

Accessibility Tools Framework (ACTF) 0.7 Release Review June 10th, 2009

Chieko Asakawa, IBM (Project Lead) Kentarou Fukuda, IBM (Release Engineer)

Introduction

- The Accessibility Tools Framework (ACTF) is a Technology subproject in the incubation phase
 - http://www.eclipse.org/actf
- ACTF aims at providing an extensible and comprehensive framework for accessibility tools.
- This release includes
 - Visualization SDK
 - Visualization Extension for WST
 - Visualization Extension for PDT



Infrastructure components

- Provide comprehensive and unified access mechanisms for the user interfaces of applications and for the object models of various kinds of content.
- Provide middleware to manage components and dataflow in the framework on top of the Eclipse platform.

Visualization components

- Provide reusable view components for creating accessibility evaluation tools.
- Provide visual representations of the content and applications as perceived by People with Disabilities (PwD).

WST/PDT integration

- Provide extension features for WST/PDT.
- Enable use of the accessibility visualization functions of ACTF from the perspectives of the Web, J2EE, and PHP.

Features (not included)

- Due to differences in the development schedule, the two components below are not included in this release.
 - Validation components
 - Alternative interface components

Non-Code Aspects

Documentation

- Visualization SDK includes documentation for users and developers.
- APIs have Javadoc.
- Extension points have a reference document.

Publication

 Several documents have been published on the ACTF documentation page.

http://www.eclipse.org/actf/docs/



- APIs conform to Eclipse Quality Standards
 - All APIs are currently provisional.
 - ACTF plans to freeze the APIs after reflecting community feedback.
- Several examples have been tested

Architectural Issues

- We use extensions to make the ACTF extendable by others
 - 7 extension points are available
- ACTF components can be used as modules
 - HTML parser, ODF API, Web Browser Editor, ...
- Non-API use for visualization
 - To obtain the HTML source, live DOM, URL, etc. from existing Browser components, such as SWT Browser Editor or Browser Output View, we uses the reflection method.
 - For more details including current migration plan: https://bugs.eclipse.org/bugs/show_bug.cgi?id=268519

Tool Usability

- Easy integration into Eclipse by providing several extension points, reusable and customizable view components, etc.
- Several kinds of exemplary tools are available
 - Accessibility visualization tool implementation: aDesigner
 - Sample implementation of visualization: SimpleVisualizer
 - etc.
- Ongoing enhancements and new use cases
 - New visualization tool that automatically analyses a webpage with respect to its visual complexity and shows the complexity as a heatmap.
 - New validation tool to validate pages for both accessibility and mobile friendliness.
 - Please visit the RIAM project page for more details (Reciprocal Interoperability of Accessible and Mobile Webs, http://hcw.cs.manchester.ac.uk/research/riam/)

End-of-Life

There are no features that are designated for end-of-life in this release.



- Statistics as of May 27th 2009
 - 162 bugs created (including initial contributions)
 - 146 bugs were resolved/verified/closed

	Component													
		Doc	Model	Other	Visualization	core	examples	util	Total					
Status	ASSIGNED	1	<u>3</u>	2	<u>6</u>	1	<u>3</u>		16					
	RESOLVED	<u>4</u>	10		<u>40</u>	2	1	2	<u>59</u>					
	VERIFIED		1		<u>1</u>				2					
	CLOSED	2	18	<u>6</u>	<u>12</u>	<u>7</u>	<u>35</u>	<u>5</u>	<u>85</u>					
	Total	<u>7</u>	<u>32</u>	<u>8</u>	<u>59</u>	10	<u>39</u>	<u>7</u>	162					

Remaining bugs

16 bugs (including 6 enhancements)

No major bugs

	Component										
		Doc	Model	Other	Visualization	core	examples	Total			
Severity	normal		2	1	<u>5</u>		1	9			
	trivial			1			•	1			
	enhancement	1	1		1	1	<u>2</u>	<u>6</u>			
	Total	1	<u>3</u>	2	<u>6</u>	1	<u>3</u>	<u>16</u>			

(excludes bugs for Validation/Alternative Interface components that are not included in this release)

Standards

- ACTF requires Java 1.5 or later and Eclipse 3.3.x or later
- W3C HTML 4.01 recommendation (and older recommendations 3.2, 4.0)
 - HTML model component
- OASIS Open Document Format v1.1
 - ODF model component

UI Usability

Accessibility

Following accessibility guidelines
 http://www.eclipse.org/articles/article.php?file=Article-Accessibility/index.html

User Interface Guidelines

- Updated ACTF UI (icons, perspectives, etc.) to conform to UI guidelines
- UI Checklist is not firm yet, but is scheduled for completion in the next release

■ I18n

- UI messages are externalized
- Registered with Babel for translation

Schedule

- Initial Schedule
 - **M4** 1/12/2009
 - M5 2/16/2009
 - **M6** 3/23/2009
 - **M7** 5/11/2009
 - RC1 5/25/2009
 - **RC2** 6/1/2009
 - **RC3** 6/8/2009
 - RC4 (0.7 GA) 6/15/2009
- All milestones (M4-M7), RC1 and RC2 were released on time
- Documentation refinement until RC4

Communities

- Active Bugzilla
 - mainly by committers
 - some from exemplary tool users
- Active discussions on the mailing list and in conference calls.
- Newsgroup is not much used yet, but is regularly monitored by committers.
- Community outreach
 - Hold an ACTF introduction session at accessibility conferences
 - ACM ASSETS 2008, October 13-15, in Halifax, Canada.
 - Blog
 - http://hcw.cs.manchester.ac.uk/news/2008/10/eclipse-accessibilitytools-framework.php (Registered to Planet Eclipse)
 - Webinar (planned: June 14th)
 - Provide more documentation and examples
- Start community implementation of checking logic for new and coming accessibility guidelines
 - Web Content Accessibility Guidelines (WCAG) 2.0, new Section 508, etc.

IP Issues

- The code has been committed by individuals who are either committers of the project themselves or by their organizations.
- IP Log up2date at
 - http://www.eclipse.org/projects/ip_log.php?projectid=technology.actf
- Previously Approved IP Log
 - http://www.eclipse.org/actf/iplog/actf_ip_log_050.html
- Project released under EPL

Project Plan

- Available at http://www.eclipse.org/projects/project-plan.php?projectid=technology.actf
- Themes for Galileo Service Release 1 (September 2009)
 - WCAG 2.0 support
 - Usability improvement



Thank you!