



## The Must-Have WCAG Checklist

A practical resource for understanding the latest Web Content Accessibility Guidelines and reviewing the accessibility of your website, web content, and web applications



# Table of contents

What is WCAG?	3
WCAG 101	4
POUR principles	4
Comparing WCAG versions What's new in 2.2?	
WCAG conformance levels	
How high should you aim?	
WCAG and ADA compliance	e
Start testing	
Automated testing	
Ad-hoc approach	
Integrated approach Manual and functional testing	
WCAG 2.1 and 2.2 checklist	
Level A	
 Level AA	
 Level AAA	
Let's get started	21



### What is WCAG?

The Web Content Accessibility Guidelines (WCAG) are a set of technical standards that, when followed, improve the accessibility of web content, websites, and web applications for people with a wide range of disabilities—including auditory, cognitive, neurological, physical, speech, and visual disabilities. Many of the guidelines can also be used to improve mobile applications, self-service kiosk software, and other digital experiences.



WCAG was created by the Web Accessibility Initiative of the <u>W3C</u>, the World <u>Wide Web Consortium</u>, which is a global community of accessibility experts striving to make the internet as inclusive as possible. WCAG provides a single, common, global standard for web accessibility, enabling authors, designers, and developers to avoid, and fix, barriers that users with disabilities may encounter online. Importantly, following WCAG also helps organizations comply with various legal mandates, like the <u>Americans with Disabilities Act (ADA)</u>, <u>Section 508 of</u> <u>the Rehabilitation Act of 1973</u>, the <u>Accessibility for Ontarians with Disabilities</u> <u>Act (AODA)</u>, the European Accessibility Act, and others. In some cases, to comply with legal requirements, web content must conform with WCAG standards.

So how well does your web content, website, or application conform with WCAG?

This practical guide explains the different WCAG principles, versions, and conformance levels, and how to test for WCAG conformance. It also includes an interactive WCAG checklist to help you evaluate your current state of accessibility.



### WCAG 101

Before reviewing your web content for WCAG conformance, it's important to understand the WCAG principles, the versions of WCAG that have been released, and the different conformance levels.

#### **POUR** principles

WCAG is organized by four main principles, which state that content must be perceivable, operable, understandable, and robust. They are often referred to by the acronym POUR. These principles can be applied to any kind of digital product or service, no matter the underlying technology.

#### Perceivable

Information and user interface components must be presentable to users in ways they can perceive. For example, it's important to present information that can be perceived in different ways, where a user can adjust color contrast or font size, or view captions for videos.

### Im

#### Operable

User interface components and navigation must be functional for users in ways they can operate. For example, a user must be able to perform required interactions using a keyboard or voice commands, not just using a mouse.

### $\sum_{i=1}^{n}$

#### Understandable

Information and user interface operation must be understandable. For example, information and instructions should be clear and navigation methods should be easy to understand and use.



#### Robust

Content must be robust enough that it can interpreted reliably by a wide variety of users and assisitve technologies. As technologies evolve, code and content should remain accessible for users of common and current assistive devices and tools.

#### **Comparing WCAG versions**

WCAG exists in various versions: 1.0, 2.0, 2.1, and 2.2. Updated versions are released to keep pace with changes in technology. The first version, known as WCAG 1.0, was released in 1999 and is no longer recommended for use. A later version, WCAG 2.0, came out in 2008. In 2018, the W3C released WCAG 2.1, which builds upon the guidelines in 2.0, introducing additional success criteria related to newer technologies, and addressing a broader range of disability-related needs.

The latest version, WCAG 2.2, was released in 2023. The various versions of WCAG are backwards compatible, meaning the more recent version incorporates the success criteria from the earlier version, with additions. Therefore, if content conforms with WCAG 2.2, it also conforms with WCAG 2.1, and so on.

#### What's new in WCAG 2.2?

WCAG 2.2 builds on the improvements in WCAG 2.1, further enhancing accessibility for web users with low vision, cognitive and learning disabilities, and motor disabilities, including support for the use of touch-screen devices. This release was also the first version of WCAG which eliminated a success criterion that was introduced in WCAG 2.0: Success Criterion 4.1.1 Parsing.

