International Standard

ISO/IEC 40500

Information technology — W3C Web Content Accessibility Guidelines (WCAG) 2.2

Technologies de l'information — Règles pour l'accessibilité des contenus Web (WCAG) 2.2

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html. In the IEC, see www.iec.ch/understanding-standards.

This document was prepared by W3C (as WCAG 2.2) and drafted in accordance with its editorial rules. It was adopted, under the JTC 1 PAS procedure, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

This second edition cancels and replaces the first edition (ISO/IEC 40500:2012), which has been technically revised.

The main changes are as follows:

— see the full commit history to WCAG 2.2.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

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Introduction

This section is non-normative.

Background on WCAG 2

Web Content Accessibility Guidelines (WCAG) 2.2 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 2.2 is developed through the W3C process 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 2.2 builds on WCAG 2.0 [*WCAG20*] and WCAG 2.1 [*WCAG21*], 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.

Significant challenges were encountered in defining additional criteria to address cognitive, language, and learning disabilities, including a short timeline for development as well as challenges in reaching consensus on testability, implementability, and international considerations of proposals. Work will carry on in this area in future versions of WCAG. We encourage authors to refer to our supplemental guidance on improving inclusion for people with disabilities, including learning and cognitive disabilities, people with low-vision, and more.

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**

Where this document refers to WCAG 2 it is intended to mean any and all versions of WCAG that start with 2.

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WCAG 2 Layers of Guidance

The individuals and organizations that use WCAG vary widely and include Web designers and developers, policy makers, purchasing agents, teachers, and students. In order to meet the varying needs of this audience, several layers of guidance are provided including overall *principles*, general *guidelines*, testable *success criteria* and a rich collection of *sufficient techniques*, *advisory techniques*, and *documented common failures* with examples, resource links and code.

- **Principles** - At the top are four principles that provide the foundation for Web accessibility: *perceivable, operable, understandable, and robust*. See also Understanding the Four Principles of Accessibility.
- **Guidelines** - Under the principles are guidelines. The 13 guidelines provide the basic goals that authors should work toward in order to make content more accessible to users with different disabilities. The guidelines are not testable, but provide the framework and overall objectives to help authors understand the success criteria and better implement the techniques.
- **Success Criteria** - For each guideline, testable success criteria are provided to allow WCAG 2.2 to be used where requirements and conformance testing are necessary such as in design specification, purchasing, regulation, and contractual agreements. In order to meet the needs of different groups and different situations, three levels of conformance are defined: A (lowest), AA, and AAA (highest). Additional information on WCAG levels can be found in Understanding Levels of Conformance.
- **Sufficient and Advisory Techniques** - For each of the *guidelines* and *success criteria* in the WCAG 2.2 document itself, the working group has also documented a wide variety of *techniques*. The techniques are informative and fall into two categories: those that are *sufficient* for meeting the success criteria and those that are *advisory*. The advisory techniques go beyond what is required by the individual success criteria and allow authors to better address the guidelines. Some advisory techniques address accessibility barriers that are not covered by the testable success criteria. Where common failures are known, these are also documented. See also Sufficient and Advisory Techniques in Understanding WCAG 2.2.

All of these layers of guidance (principles, guidelines, success criteria, and sufficient and advisory techniques) work together to provide guidance on how to make content more accessible. Authors are encouraged to view and apply all layers that they are able to, including the advisory techniques, in order to best address the needs of the widest possible range of users.

Note that even content that conforms at the highest level (AAA) will not be accessible to individuals with all types, degrees, or combinations of disability, particularly in the cognitive, language, and learning areas. Authors are encouraged to consider the full range of techniques, including the advisory techniques, Making Content Usable for People with Cognitive and Learning Disabilities, as well as to seek relevant advice about current best practice to ensure that Web content is accessible, as far as possible, to this community. Metadata may assist users in finding content most suitable for their needs.

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WCAG 2.2 Supporting Documents

The WCAG 2.2 document is designed to meet the needs of those who need a stable, referenceable technical standard. Other documents, called supporting documents, are based on the WCAG 2.2 document and address other important purposes, including the ability to be updated to describe how WCAG would be applied with new technologies. Supporting documents include:

1. **How to Meet WCAG 2.2** - A customizable quick reference to WCAG 2.2 that includes all of the guidelines, success criteria, and techniques for authors to use as they are developing and evaluating Web content. This includes content from WCAG 2.0, 2.1 2.2 and can be filtered in many ways to help authors focus on relevant content.
2. **Understanding WCAG 2.2** - A guide to understanding and implementing WCAG 2.2. There is a short "Understanding" document for each guideline and success criterion in WCAG 2.2 as well as key topics.
3. **Techniques for WCAG 2.2** - A collection of techniques and common failures, each in a separate document that includes a description, examples, code and tests.
4. **The WCAG 2 Documents** - A brief introduction to the WCAG 2 supporting documents and supplemental guidance.
5. **What's New in WCAG 2.2** introduces the new success criteria with persona quotes that illustrate the accessibility issues.

See Web Content Accessibility Guidelines (WCAG) Overview for a description of the WCAG 2.2 supporting material, including education resources related to WCAG 2. Additional resources covering topics such as the business case for Web accessibility, planning implementation to improve the accessibility of Web sites, and accessibility policies are listed in WAI Resources.

