclipse.actf.examples.adesigner

org.eclipse.actf.examples.aibrowser

org.eclipse.actf.examples.simplevisualizer

Open an export product wizard by selecting 'Eclipse product export wizard' under 'Exporting' section and follow the wizard.

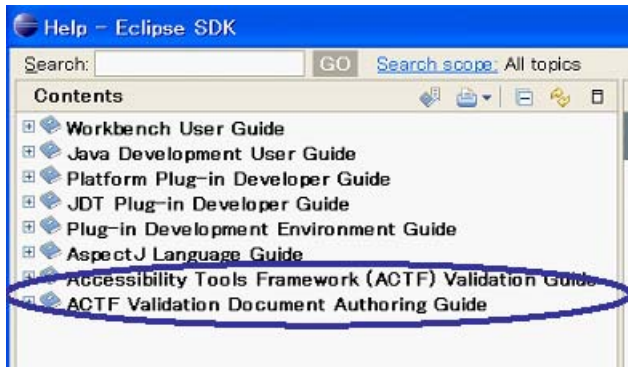


3.2 Validation SDKs

Java Validation Componentry (Javaco)

1. Read help documents

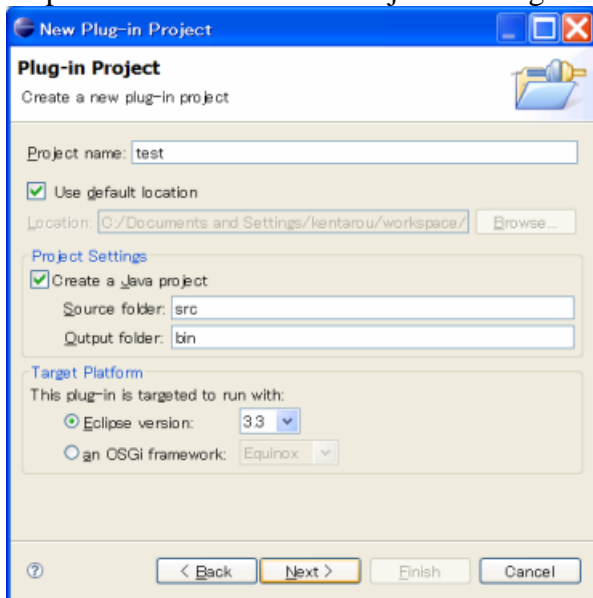
Open Eclipse's 'Help' -> 'Help Contents' and select ACTF validation related items.



2. Test application GUI

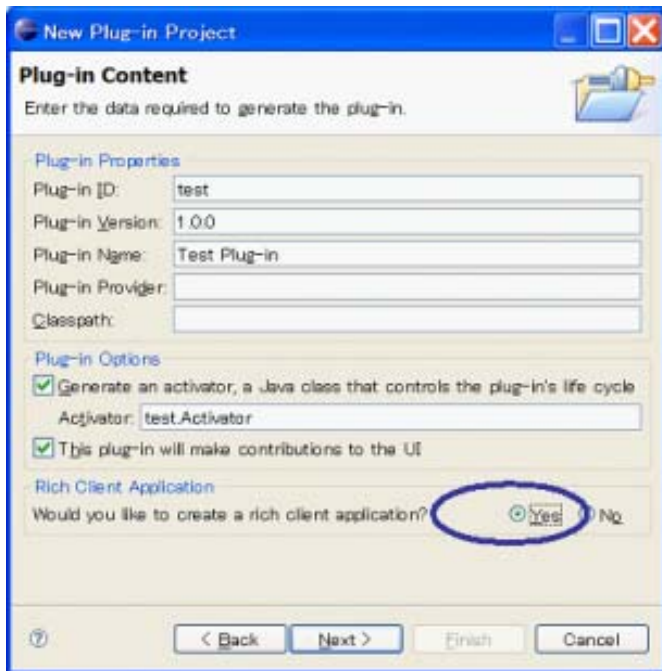
Create new example RCP application.

Open 'File' -> 'New' -> 'Project' -> 'Plug-in Project' menu.

