


Web Accessibility Analytics and Open Source Tools for Inspecting and Auditing Web Resources for Accessibility

The Session begins at 1:00 pm CST
We will be testing audio quality periodically

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By Jon Gunderson University of Illinois

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Slides Available for Download

Slides at:

<http://presentations.cita.illinois.edu/2014-04-29-webcon/>

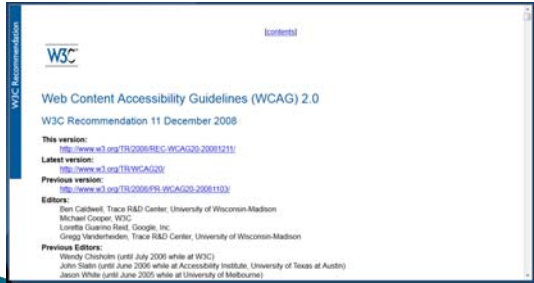
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Overview

- ▶ W3C Standards for Web Accessibility
- ▶ OAA Rulesets
- ▶ Getting Started
- ▶ AInspector Sidebar
- ▶ FAE 2.0 Testing Server
- ▶ Next Steps

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Web Content Accessibility Guidelines 2.0



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Accessible Rich Internet Applications (ARIA) 1.0



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HTML 5

W3C Recommendation

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W3C

Accessible Rich Internet Applications (WAI-ARIA) 1.0

W3C Recommendation 20 March 2014

This version:
<http://www.w3.org/TR/2014/REC-wai-aria-20140320/>

Latest version:
<http://www.w3.org/TR/wai-aria/>

Previous version:
<http://www.w3.org/TR/2014/RS-wai-aria-20140209/>

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Please check the [errata](#) for any errors or issues reported since publication.
 This document is also available as a [source code version](#).

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HTML 5: main element

4.4.14 The main element

Categories:
 Flow content.
 Palpable content.

Contexts in which this element can be used:
 Where flow content is expected, but with no article, aside, footer, header or nav element ancestors.

Content model:
 Flow content.

Content attributes:
 Global attributes

Tag omission in text/html:
 Neither tag is omissible

Allowed ARIA role attribute values:
 main role (default – do not set) or presentation.

Allowed ARIA state and property attributes:
 Global aria-* attributes

Any aria-* attributes applicable to the allowed roles:
 DOM interface:
 Uses HTMLElement

The main element represents the main content of the body of a document or application. The main content area consists of content that is directly related to or expands upon the central topic of a document or central functionality of an application.

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OpenAjax Evaluation Library Rulesets

[DOM Ruleset: WCAG - HTML5 - ARIA by Rule Category](#)

Ruleset: WCAG - HTML5 - ARIA by Rule Category

Ruleset View Options

Rule Categories
 WCAG 2.0 Guidelines

About Options

Overview
 Rulesets
 Usage Statistics
 Concepts and Terms
 Disclaimer
 Version History
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Ruleset Title

WCAG 2.0 Level A and AA requirements using semantics and accessibility features HTML5 and ARIA 1.0

Version

0.9.4 Beta

Author

OpenAjax Accessibility Working Group
 Description

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Getting Started: Conceptual Foundation

Basic Concepts

Rule

A low-level accessibility compliance requirement with numerous components, the most basic of which are a definition, an evaluation function, and result messages. When a rule is evaluated, it is assigned a rule result value.

Target resources

The set of HTML elements to which a particular rule applies. These include familiar elements such as div, img and input, as well as a pseudo-element designated as page, which is a placeholder for the document element. When a rule is evaluated, each of its target resources is assigned an element result value.

Ruleset

A set of rules that embodies specific standards compliance goals. Each rule within a ruleset is designated as either required or recommended, according to its relationship to the compliance goals of the ruleset.

Evaluation

The application of all evaluation functions of all rules in the selected ruleset to their corresponding target resources in a web page, and the subsequent collection of all evaluation results and messages, at both the rule and element levels, into a dataset.

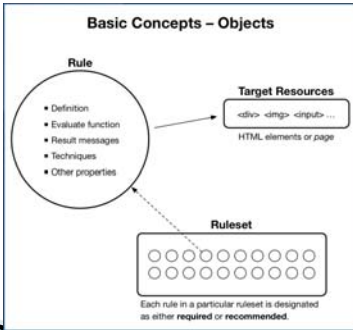
Rule result

The aggregate result of a rule evaluation with respect to its target resources (all of its target elements and/or the entire page).

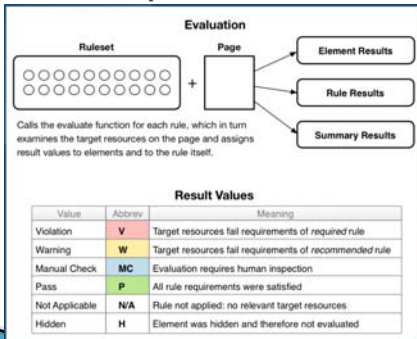
Element result

The result of a rule evaluation with respect to one of its target elements.

Basic Concepts – Objects



Basic Concepts – Actions



Demonstration: AInspector Sidebar for Firefox

[Get latest version of AInspector Sidebar from IT Access Website](#)

- ▶ Update your version of Firefox to the latest version to ensure compatibility
- ▶ Analyzing current web page DOM for accessibility features
- ▶ Organizes rules by Rule Categories and WCAG Guidelines
- ▶ Map rules to WCAG 2.0 Single A and AA requirements
- ▶ Highlighting element information

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Accessible Web Coding Practices

[Accessible Web Coding Practices](#)



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ARIA Resources

- ▶ [ARIA Specifications](#)
- ▶ [ARIA 1.0 Authoring Practices](#)
- ▶ [Landmark Example: DRES Website](#)
- ▶ [Widget Examples](#)
- ▶ [Dojo Toolkit Accessibility Support](#)
- ▶ [jQuery UI widgets that are accessible using ARIA](#)
- ▶ [jQuery UI Accessible demos](#)

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Next Steps

- ▶ Finish rules for WCAG 2.0 evaluation (10-12 more rules)
- ▶ Testing validity of rules
- ▶ Improving the rule messaging and references
- ▶ User testing
- ▶ Coding Practices: Design principles, resources and examples for each rule
- ▶ FAE Auditor (new tool): Campus wide evaluation of web resources

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Feature Prioritization

Alnspector Sidebar Features

- ▶ HTML Reports of evaluation results
- ▶ Delayed, timed or event triggered re-evaluations of web page
- ▶ Provide Manual Checking views
- ▶ Additional accessibility information in highlighted elements

FAE 2.0 Features

- ▶ Shibboleth authentication support
- ▶ Rule rating and commenting within FAE 2.0
- ▶ Analyzing password protected websites
- ▶ Report annotation

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You Can Help

Open source and community development to meet the accessibility needs of developers and designers

- ▶ Providing feedback on rules
- ▶ Editing rule messaging
- ▶ Identifying useful support resources that you use
- ▶ Developing supporting documentation and tutorials
- ▶ Developing coding practice examples
- ▶ Contributing to coding of tools

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Questions and Comments

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Thank you for participating!

NEXT SESSION IS JULY 24, 2014

High Quality Apps for Accessibility

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