Accessibility Tools Framework (ACTF) 0.8 Release Review

June 11th, 2010

Chieko Asakawa, IBM (Project Lead)

Kentarou Fukuda, IBM (Release Engineer)

(Helios Simultaneous Release)

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

Features

- 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, Alternative Interface components are not included in this release.

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

- **APIs conform to Eclipse Quality Standards**

  - All APIs are currently provisional. ACTF plans to freeze the APIs after reflecting community feedback.

  - Internal APIs are in internal packages and currently are not exported.

- **Several examples have been tested**

Architectural Issues

- We use extensions to make the ACTF extendable by others
    - 8 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.

- New use cases and enhancements
  - ScriptEditor: It aims to provide an environment to easily edit audio descriptions for internet movies. It also tries to reduce cost of audio description by using audio synthesis.

End-of-Life

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

Bugzilla

- Statistics as of May 28th 2010
  - 182 bugs created (including initial contributions)
    - 163 bugs were resolved/verified/closed

		Component							
Status		Doc	Model	Other	Visualization	core	examples	util	Total
	NEW	.	.	1	.	.	.	.	1
	ASSIGNED	1	3	2	8	.	4	.	18
	RESOLVED	.	2	.	4	.	.	.	6
	VERIFIED	.	2	.	1	.	.	.	3
	CLOSED	6	31	6	55	11	37	8	154
	Total	7	38	9	68	11	41	8	182

- Remaining bugs
  - 19 bugs (including 7 enhancements)
  - No major bugs

		Component					
Severity		Doc	Model	Other	Visualization	examples	Total
	normal	.	3	1	5	2	11
	trivial	.	.	1	.	.	1
	enhancement	1	.	1	3	2	7
	Total	1	3	3	8	4	19

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

Standards

- ACTF requires Java 1.5 or later and Eclipse 3.5 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, such as http://www.eclipse.org/articles/article.php?file=Article-Accessibility351/index.html

- User Interface Guidelines
  - UI Checklist is not firm yet, but is planned to update in the next release

- I18n
  - UI messages are externalized
  - Registered with Babel for translation

Schedule

- Initial Schedule
    - **M1**   08/19/2009   0.8 M1
    - **M2**   09/30/2009   0.8 M2
    - **M3**   11/11/2009   0.8 M3
    - **M4**   12/16/2009   0.8 M4
    - **M5**   02/03/2010   0.8 M5
    - **M6**   03/17/2010   0.8 M6
    - **M7**   05/05/2010   0.8 M7 (Feature Freeze)
    - **RC1**   05/19/2010   0.8 RC1
    - **RC2**   05/26/2010   0.8 RC2 (= RC1)
    - **RC3**   06/02/2010   0.8 RC3 (API Freeze)
    - **RC4**   06/09/2010   0.8 RC4

- All milestones, RC1 were released on time.
  (RC2 had not released because there is no update.)

Communities

- Active Bugzilla
  - mainly by committers
  - some from exemplary tool users
- Discuss project plans, etc. in conference calls and ML.
- Newsgroup is not much used yet, but is monitored by committers.

- Community outreach
  - Eclipse Webinar (June 14th, 2009)
  - Introduce ACTF at ITRC UAI seminar (October 17th, 2009)
  - Provide more documentation and examples

- Plan to start community implementation of checking logic for new and coming accessibility guidelines
  - Web Content Accessibility Guidelines (WCAG) 2.0, new Section 508, JIS X8341-3:2010, 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_070.html

- Project released under EPL

Project Plan

- Available at
  http://www.eclipse.org/projects/project-plan.php?projectid=technology.actf

- Themes for Helios Service Release 1 (September 2010)

  - WCAG 2.0, JIS X8341-3:2010 support

  - Usability improvement

Thank you!