

Knowbility

Digital Equity for
people with disabilities

WCAG 2.2 is Coming

What you should know

Today's agenda

- Thanks for having me!
 - Sharron Rush / Knowbility ED / srush@knowbility.org
- Background on WCAG
- WCAG 2.2
 - Process/Timeline
 - Walk through proposed changes
- Discussion



WCAG background

- Acronym for Web Content Accessibility Guidelines
- Created, maintained at W3C - World Wide Web Consortium
- One of several Working Group (WG) products
- Developed by member consensus
- First published in 1998

Evolution of WCAG

- Web Content Accessibility Guidelines (WCAG) developed by consensus among Working Group member representatives
- WCAG 1 in 1998 was series of 39 Checkpoints - Priority 1, 2, or 3
- WCAG 2 in 2008 changed structure to Success Criteria (SC). Organized within Guidelines aligned to Principles of Accessibility
- Rather than Priority checkpoints, Success Criteria were assigned Conformance Levels A, AA, and AAA
- WCAG 2.1 retained structure and wording as previous, added new SCs.

WCAG 2.2 follows that model

- Current version in Candidate Recommendation
- Final phase before WCAG 2.2 becomes W3C Recommendation
- Proposes 9 new Success Criteria
- Removes one - SC 4.1.1 Parsing

9 New Success Criteria:

Level A

- 3.2.6 Consistent Help
- 3.3.7 Redundant Entry

Level AA

- 2.4.11 Focus Appearance
- 2.4.12 Focus Not Obscured (Minimum)
- 2.5.7 Dragging Movements
- 2.5.8 Target Size (Minimum)
- 3.3.7 Accessible Authentication

Level AAA

- 2.4.13 Focus Not Obscured (Enhanced)
- 3.3.8 Accessible Authentication (No Exception)

WCAG 2 Principles: POUR

I can perceive it.

I can use it.

I can grasp it.

I can access it.



1. Perceivable



2. Operable



3. Understandable



4. Robust

Principle > Guideline > Success Criteria

1. Perceivable (4 Guidelines)

- 1.x Guideline
- 1.x.x Success Criteria

2. Operable (5 Guidelines)

- 2.x Guideline
- 2.x.x Success Criteria

3. Understandable (3 Guidelines)

- 3.x Guideline
- 3.x.x Success Criteria

4. Robust (1 Guideline)

- 4.x Guideline
- 4.x.x Success Criteria

How the SC Levels work

- Level A = basic minimum requirement. No claims of accessibility can be made without conformance to all SCs in this category.
- Level AA = most commonly used standard for general conformance. US Section 508, EU Web Accessibility Directive and those of many other countries align to WCAG 2.x Level AA
- Level AAA = will include more disability categories and needs.

Each subsequent Level must meet all previous requirements

New WCAG 2.2 SCs are being tested

- WCAG Success Criteria were conceived as testable
- Before WCAG 2.2 can proceed through W3C process, Recommendations must be implemented
- [How WAI develops standards through W3C Process](#)

WCAG 2.1 is current global standard

- Basis for legal responsibility throughout the world
 - Section 508 in US – (Texas Administrative Code 206 aligns)
 - European Union Web Accessibility Directive
 - [Global policies related to/based on WCAG](#)
- WCAG 2.2 will carry the language and structure forward
- Members are working toward a new structure and user focus for WCAG 3 (not expected for 5 years or more)

Extensive supports at [w3.org/wai](https://www.w3.org/wai)

- Related WG products:
 - ATAG – Authoring Tool Accessibility Guidelines
 - UAAG – User Agent Accessibility Guidelines
 - WAI-ARIA – Accessible Rich Internet Applications
- Goal is for all ATAG and UAAG work to be continued by WCAG Working Group. Acronym will remain WCAG for “W3C Accessibility Guidelines”
- Understanding documents
- Techniques, tutorials, planning guides and more

How will WCAG 2.2 Change the Rules?