Requirements for WCAG 2.2

WCAG 2.2 meets a set of requirements for WCAG 2.2 which, in turn, inherit requirements from previous WCAG 2 versions. Requirements structure the overall framework of guidelines and ensure backwards compatibility. The Working Group also used a less formal set of acceptance criteria for success criteria, to help ensure success criteria are similar in style and quality to those in WCAG 2.0. These requirements constrained what could be included in WCAG 2.2. This constraint was important to preserve its nature as a dot-release of WCAG 2.

Comparison with WCAG 2.1

WCAG 2.2 was initiated with the goal to continue the work of WCAG 2.1: Improving accessibility guidance for three major groups: users with cognitive or learning disabilities, users with low vision, and users with disabilities on mobile devices. Many ways to meet these needs were proposed and evaluated, and a set of these were refined by the Working Group. Structural requirements inherited from WCAG 2.0, clarity and impact of proposals, and timeline led to the final set of success criteria included in this version. The Working Group considers that WCAG 2.2 incrementally advances web content accessibility guidance for all these areas, but underscores that not all user needs are met by these guidelines.

WCAG 2.2 builds on and is backwards compatible with WCAG 2.1, meaning web pages that conform to WCAG 2.2 are at least as accessible as pages that conform to WCAG 2.1. Requirements have been added that build on 2.1 and 2.0. WCAG 2.2 has removed one success criterion, 4.1.1 Parsing. Authors that are required by policy to conform with WCAG 2.0 or 2.1 will be able to update content to WCAG 2.2, but

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may need to continue to test and report 4.1.1. Authors following more than one version of the guidelines should be aware of the following additions.

New Features in WCAG 2.2

WCAG 2.2 extends WCAG 2.1 by adding new success criteria, definitions to support them, and guidelines to organize the additions. This additive approach helps to make it clear that sites which conform to WCAG 2.2 also conform to WCAG 2.1. The Accessibility Guidelines Working Group recommends that sites adopt WCAG 2.2 as their new conformance target, even if formal obligations mention previous versions, to provide improved accessibility and to anticipate future policy changes.

The following success criteria are new in WCAG 2.2:

- 2.4.11 Focus Not Obscured (Minimum) (AA)
- 2.4.12 Focus Not Obscured (Enhanced) (AAA)
- 2.4.13 Focus Appearance (AAA)
- 2.5.7 Dragging Movements (AA)
- 2.5.8 Target Size (Minimum) (AA)
- 3.2.6 Consistent Help (A)
- 3.3.7 Redundant Entry (A)
- 3.3.8 Accessible Authentication (Minimum) (AA)
- 3.3.9 Accessible Authentication (Enhanced) (AAA)

The new success criteria may reference new terms that have also been added to the glossary and form part of the normative requirements of the success criteria.

WCAG 2.2 also introduces new sections detailing aspects of the specification which may impact privacy and security.

Numbering in WCAG 2.2

In order to avoid confusion for implementers for whom backwards compatibility to WCAG 2 versions is important, new success criteria in WCAG 2.2 have been appended to the end of the set of success criteria within their guideline. This avoids the need to change the section number of success criteria from WCAG 2, which would be caused by inserting new success criteria between existing success criteria in the guideline, but it means success criteria in each guideline are no longer grouped by conformance level. The order of success criteria within each guideline does not imply information about conformance level; only the conformance level indicator (A / AA / AAA) on the success criterion itself indicates this. The WCAG 2.2 Quick Reference will provide a way to view success criteria grouped by conformance level, along with many other filter and sort options.

Conformance to WCAG 2.2

WCAG 2.2 uses the same conformance model as WCAG 2.0. It is intended that sites that conform to WCAG 2.2 also conform to WCAG 2.0 and WCAG 2.1, which means they meet the requirements of any policies that reference WCAG 2.0 or WCAG 2.1, while also better meeting the needs of users on the current Web.

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Later Versions of Accessibility Guidelines

In parallel with WCAG 2.2, the Accessibility Guidelines Working Group is developing another major version of accessibility guidelines. 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 work 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 2.2 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. The Working Group might also develop additional interim versions, continuing with WCAG 2.2, on a similar short timeline to provide additional support while the major version is completed.

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Information technology — W3C Web Content Accessibility Guidelines (WCAG) 2.2

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1. Perceivable

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

Guideline 1.1 Text Alternatives

Understanding Text Alternatives |
How to Meet 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.

Success Criterion 1.1.1 Non-text Content

Understanding Non-text Content |
How to Meet Non-text Content

(Level A)

All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below.

Controls, Input

> If non-text content is a control or accepts user input, then it has a name that describes its purpose. (Refer to Success Criterion 4.1.2 for additional requirements for controls and content that accepts user input.)

Time-Based Media

> If non-text content is time-based media, then text alternatives at least provide descriptive identification of the non-text content. (Refer to Guideline 1.2 for additional requirements for media.)

Test

> If non-text content is a test or exercise that would be invalid if presented in text, then text alternatives at least provide descriptive identification of the non-text content.

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