Web Content Accessibility Guidelines (WCAG) 2.1 covers a wide range of recommendations for making Web content more accessible. Following these guidelines will make content accessible to a wider range of people with disabilities, including blindness and low vision, deafness and hearing loss, learning disabilities, cognitive limitations, limited movement, speech disabilities, photosensitivity, and combinations of these. These guidelines address accessibility of web content on desktops, laptops, tablets, and mobile devices. Following these guidelines will also often make your Web content more usable to users in general.

WCAG 2.1 success criteria are written as testable statements that are not technology-specific. Guidance about satisfying the success criteria in specific technologies, as well as general information about interpreting the success criteria, is provided in separate documents. See <u>Web</u> <u>Content Accessibility Guidelines (WCAG) Overview</u> for an introduction and links to WCAG technical and educational material.

WCAG 2.1 extends <u>Web Content Accessibility Guidelines 2.0</u> [[!WCAG20]], which was published as a W3C Recommendation December 2008. Content that conforms to WCAG 2.1 also conforms to WCAG 2.0, and therefore to policies that reference WCAG 2.0.

To comment, <u>file an issue in the W3C WCAG 2.1 GitHub repository</u>. Although the proposed Success Criteria in this document reference issues tracking discussion, the Working Group requests that public comments be filed as new issues, one issue per discrete comment. It is free to create a GitHub account to file issues. If filing issues in GitHub is not feasible, send email to <u>public-agwg-comments@w3.org</u> (comment archive).

Introduction

About This Draft

This is a draft of the guidelines, published to allow initial review of the structure, approach, and types of new success criteria. It does not yet include all the Success Criteria that have been proposed for WCAG 2.1, nor are the ones present necessarily in their final form.

Because WCAG 2.1 extends WCAG 2.0, all the Success Criteria from WCAG 2.0 are included. To differentiate new Success Criteria, they are labeled as "[New]" and displayed in a green box. In this draft the WCAG 2.0 Success Criteria remain unchanged. This does create some redundancy but the Working Group seeks review of the new Success Criteria at this time and will evaluate where to modify existing WCAG 2.0 Success Criteria later in the process.

Not all Success Criteria proposals are included in the above list. The Working Group maintains a <u>full</u> <u>set of current Success Criterion proposals</u> which is also available for review and consideration for inclusion in future drafts.

Background on WCAG 2

Web Content Accessibility Guidelines (WCAG) 2.1 defines how to make Web content more accessible to people with disabilities. Accessibility involves a wide range of disabilities, including visual, auditory, physical, speech, cognitive, language, learning, and neurological disabilities. Although these guidelines cover a wide range of issues, they are not able to address the needs of people with all types, degrees, and combinations of disability. These guidelines also make Web content more usable by older individuals with changing abilities due to aging and often improve usability for users in general.

WCAG 2.1 is developed through the <u>W3C process</u> in cooperation with individuals and organizations around the world, with a goal of providing a shared standard for Web content accessibility that meets the needs of individuals, organizations, and governments internationally. WCAG 2.1 builds on WCAG 2.0 [[!WCAG20]], which in turn built on WCAG 1.0 [[WAI-WEBCONTENT]] and is designed to apply broadly to different Web technologies now and in the future, and to be testable with a combination of automated testing and human evaluation. For an introduction to WCAG, see the Web Content Accessibility Guidelines (WCAG) Overview.

Web accessibility depends not only on accessible content but also on accessible Web browsers and other user agents. Authoring tools also have an important role in Web accessibility. For an overview of how these components of Web development and interaction work together, see:

- Essential Components of Web Accessibility
- User Agent Accessibility Guidelines (UAAG) Overview
- Authoring Tool Accessibility Guidelines (ATAG) Overview

Further introductory information about the structure of WCAG 2.0, inherited by WCAG 2.1, is available in the introduction to WCAG 2.0. For brevity in this draft it is not repeated here but can be found at:

- WCAG 2.0 Layers of Guidance
- WCAG 2.0 Supporting Documents
- Important Terms in WCAG 2.0

Conformance to WCAG 2.1

WCAG 2.1 uses the same conformance model as WCAG 2.0, which is described in the <u>Conformance</u> section. The conformance section has not been updated in this Working Draft to describe how WCAG 2.1 conformance builds upon WCAG 2.0 conformance. In particular, it is intended that sites that conform to WCAG 2.1 also conform to WCAG 2.0, which means they meet the requirements of any policies that reference WCAG 2.0, while also better meeting the needs of

users on the current Web. Conformance wording for this will be provided in a future Working Draft.