Changes since 1998

- WCAG 1: 1998, 38 Checkpoints, designated as Priority 1, 2, or 3
- WCAG 2.0: 2008, changed structure
 - Principles > Guidelines > Success Criteria
 - 61 testable Success Criteria
- WCAG 2.1: 2018 – now. Backward compatible to WCAG 2.0
 - 78 Success Criteria
- WCAG 2.2: 2023 (expected) also backward compatible
 - Added 9, removed 1
 - 86 Success Criteria

Expected launch by end of 2023

- Final stage of W3C Process – Candidate Recommendation
- During this phase, SCs are tested to see if they are feasible and testable
- Will remove 1 Success Criteria (deemed obsolete) and add 9 new
- Expect gradual adoption by policy makers around the world

Organized around POUR Principles

1. Perceivable

- 1.1 Text Alternatives
- 1.2 Time-based Media
- 1.3 Adaptable
- 1.4 Distinguishable

2. Operable

- 2.1 Keyboard Accessible
- 2.2 Enough Time
- 2.3 Seizures and Physical Reactions

2.4 Navigable

- 2.5 Input Modalities

3. Understandable

- 3.1 Readable
- 3.2 Predictable
- 3.3 Input Assistance

4. Robust

- 4.1 Compatible



Additions to Guideline 2.4 : Navigable

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

Added: 2.4.11 Focus Not Obscured Minimum (AA)

“When a user interface component receives keyboard focus, the component is not entirely hidden due to author-created content.”

Who is for/what does it mean?

- Cognitive disabilities, sighted user of keyboard only, voice input
- Content that might overlap focused items are sticky footers, sticky headers, and non-modal dialogs. As a user tabs, this type of content can obscure the item receiving focus, along with its focus indicator.
- SC 2.4.11 requires that, when an interactive component receives keyboard focus, it must remain at least partially visible along with focus indication.
- [Understanding SC 2.4.11](#)

Added: 2.4.12 Focus Not Obscured Enhanced (AAA)

“When a user interface component receives keyboard focus, no part of the component is hidden by author-created content.”

Who is for/what does it mean?

- Serves same disabilities group
- SC 2.4.12 requires that, when an interactive component receives keyboard focus, it must remain **entirely** visible.
- [Understanding SC 2.4.12](#)

Added: SC 2.4.13 Focus Appearance (AAA)

“When the keyboard focus indicator is visible, an area of the focus indicator meets all the following:

- is at least as large as the area of a 2 CSS pixel thick perimeter of the unfocused component or sub-component, and
- has a contrast ratio of at least 3:1 between the same pixels in the focused and unfocused states.”

There are listed exceptions

Who is for/what does it mean?

- People with low vision, cognitive issues, contrast sensitivities may not be able to see small changes in displayed text and images
- Authors are encouraged to provide keyboard focus indication that is clearly visible and discernible.
- Related to SC 2.4.7 Focus Visible that requires focus indication. SC 2.4.13 further defines what makes focus visible to certain groups
- [Understanding SC 2.4.13](#)

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Additions to Guideline 2.5 : Input Modalities

“Make it easier for users to operate functionality through various inputs beyond keyboard.”

Added: SC 2.5.7 Dragging Movements (AA)

“All functionality that uses a dragging movement for operation can be achieved by a single pointer without dragging, unless dragging is essential or the functionality is determined by the user agent and not modified by the author.”

Who is it for/what does it mean?

- People with tremors, limited hand strength or mobility, and using other devices
- Authors must provide alternatives to drag and drop that are not device dependent.
- Examples: slider that can also move with inputting numbers on the scale; a map where you can drag focus and also use the arrow key to move focus in all directions
- [Understanding SC 2.5.7](#)

Added SC 2.5.8 Target Size (Minimum) (AA)

The size of the target for pointer inputs is at least 24 by 24 CSS pixels, except where:

- **Spacing:** Undersized targets (less than 24 x 24) are positioned so that if a 24 CSS pixel diameter circle is centered on the bounding box of each, the circles do not intersect another target or the circle for another undersized target;
- **Equivalent:** The function can be achieved through a different control on the same page that meets this criterion;
- **Inline:** The target is in a sentence or its size is otherwise constrained by the line-height of non-target text;
- **User agent control:** The size of the target is determined by the user agent and is not modified by the author;
- **Essential:** A particular presentation of the target is essential or is legally required for the information being conveyed.

Who is it for/what does it mean?

- Disabilities addressed by this requirement include hand tremors, spasticity, and quadriplegia.
- Past guidance has been for “sufficient” target size. This SC defines and further specifies use cases and requirements. This Success Criterion defines a *minimum size* and, if this can't be met, a *minimum spacing*.
- [Understanding SC 2.5.8 Target Size \(Minimum\)](#)

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Additions to Guideline 3.2: Predictable

“Make Web pages appear and operate in predictable ways.”

