

# Accessibility Tools Framework (ACTF) 1.0 Release Review & Graduation Review June 2012

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(Juno Simultaneous Release)

### **Introduction**

- The Accessibility Tools Framework (ACTF) is a Technology subproject in the incubation phase
  - http://www.eclipse.org/actf
  - From project launch in 2007, ACTF team worked with communities. We already completed 4 releases (including Galileo, Helios and Indigo), and would like to graduate from incubation phase by this 5th release (Juno).
- 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
  - Exemplary applications



### 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 SDK is not included in this release.
  - But, some of reusable components of Alternative Interface SDK are included in Visualization SDK as Infrastructure components (such as Text-to-Speech interfaces).

# 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 by this release.
  - 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 in ACTF
  - ACTF uses several components from swt.internal to access native applications
    - to get accessibility information
    - to control existing Text-to-Speech engines
    - to embed applications (IE, OpenOffice.org, etc.) as Eclipse Editor/View for accessibility evaluation
  - ACTF also uses reflection method to obtain HTML source, live DOM, URL, etc. from existing Browser components, such as SWT Browser Editor or Browser Output View
  - For more details including current migration plan:
     <a href="https://bugs.eclipse.org/bugs/show\_bug.cgi?id=259250">https://bugs.eclipse.org/bugs/show\_bug.cgi?id=259250</a>
     <a href="https://bugs.eclipse.org/bugs/show\_bug.cgi?id=268519">https://bugs.eclipse.org/bugs/show\_bug.cgi?id=268519</a>

# 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
  - Audio description editor for internet movies: ScriptEditor

# End-of-Life

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



- Statistics as of June 4th 2012
  - 208 bugs created (including initial contributions)
    - 186 bugs were resolved/verified/closed

#### Component Doc core Model Other examples util Visualization Total NEW ASSIGNED 10 Status RESOLVED 10 CLOSED <u>32</u> 176 8 75 49 37 208 Total 90

Remaining bugs

(Except INVALID/NOT\_Eclipse bugs)

- 22 bugs (including 7 enhancements)
- No major bugs

	Component							
		Doc	core	Model	Other	examples	Visualization	Total
Severity	normal			<u>3</u>		1	<u>9</u>	<u>13</u>
	minor	1					1	<u>2</u>
	enhancement		1		<u>1</u>	<u>3</u>	<u>2</u>	<u> 7</u>
	Total	1	1	<u>3</u>	1	<u>4</u>	<u>12</u>	<u>22</u>

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

### Standards

- ACTF requires Java 1.5 or later and Eclipse 3.6 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

# Ul 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 future release

### I18n

- UI messages are externalized
- Registered with Babel for translation
- Simplified Chinese translation was contributed from community member

### Schedule Schedule

- Initial Schedule
  - M1 08/19/2011 1.0 M1
  - M2 09/30/2011 1.0 M2
  - M3 11/11/2011 1.0 M3
  - M4 12/16/2011 1.0 M4
  - M5 02/03/2012 1.0 M5
  - M6 03/23/2012 1.0 M6
  - M7 05/11/2012 1.0 M7 (Feature Freeze)
  - RC1 05/25/2012 1.0 RC1
  - RC2 06/01/2012 1.0 RC2
  - RC3 06/08/2012 1.0 RC3 (API Freeze)
  - RC4 06/15/2012 1.0 RC4
- 5 milestones, RC1, RC2 were released on time.
  - M5 and M7 were skipped (identical with previous milestone)

### **Communities**

- Active Bugzilla
  - mainly by committers
  - some from community members, e.g., from exemplary tool users
- Discuss project plans, etc. in conference calls and ML.
- Newsgroup is not much used yet, but is monitored by subscribed committers.
- Community outreach
  - Introduced Web accessibility evaluation tool developed on top of ACTF at CEATEC JAPAN 2011 (October 6<sup>th</sup>, 2011)
  - Improve/update documentation and examples
- Continue to enhance check logic for new and coming accessibility guidelines with communities
  - 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
- Approved IP Log
  - https://bugs.eclipse.org/bugs/attachment.cgi?id=216614
- Project released under EPL

# Project Plan

- Available at http://www.eclipse.org/projects/project-plan.php?projectid=technology.actf
- Themes for next Simultaneous Release in 2013
  - Enhancement of WCAG 2.0, JIS X8341-3:2010 support
  - Enhancement of exemplary tools
  - Usability improvement
  - Support for research and development activities on top of ACTF



# Thank you!