Future work on WCAG 2.1

The Accessibility Guidelines Working Group plans to continue developing WCAG 2.1 over the course of 2017. This work will primarily involve review and processing of the Success Criteria proposals, response to public feedback on this and later Working Drafts, and preparation of support materials similar to <u>Understanding WCAG 2.0</u> [[UNDERSTANDING-WCAG20]] and <u>Techniques for WCAG 2.0</u> [[WCAG20-TECHS]]. Early feedback on this work as soon as it is available is important, because the Working Group intends to begin finalization stages towards the end of the year.

Once the set of Success Criteria has been decided for WCAG 2.1, the Working Group will review the structure of the document. One goal will be to achieve the most clear backwards compatibility possible with WCAG 2.0; another will be to optimize the new Success Criteria to reduce duplication and increase clarity. The Working Group will also make final decisions about characteristics of the specification such as numbering and position of added Success Criteria. In preparation for the <u>Candidate Recommendation</u>, the Working Group will also re-evaluate testability and implementability of the Success Criteria given the technologies available at that time.

Later versions of Accessibility Guidelines

In parallel with WCAG 2.1, the Accessibility Guidelines Working Group is working on requirements for a 3.0 version of accessibility guidelines, developed by the <u>Silver Task Force</u>. The result of this work is expected to be a more substantial restructuring of web accessibility guidance than would be realistic for dot-releases of WCAG 2. The task force follows a research-focused, user-centered design methodology to produce the most effective and flexible outcome, including the roles of content authoring, user agent support, and authoring tool support. This is a multi-year effort, so WCAG 2.1 is needed as an interim measure to provide updated web accessibility guidance to reflect changes on the web since the publication of WCAG 2.0.

In order for WCAG 2.1 to achieve its goal to update web accessibility guidance in a time frame that is meaningful before the 3.0 project delivers results, WCAG 2.1 must be completed quickly. This inherently means that some proposed Success Criteria may prove too complex to include in WCAG 2.1, but nonetheless will be viewed as important accessibility guidance for current web content. The larger 3.0 project is expected to incorporate such guidance, but the Working Group could also decide that another set of guidelines between WCAG 2.1 and 3.0 is needed. In that case, a new version, WCAG 2.2, could be proposed. A decision to develop WCAG 2.2 will need to balance the benefits of providing additional accessibility guidance earlier, versus the opportunity cost the work could have on the more substantially restructured and comprehensive 3.0 project. The current <u>Accessibility Guidelines Working Group charter</u> states "The Working Group intends to produce updated guidance for accessibility on a regular interval, starting with WCAG 2.1. Depending on the outcome of the requirements development for the next major update to WCAG, it may be necessary

to pursue further dot-releases of WCAG until a major release is ready to be completed in time for a scheduled release date."

Principle Perceivable

Information and user interface components must be presentable to users in ways they can perceive.

Guideline Text Alternatives

Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.

Guideline Time-based Media

Provide alternatives for time-based media.

Guideline Adaptable

Create content that can be presented in different ways (for example simpler layout) without losing information or structure.

Guideline Distinguishable

Make it easier for users to see and hear content including separating foreground from background.

Principle Operable

User interface components and navigation must be operable.

Guideline Keyboard Accessible

Make all functionality available from a keyboard.

Guideline Enough Time

Provide users enough time to read and use content.

Guideline Seizures

Do not design content in a way that is known to cause seizures.

Guideline Navigable

Provide ways to help users navigate, find content, and determine where they are.