This criterion was determined to be unnecessary in later versions because almost all modern assistive technologies and browsers automatically solve for the issues it was meant to prevent. The W3C has made amendments to older versions of WCAG to ensure that digital experiences conforming with WCAG 2.2, which omits the 4.1.1 criterion, will still be conformant and backwards compatible with the earlier WCAG 2.1 and 2.0.



#### WCAG conformance levels

There are three levels of WCAG conformance: A, AA, and AAA. Each level builds on the previous level like a pyramid. So, in order to meet Level AA, you must meet all of Level A, and in order to meet Level AAA, you must meet all of Level AA.

#### Level A

This level represents the minimum level of conformance. Level A criteria affect the broadest group of users with the most benefits and are essential. But, with the base level of support, some barriers will still exist that impact certain groups of users.

#### Level AA

This level is the most common target conformance level, often adopted in regulations or negotiated in legal settlements. The criteria at this level establish a higher level of accessibility that works for more users, including those who use assistive technology.

#### Level AAA

This is the highest conformance level achievable, meaning it covers the success criteria of all three levels. However, Level AAA is not applicable or realistic in all situations, as all criteria may not apply to every digital experience. Most organizations will target Level AA conformance, but some may choose to additionally adopt specific criteria at the AAA level.

		Success criteria			
	Level	WCAG 2.0	WCAG 2.1	WCAG 2.2	Total (all versions)
А	Minimum accessibility	25	5	2	32
AA	More accessible	13	7	4	24
AAA	Even more accessible (not applicable to all experiences)	23	5	3	31
	Total	61	17	9	86*

\*Includes the removal of one WCAG 2.0 success criterion, which is now obsolete.



#### How high should you aim?

The W3C encourages organizations to conform with the most recent version of WCAG as a best practice. While certain laws, such as the Accessibility for Ontarians with Disabilities Act (AODA) and Section 508 of the U.S. Rehabilitation Act of 1973, require conformance with WCAG 2.0 Level AA (which also requires conforming with the 2.0 Level A success criteria), the U.S. Department of Justice has referenced WCAG 2.1 Level AA (at minimum) as the benchmark in its more recent ADA enforcement actions. Amidst this inconsistency, conformance with the latest version, WCAG 2.2, will not only provide improved accessibility for every user, it will ensure your organization is up-to-date in its compliance efforts, especially as we anticipate future policy changes and updated legal rulemaking. Accessibility laws generally mandate conformance with Level A and AA success criteria because all of the technical standards in Level AAA may not be applicable or realistic in all situations.



#### WCAG and ADA compliance

While ADA compliance and WCAG conformance have become almost synonymous over the years, it's important to understand the distinction. Since WCAG itself is not a law, but a set of accessibility standards, there is no such thing as "compliance" with WCAG. However, WCAG can be, and has been, incorporated into the law as a standard for evaluating accessibility compliance, as in Section 508 of the Rehabilitation Act of 1973. The ADA does not specifically state conforming with WCAG standards as a requirement for compliance, but WCAG was designed to help website owners achieve the level of accessibility that is required by laws such as the ADA. To remember this distinction, it can be helpful to think of accessibility laws such as the ADA as the end destination—i.e., web accessibility for all—while WCAG maps out how to get there.



### Start testing

To gauge WCAG conformance, first conduct an evaluation of your website or web content. This evaluation can consist of the step-by-step process of thoroughly and diligently testing whether that experience is usable by people with disabilities. A comprehensive accessibility evaluation typically involves a combination of automated testing and extensive manual evaluation.

#### Automated testing

Automated testing (or scanning) is a great first step in the testing process. Organizations will differ in how they incorporate automated testing into their workflows. Two common approaches to automated accessibility testing are ad-hoc and integrated.

#### Option 1: Ad-hoc approach

In an ad-hoc approach, specific teams connected to the web, software, or product development life cycle will usually choose tools that support their work and integrate automated testing in their own workflows, perhaps sharing data and results with other teams, perhaps not. If choosing this approach, we recommend you determine which tools will work with your firewall settings, as well as for your design and developer teams. Quality assurance (QA) teams will likely need to leverage even more tools to ensure compliance and usability. Consider the following list of common automated testing tools as you get started.



