

Accessibility Tools Framework (ACTF) 0.5 Release Review October 8th, 2008

Chieko Asakawa, IBM Mike Paciello, The Paciello Group

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 is the first release on Eclipse.org and includes
 - Validation SDK
 - Visualization SDK
 - Alternative Interface SDK



Validation components

- Provide extensible accessibility validation features with initial support for HTML, OpenDocument Format (ODF), Flash, Java Swing, Eclipse SWT, and accessibility APIs such as Microsoft Active Accessibility (MSAA) and IAccessible2.
- Developers can customize validation rules by using XML configuration files or through Java APIs.
- Visualization components
 - Provide reusable view components for creating accessibility evaluation tools.
 - Provide a visual representation of the usability of content or applications for People with Disabilities (PwD).
- Alternative interface components
 - Provide middleware components to make multimedia content controllable via alternative input methods, to add audio descriptions or captions, and to transform user interfaces by using external metadata.
- 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.

Non-Code Aspects

Documentation

- APIs have Javadoc.
- Extension points have a reference document.
- Validation SDK includes documentation in downloads.
- Other SDK documentation will be published on the Eclipse.org website and be included in the downloads in the next (0.6) release.

Publication

- There was one short talk and two long talks about ACTF at EclipseCon08.
- Some developer's guide documents were published on the actf-dev mailing list. These documents will be available on the website.



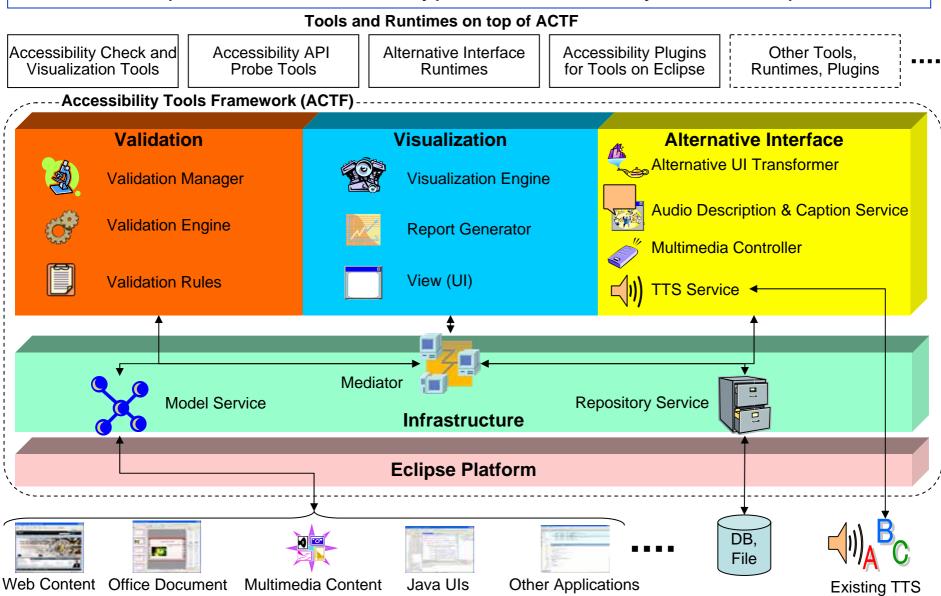
- APIs conform to Eclipse Quality Standards
 - All APIs are currently provisional
 - ACTF plans to freeze the APIs after reflecting community feedback
- Several examples have been tested



Architectural Issues

Existing Applications and Content

Allow developers to build various types of accessibility tools on top of ACTF.



Engines

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 API probe tool implementation: AccProbe
 - Accessibility visualization tool implementation: aDesigner
 - Alternative interface implementation for multimedia content: aiBrowser
 - 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

Since this is the first release, there are no features that are designated for end-of-life in this release.



- Statistics from October 2007 through September 29th 2008
 - 130 bugs created (including initial contributions)
 - 96 were resolved
- Current Status
 - 34 bugs (including 11 enhancements)
 - 1 major bug (for exemplary tool not for platform)

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 (approved)
 - ODF model component

UI Usability

ACTF follows Eclipse User Interface Guidelines



- ACTF 0.6 planned for December, 2008 (tentative)
 - Next release goals
 - Refinement of APIs
 - Complete Documentation

- ACTF 1.0 targeted for June, 2009
 - Key goals
 - Exit incubation
 - Freeze APIs as Platform API

Communities

- Active Bugzilla
 - mainly by committers (since no release available yet)
 - some from exemplary tool users
- Active discussions on the mailing list and in monthly calls.
- Newsgroup is not much used yet, but is regularly monitored by committers.

Plans for community growth

- Focus on community outreach
 - Hold an ACTF introduction session at accessibility conferences
 - Planned at ACM ASSETS, October 13-15, in Halifax, Canada.
 - Publicize ACTF release on mailing lists, such as
 - W3C Web Accessibility Initiative (WAI), Mozilla Developers ML, WebAIM, Google Accessibility Group, etc.
 - Contact related companies and invite them to join the community
 - Provide more documentation and examples
- Start discussions with other Eclipse projects
 - Contribute HTML model components to Web Tools Platform (WTP)
 - Contribute Validation components to Java Development Tools (JDT), WTP
 - Discuss Eclipse Accessibility Guide with User Interface Best Practice Working Group
- Start community implementation of check logic for 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.
- Approved IP Log at
 - http://www.eclipse.org/actf/iplog/actf_ip_log_050.html
- IP Log up2date at
 - http://www.eclipse.org/actf/actf_ip_log.html
- Project released under EPL



Thank you!