Guideline Pointer Accessible

[Proposed]

Make it easier for users to operate pointer functionality

Guideline Additional sensor inputs

[Proposed]

Principle Understandable

Information and the operation of user interface must be understandable.

Guideline Readable

Make text content readable and understandable.

Guideline Predictable

Make Web pages appear and operate in predictable ways.

Guideline Input Assistance

Help users avoid and correct mistakes.

Principle Robust

Content must be robust enough that it can be interpreted by by a wide variety of user agents, including assistive technologies.

Guideline Compatible

Maximize compatibility with current and future user agents, including assistive technologies.

This section lists requirements for conformance to WCAG 2.1. It also gives information about how to make conformance claims, which are optional. Finally, it describes what it means to be accessibility supported, since only accessibility-supported ways of using technologies can be relied upon for conformance. <u>Understanding Conformance</u> includes further explanation of the accessibility-supported concept.

Conformance Requirements

In order for a Web page to conform to WCAG 2.1, all of the following conformance requirements must be satisfied:

Conformance Level

One of the following levels of conformance is met in full.

- For Level A conformance (the minimum level of conformance), the Web page satisfies all the Level A Success Criteria, or a conforming alternate version is provided.
- For Level AA conformance, the Web page satisfies all the Level A and Level AA Success Criteria, or a Level AA conforming alternate version is provided.
- For Level AAA conformance, the Web page satisfies all the Level A, Level AA and Level AAA Success Criteria, or a Level AAA conforming alternate version is provided.

Although conformance can only be achieved at the stated levels, authors are encouraged to report (in their claim) any progress toward meeting success criteria from all levels beyond the achieved

level of conformance.

It is not recommended that Level AAA conformance be required as a general policy for entire sites because it is not possible to satisfy all Level AAA Success Criteria for some content.

Full pages

Conformance (and conformance level) is for full Web page(s) only, and cannot be achieved if part of a Web page is excluded.

For the purpose of determining conformance, alternatives to part of a page's content are considered part of the page when the alternatives can be obtained directly from the page, e.g., a long description or an alternative presentation of a video.

Authors of Web pages that cannot conform due to content outside of the author's control may consider a <u>Statement of Partial Conformance</u>.

Complete processes

When a Web page is one of a series of Web pages presenting a process (i.e., a sequence of steps that need to be completed in order to accomplish an activity), all Web pages in the process conform at the specified level or better. (Conformance is not possible at a particular level if any page in the process does not conform at that level or better.)

An online store has a series of pages that are used to select and purchase products. All pages in the series from start to finish (checkout) conform in order for any page that is part of the process to conform.

Only Accessibility-Supported Ways of Using Technologies

Only accessibility-supported ways of using technologies are relied upon to satisfy the success criteria. Any information or functionality that is provided in a way that is not accessibility supported is also available in a way that is accessibility supported. (See <u>Understanding accessibility support</u>.)

Non-Interference

If technologies are used in a way that is not accessibility supported, or if they are used in a nonconforming way, then they do not block the ability of users to access the rest of the page. In addition, the Web page as a whole continues to meet the conformance requirements under each of the following conditions:

- 1. when any technology that is not relied upon is turned on in a user agent,
- 2. when any technology that is not relied upon is turned off in a user agent, and
- 3. when any technology that is not relied upon is not supported by a user agent

In addition, the following success criteria apply to all content on the page, including content that is not otherwise relied upon to meet conformance, because failure to meet them could interfere with any use of the page:

- 1.4.2 Audio Control,
- 2.1.2 No Keyboard Trap,
- 2.3.1 Three Flashes or Below Threshold, and
- 2.2.2 Pause, Stop, Hide.

If a page cannot conform (for example, a conformance test page or an example page), it cannot be included in the scope of conformance or in a conformance claim.

For more information, including examples, see Understanding Conformance Requirements.

Conformance Claims (Optional)

Conformance is defined only for Web pages. However, a conformance claim may be made to cover one page, a series of pages, or multiple related Web pages.