#### The Must-Have WCAG Checklist

#### Design accessibility

A color contrast checker, like the Level Access <u>Accessible Color</u> <u>Picker</u> for Chrome, is an online tool that enables users to select or enter the hex codes of foreground and background color to reveal the contrast ratio between the two, ensuring you meet WCAG requirements. If the two colors do not have a high enough contrast, these tools will offer suggestions or allow you to adjust either color until the proper contrast is met, providing the new hex code. The WebAIM Contrast Checker is another popular tool in this category.

Additionally, designers may want to explore <u>freely available</u> <u>accessibility design kits</u> by leading brands and thought leaders in Figma.

#### Mobile accessibility

Two tools serve the mobile accessibility space. <u>Accessibility</u> <u>Scanner</u> checks the accessibility of Android apps. For iOS, <u>Accessibility Inspector</u> can be used. Both apps are utilized by development and QA teams.



#### **Document accessibility**

The Document Accessibility Toolbar is a dedicated accessibility ribbon menu for Microsoft Word that makes it quicker and easier to create accessible documents. This toolbar features a range of hand-picked and custom-built functions to optimize and validate a document for accessibility.

For Windows users, the <u>PDF Accessibility Checker (PAC)</u> tool checks PDFs for accessibility. Mac users may want to explore the Accessibility Checker capabilities in Adobe Acrobat Professional.



#### Web accessibility

For a quick, at-a-glance survey of a website's accessibility, teams can start with a free page scanner, like the one we offer at Level Access.

For a more in-depth scan, the <u>WAVE tool by WebAIM</u> scans a URL, delivering a report that uses a simple red, yellow, or green icon to show errors, warnings, and elements that pass.

There are also some tools that help teams embed automated testing for accessibility in their development workflows, such as our <u>free</u> automatic and continuous testing tools.

### Option 2: Integrated approach (recommended)

While free tools like the ones we've listed can help you get an initial overview of your digital experiences' accessibility, when it comes to maintaining sustainable digital accessibility compliance, managing and applying results from multiple different testing tools, being used by multiple teams, quickly becomes unmanageable. An integrated accessibility management platform offered by an expert third-party provider helps to organize and streamline testing data and remediation work.

Seek a solution that offers specific tools for different creative roles, such as designer and developer suites, and integrates with existing project management tools, such as Jira. A truly sustainable solution will also offer robust monitoring insights and dedicated dashboards to track progress made and efficiency gained over time.





# Manual and functional testing

Manual and functional testing will build upon automated testing results. In this process, accessibility experts, which should include people with disabilities, check website features and key user flows using assistive technology. This evaluation will confirm or dismiss any issues reported in an automated scan, as well as identify any new issues that should be resolved.



### There are several ways to accomplish manual testing:

#### Option 1

Build an in-house team of accessibility testers to perform QA on digital assets in development.

#### Option 2

Hire an outside consultant to provide a one-time report outlining issues identified and barriers encountered.

#### Option 3

Work with an accessibility partner on an ongoing basis. A partner should provide automated testing as well as give you access to an expert team to manually check digital assets using assistive technology. These partners will also work with you to develop prioritization reports outlining the critical, high, medium, and low-level issues; monitor your digital properties on an ongoing basis; validate fixes; and integrate seamlessly into your backend systems for better team collaboration.



### WCAG 2.1 and 2.2 checklist

As you create or review your content, or partner with a company to conduct accessibility testing, the following interactive WCAG checklist will serve as a helpful guide to applicable success criteria. The checklist includes all WCAG 2.2 success criteria (which include the 2.1 and 2.0 criteria). The new success criteria added in WCAG 2.2 are called out with an icon:

#### WCAG Level A checklist

Success criterion	Description	Pass/Fail	Complete
<u>1.1.1 – Non-text Content</u>	Text alternatives are provided for non-text content.		
1.2.1 – Audio-only and Video-only (Pre-recorded)	A transcript is provided for audio-only content and a transcript or audio description is provided for video-only content.		
1.2.2 – Captions (Pre-recorded)	Captions are provided for video with audio.		
1.2.3 – Audio Description or Media Alternative (Pre-recorded)	A transcript and / or audio descriptions are provided for video with audio.		
<u>1.3.1 – Info and Relationships</u>	Information and content relationships implied by formatting are communicated in text or in a way that works with assistive technology.		
1.3.2 – Meaningful Sequence	The reading order of content is meaningful, no matter how a user accesses or consumes it.		
1.3.3 – Sensory Characteristics	Instructions rely on more than one sense.		
1.4.1 – Use of Color	Color is not the only way used to distinguish an element, convey meaning, indicate an action, or prompt a response.		