Added: SC 3.2.6 Consistent Help (A)

If a web page contains any of the following help mechanisms, and those mechanisms are repeated on multiple web pages within a set of web pages, they occur in the same relative order to other page content, unless a change is initiated by the user:

- Human contact details;
- Human contact mechanism;
- Self-help option;
- A fully automated contact mechanism.

Who is it for/what does it mean?

- People with cognitive impairments, brain injury, intellectual disabilities and (imo) everyone.
- Does not require authors to provide help resources but only that, if they ARE provided, the mechanism remains consistent and easy to find.
- To succeed in this SC, simply put help in the same place when it is on multiple pages.
- [Understanding Consistent Help](#)

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Additions to Guideline 3.3: Input Assistance

“Help users avoid and correct mistakes.”

Added SC 3.3.7 Redundant Entry (A)

Information previously entered by or provided to the user that is required to be entered again in the same process is either:

- auto-populated, or
- available for the user to select.

Except when:

- re-entering the information is essential,
- the information is required to ensure the security of the content, or
- previously entered information is no longer valid.

Who is it for/what does it mean?

- People with memory loss, cognitive disabilities. Users with learning, and cognitive disabilities are highly susceptible to mental fatigue.
- Authors are required to provide information that was previously entered by the user or by the system, rather than requiring the user to remember and re-enter information from a previous step.
- Does not add a requirement to store information between sessions.
- Browser stored prompts are insufficient to meet this requirement.
- [Understanding Redundant Entry](#)

Added: SC 3.3.8 Accessible Authentication (Minimum) (AA)

A cognitive function test (such as remembering a password or solving a puzzle) is not required for any step in an authentication process unless that step provides at least one of the following:

- Alternative: Another authentication method that does not rely on a cognitive function test.
- Mechanism: A mechanism is available to assist the user in completing the test.
- Object Recognition: The cognitive function test is to recognize objects.
- Personal Content: The cognitive function test is to identify non-text content the user provided to the website.

Who is it for/what does it mean?

- Some people with cognitive disabilities may have difficulty trying to solve puzzles, memorize a username and password, or retype one-time passcodes.
- Memorizing a username and password (or transcribing it manually) places a very high or impossible burden upon people with certain cognitive disabilities.
- Don't make people solve, recall, or transcribe something to log in.
- Offer alternatives ways to authenticate the user identity.
- [Understanding Accessible Authentication \(Minimum\)](#)

Added 3.3.9 Accessible Authentication (Enhanced) (AAA)

A cognitive function test (such as remembering a password or solving a puzzle) is not required for any step in an authentication process unless that step provides at least one of the following:

- Alternative: Another authentication method that does not rely on a cognitive function test.
- Mechanism: A mechanism is available to assist the user in completing the cognitive function test.

Who is it for/what does it mean?

- Serves the same group of those with cognitive disabilities. Provides fewer exceptions, work arounds to meet the requirement
- Removes the exceptions for objects and user-provided content.
- Result: People with cognitive issues relating to memory, reading (for example, dyslexia), numbers (for example, dyscalculia), or perception-processing limitations can authenticate regardless of cognitive abilities.
- [Understanding Accessible Authentication \(Enhanced\)](#)

Removed: SC 4.1.1 Parsing (Level A)

“In content implemented using markup languages, elements have complete start and end tags, elements are nested according to their specifications, elements do not contain duplicate attributes, and any IDs are unique, except where the specifications allow these features.”

Rationale:

Now considered obsolete since modern browsers and assistive tech will compensate.

In summary

- WCAG 2.1

- Current standard
- Added to WCAG 2.0
 - 5 Level A Success Criteria
 - 7 Level AA Success Criteria
 - 5 Level AAA Success Criteria
- Supported by laws around the world, VPATs and ACRs
- Reflected in Section 508, Texas Administrative Code

- WCAG 2.2

- Emerging, W3C Recommendation
- Expected by EOY 2023
- Adds 9 new SCs to WCAG 2.1
 - 2 Level A Success Criteria
 - 4 Level AA Success Criteria
 - 3 Level AAA Success Criteria
- Removes 1 Level A SC due to obsolescence

Let's Talk!



Thank you!

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