Accessibility Tools Framework (ACTF) 0.5 Release Review

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Introduction

- Accessibility Tools Framework (ACTF) is a Technology sub-project in incubation phase
  - http://www.eclipse.org/actf
- ACTF aims at providing an extensible and comprehensive framework for accessibility tools.

- This is the first release as on Eclipse.org including
  - Validation SDK
  - Visualization SDK
  - Alternative Interface SDK

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Features

- 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 that will be useful to create accessibility evaluation tools.
  - Provide a visual representation of the PwD users' usability of content or applications.
- Alternative interface components
  - Provide middleware components for making multimedia content controllable via alternative input methods, for adding audio descriptions/captions, and for transforming user interfaces by using external metadata.
- Infrastructure components
  - Provide comprehensive and unified access mechanism to user interfaces of applications and object models of various kinds of content.
  - Provide middleware for managing components and dataflow in the framework on top of the Eclipse platform.

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Non-Code Aspects

- Documentation
  - APIs have Javadoc
  - Extension points have reference document
  - Validation SDK includes documentation in downloads.
  - Other SDKs' documentation will be published on Eclipse.org Web site. It will be included into downloads in next (0.6) release.
- Publication
  - There has been one short talk and two long talks about ACTF at EclipseCon08.
  - Some developer guide documents are published at actf-dev mailing list. These documentations will be available on the web site.

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APIs

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

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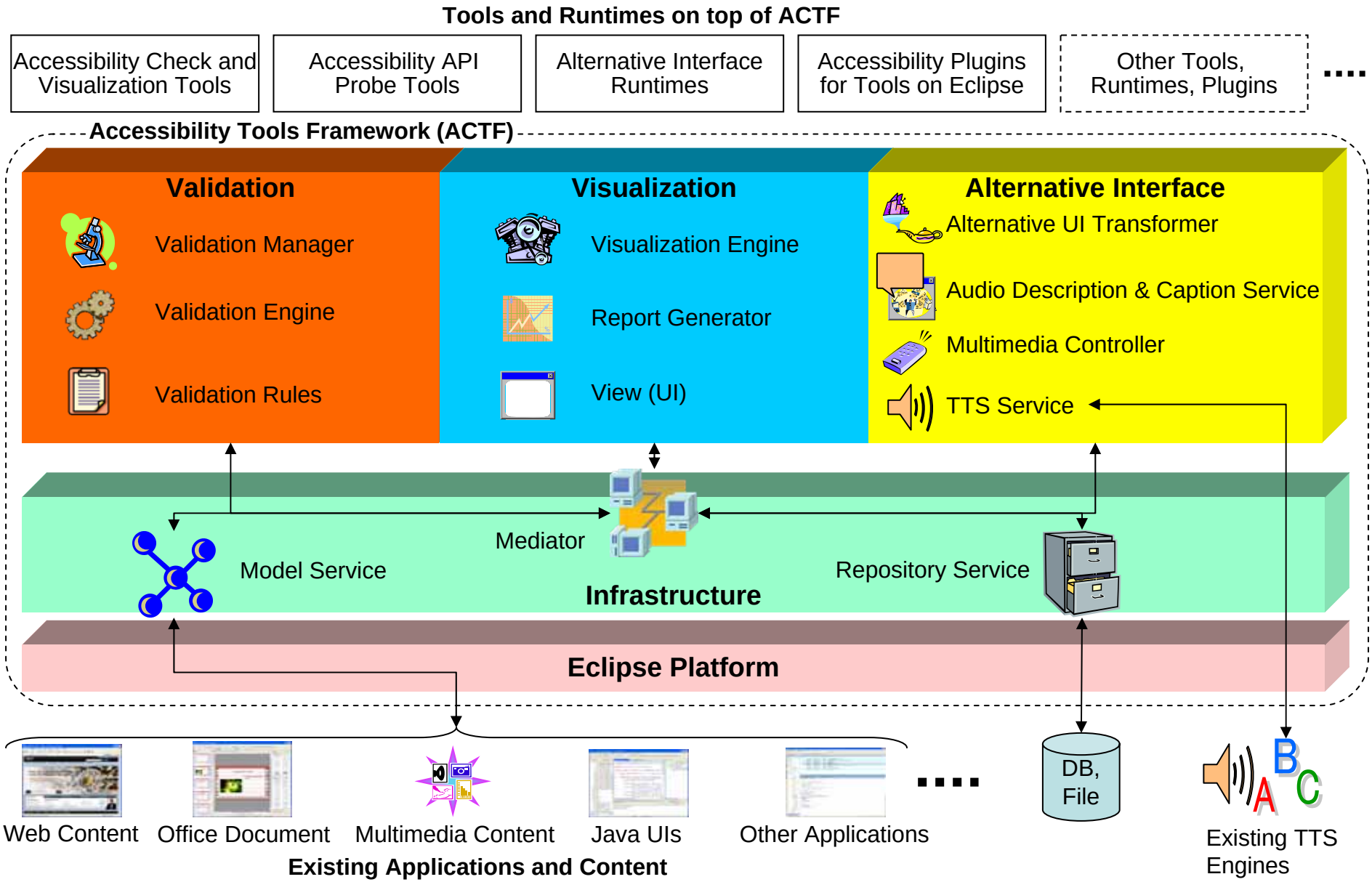
Architectural Issues

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



Tool Usability

- Easy integration into Eclipse by providing several extension points, re-usable 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.

- On-going enhancements and new use cases
  - New visualization tool that automatically analyses a Web page with respect to its visual complexity and overlays the complexity as heatmap.
  - New validation tool to validate pages such that they are both accessible and mobile friendly.
    - Please visit RIAM project page for more details (Reciprocal Interoperability of Accessible and Mobile Webs, <http://hcw.cs.manchester.ac.uk/research/riam/>)

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End-of-Life

- Since this is the first release, there is no feature that is end-of-life'd in this release.

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Bugzilla

- Statistics from October 2007 through September 2008
  - 129 bugs created (including initial contributions)
    - 95 were resolved
- Current Status
  - 34 bugs (including 10 enhancements)
    - 1 major bug: for exemplary tool (not for platform)

As of 25th Sep.
Need to update

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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

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Schedule

- 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

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Communities

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

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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 to mailing list, such as
    - W3C WAI, Mozilla Developers ML, WebAIM, Google Accessibility Group, etc.
  - Contact related companies and invite them to join the community
  - Provide more documentations and examples
- Start discussion with other Eclipse projects
  - Contribute HTML model components to WTP
  - Contribute Validation components to JDT, WTP
  - Discuss Eclipse Accessibility Guide with User Interface Best Practice Working Group
- Start implementation of check logics for coming accessibility guidelines with community
  - WCAG 2.0, new Section 508, etc.

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IP Issues

- The code has been committed by individuals who are either committers of the project themselves or their foundation.
- 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

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Thank you!

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