Required Components of a Conformance Claim

Conformance claims are **not required**. Authors can conform to WCAG 2.1 without making a claim. However, if a conformance claim is made, then the conformance claim **must** include the following information:

- 1. Date of the claim
- Guidelines title, version and URI "Web Content Accessibility Guidelines 2.1 at <u>https://www.w3.org/TR/WCAG21/</u>" In WCAG 2.0 this was a dated URI, which may need to be adjusted when this becomes a Rec.
- 3. Conformance level satisfied: (Level A, AA or AAA)
- 4. A concise description of the Web pages, such as a list of URIs for which the claim is made, including whether subdomains are included in the claim.

The Web pages may be described by list or by an expression that describes all of the URIs included in the claim.

Web-based products that do not have a URI prior to installation on the customer's Web site

may have a statement that the product would conform when installed.

5. A list of the Web content technologies relied upon.

If a conformance logo is used, it would constitute a claim and must be accompanied by the required components of a conformance claim listed above.

Optional Components of a Conformance Claim

In addition to the required components of a conformance claim above, consider providing additional information to assist users. Recommended additional information includes:

- A list of success criteria beyond the level of conformance claimed that have been met. This information should be provided in a form that users can use, preferably machine-readable metadata.
- A list of the specific technologies that are " used but not relied upon."
- A list of user agents, including assistive technologies that were used to test the content.
- Information about any additional steps taken that go beyond the success criteria to enhance accessibility.
- A machine-readable metadata version of the list of specific technologies that are relied upon.
- A machine-readable metadata version of the conformance claim.

Refer to <u>Understanding Conformance Claims</u> for more information and example conformance claims.

Refer to <u>Understanding Metadata</u> for more information about the use of metadata in conformance claims.

Statement of Partial Conformance - Third Party Content

Sometimes, Web pages are created that will later have additional content added to them. For example, an email program, a blog, an article that allows users to add comments, or applications supporting user-contributed content. Another example would be a page, such as a portal or news site, composed of content aggregated from multiple contributors, or sites that automatically insert content from other sources over time, such as when advertisements are inserted dynamically.

In these cases, it is not possible to know at the time of original posting what the uncontrolled content of the pages will be. It is important to note that the uncontrolled content can affect the accessibility of the controlled content as well. Two options are available:

1. A determination of conformance can be made based on best knowledge. If a page of this type is monitored and repaired (non-conforming content is removed or brought into conformance)

within two business days, then a determination or claim of conformance can be made since, except for errors in externally contributed content which are corrected or removed when encountered, the page conforms. No conformance claim can be made if it is not possible to monitor or correct non-conforming content;

OR

- 2. A "statement of partial conformance" may be made that the page does not conform, but could conform if certain parts were removed. The form of that statement would be, "This page does not conform, but would conform to WCAG 2.1 at level X if the following parts from uncontrolled sources were removed." In addition, the following would also be true of uncontrolled content that is described in the statement of partial conformance:
 - 1. It is not content that is under the author's control.
 - 2. It is described in a way that users can identify (e.g., they cannot be described as "all parts that we do not control" unless they are clearly marked as such.)

Statement of Partial Conformance - Language

A "statement of partial conformance due to language" may be made when the page does not conform, but would conform if accessibility support existed for (all of) the language(s) used on the page. The form of that statement would be, "This page does not conform, but would conform to WCAG 2.1 at level X if accessibility support existed for the following language(s):"

Glossary

Change Log

The full commit history to WCAG 2.1 is available.

Substantive changes since the last public working draft

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Other substantive changes since the first public working draft

- 2017-03-16: Remove Success Criteria that were listed as "proposals" in the First Public Working Draft but not yet past the Working Group consensus process.
- 2017-04-13: Added definition of easily available.
- 2017-04-14: Accepted new version of Accidental Activation, changing "Timing of event is

essential..." to "Down-event activation event is essential..." and removing note about applicability when AT that remaps touch gestures is not turned on.

- 2017-04-14: Added content that had been omitted from WCAG 2.0 Success Criteria Error Prevention (Legal, Financial, Data), Error Prevention (All), and Visual Presentation.
- 2017-04-19: Added definition of essential (which had been omitted from WCAG 2.0 terms) and css pixel.

Acknowledgements