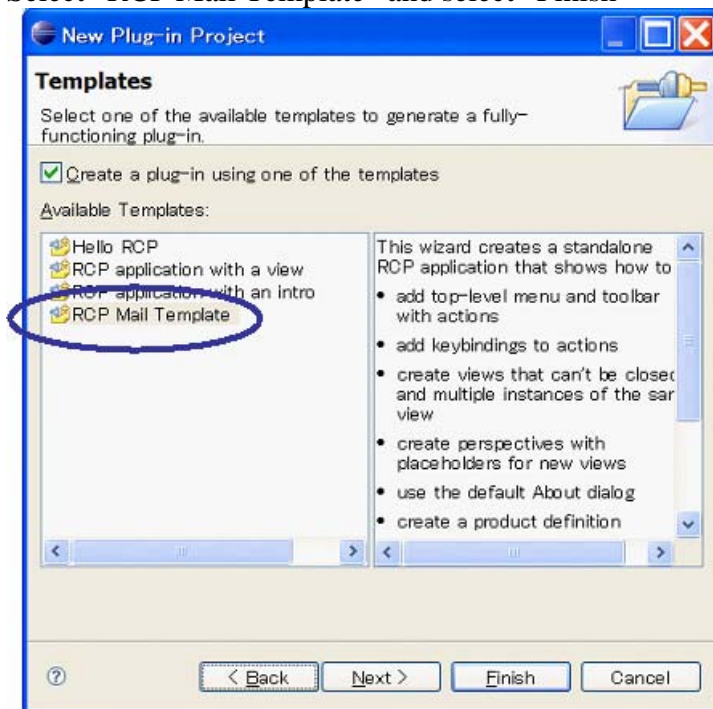


Enter project name, e.g., "test", and select 'Next'.

In the "Plug-in Content" dialog, select "Yes" in "Rich Client Application" section, and press 'Next'.

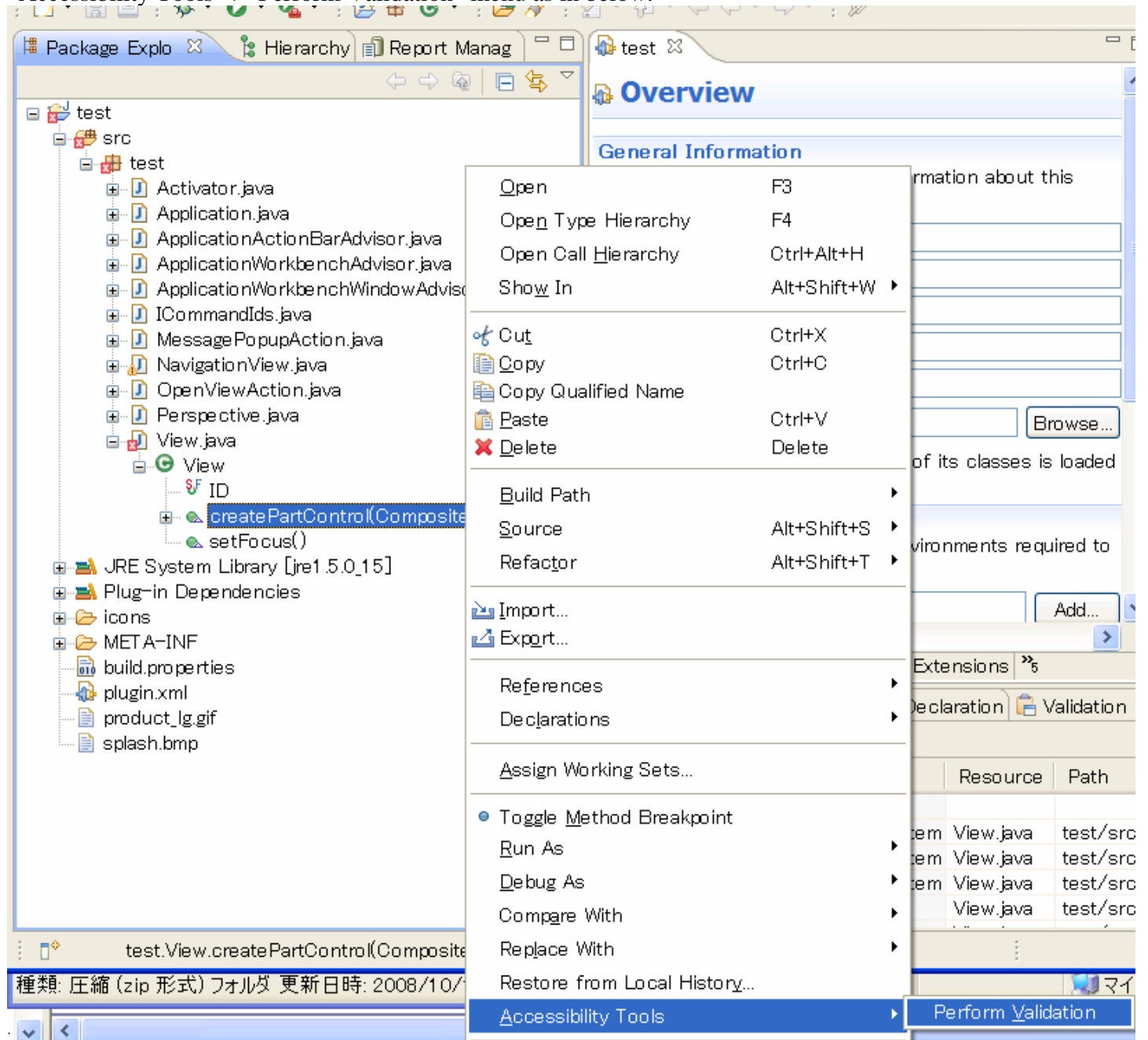


Select “RCP Mail Template” and select “Finish”



Then, “test” project will be shown in your “Package Explorer”.

Select “View.java” file under the “test/src/test” folder. Right click on “createPartControl” method and select “Accessibility Tools”->”Perform Validation” menu as in below.



Then, you may see validation results in “Problems” view and “Validation Report” view.

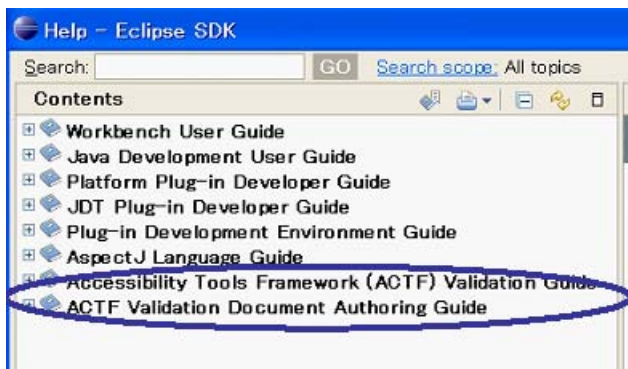
Note: current version has some limitation. Please visit URL below to know more details about the limitation.

<http://www.eclipse.org/newsportal/article.php?id=9&group=eclipse.technology.actf#9>

Web Validation Componentry (Webelo)

1. Read help documents

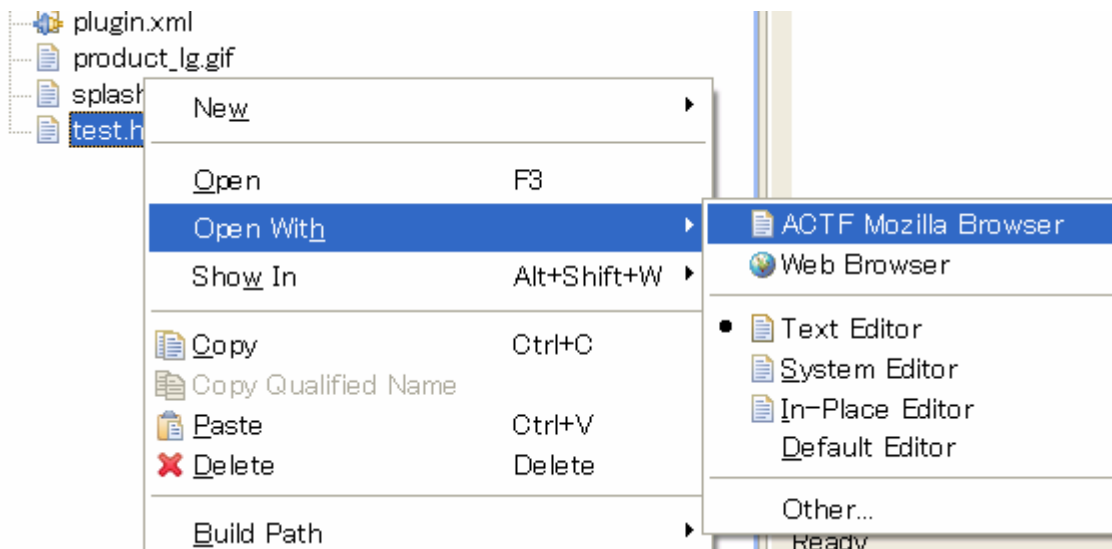
Open Eclipse's 'Help' -> 'Help Contents' and select ACTF validation related items.



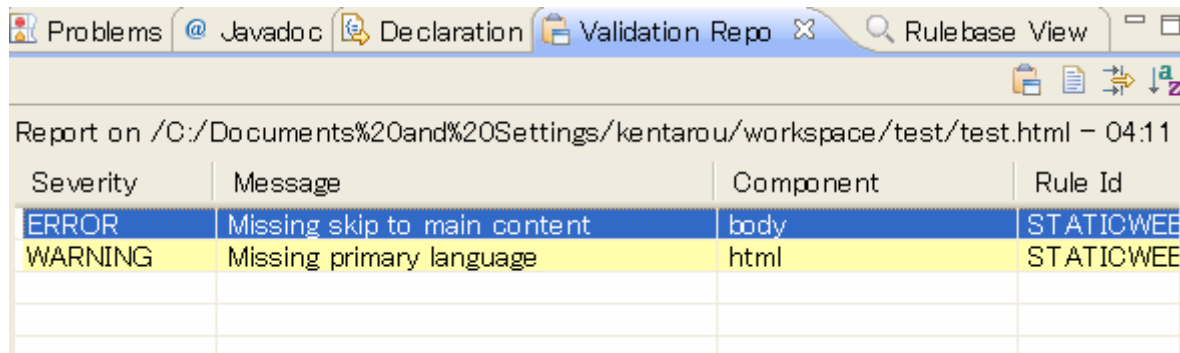
2. Test Web content

Create new Project from 'File' -> 'New' -> 'General' -> 'Project' menu and copy your target HTML into the project. (or create new HTML file from 'File' -> 'New' -> 'File' menu, and edit it from "Open with" -> "Text Editor" menu.)

Open target HTML File with "ACTF Mozilla Browser" by selecting "Open With" -> "ACTF Mozilla Browser" menu as in below.



Validation result will automatically shown in “Validation Report” view.



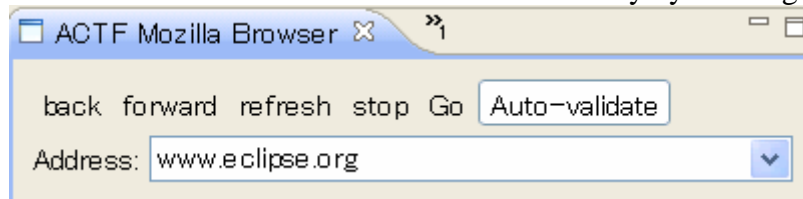
Severity	Message	Component	Rule Id
ERROR	Missing skip to main content	body	STATICWEB
WARNING	Missing primary language	html	STATICWEB

You can see more detailed information by right clicking the error and select “Show Record Details” menu.



Press “Details” button to see Path information, etc.

You can also check usual Web site’s accessibility by entering target URL into Address area.



4. Access to ACTF source code

Anyone can access to ACTF CVS repository. Please visit the ACTF Contributors Information page below and get ACTF source code.

<http://www.eclipse.org/actf/contributors.php>

5. Communication with ACTF team

5.1 Bug report

If you find any issues, please submit a bug report from URL below:

https://bugs.eclipse.org/bugs/enter_bug.cgi?product=ACTF

(Please create your bugzilla account from <https://bugs.eclipse.org/bugs/createaccount.cgi>)

You can also attach your change as patch file.

Please export your change by using “Team”->”Create Patch” menu, and attach the file to bugzilla entry.

5.2 Questions and feedbacks

If you have any questions or feedbacks about ACTF, please post it to our News Group.

<http://www.eclipse.org/newsportal/thread.php?group=eclipse.technology.actf>

You can post your message by using “New message” and/or “Reply to this” menu.

(Please create your bugzilla account from <https://bugs.eclipse.org/bugs/createaccount.cgi>)

5.3 Development discussions

If you want to get more involved into ACTF development discussions, please join the actf-dev Mailing List from URL below.

<https://dev.eclipse.org/mailman/listinfo/actf-dev>

We are looking forward to working with you!!