#### WCAG Level A checklist (continued)

Success criterion	Description	Pass/Fail	Complete
<u>1.4.2 – Audio Control</u>	A mechanism is provided to control audio that plays on page automatically for more than three seconds.		
2.1.1 – Keyboard	All functionality is operable using a keyboard (with exceptions).		
2.1.2 – No Keyboard Trap	The focus does not get trapped on any element in keyboard-only navigation.		
2.1.4 – Character Key Shortcuts	No single-key shortcuts are used, or a way to turn them off or change them is provided.		
2.2.1 – Timing Adjustable	If a page has a time limit, users can turn the time limit off, adjust it, or extend it.		
2.2.2 – Pause, Stop, Hide	User controls are provided for moving or dynamically changing content.		
2.3.1 - Three Flashes or Below	No content flashes more than three times per second, or the flash is below flash thresholds.		
2.4.1 – Bypass Blocks	When blocks of content are repeated on multiple pages, a mechanism is provided to bypass / skip them.		
2.4.2 – Page Titled	Page titles clearly describe the page topic or page purpose.		
2.4.3 – Focus Order	The tabbing order of the content is meaningful and supports operation.		
2.4.4 – Link Purpose (In Context)	The purpose of each link can be determined from the link text alone or from the link text and its related context.		
2.5.1 – Pointer Gestures	A single pointer alternative to complex pointer or touch gestures is provided.		
2.5.2 - Pointer Cancellation	For functionality that is operated by a single pointer, a way to cancel the pointer input is provided.		



#### WCAG Level A checklist (continued)

Success criterion	Description	Pass/Fail	Complete
2.5.3 – Label in Name	The programmatic name contains the text that is presented visually.		
2.5.4 – Motion Actuation	For functions that are triggered by moving a device or by gesturing toward a device, an alternative way of triggering the response is provided.		
3.1.1 – Language of Page	Each page has a human language assigned.		
<u>3.2.1 – On Focus</u>	Interactive elements receiving focus do not trigger any functionality.		
<u>3.2.2 – On Input</u>	Interactive elements receiving input do not trigger any functionality.		
3.2.6 – Consistent Help	Help options provided are consistently available and in the same relative place throughout.		
3.3.1 – Error Identification	When input error is detected, the user is notified and the error is described.		
3.3.2 – Labels or Instructions	A persistent visible label and / or instructions are provided for elements that require user input.		
3.3.7 – Redundant Entry	Information that the user has already entered during a process is made available to them.		
4 <del>.1.1 – Parsing</del>	HTML code is clean and well formed in a way that it can be interpre- and assistive technology. *Note: Criterion 4.1.1 – Parsing, has been version 2.2 and is now considered automatically met for versions 2	removed in	r <del>s-</del>
4.1.2 – Name, Role, Value	All user interface components communicate their accessibility properties and actions to assistive technology.		



#### WCAG Level AA checklist

Success criterion	Description	Pass/Fail	Complete
1.2.4 – Captions (Live)	Synchronized captions are provided for live videos containing audio.		
1.2.5 – Audio Description (Pre-recorded)	If there is important visual content in a video that is not presented in the accompanying audio, an audio description is provided.		
1.3.4 – Orientation	Screen orientation is not restricted unless the orientation is considered essential.		
1.3.5 – Identify Input Purpose	For each form field collecting user information, the purpose of the field is programmatically declared.		
1.4.3 – Contrast (Minimum)	The contrast ratio between regular-sized, non- decorative text and its background is at least 4.5:1.		
1.4.4 – Resize Text	Text can be resized up to 200% without loss of content or function.		
1.4.5 – Images of Text	Aside from a few specific exceptions, there are no images of text.		
<u>1.4.10 – Reflow</u>	Content presentation is responsive and doesn't require scrolling in two dimensions.		
1.4.11 – Non-Text Contrast	The contrast ratio between non-text elements (including any states) and their background is at least 3:1.		
1.4.12 – Text Spacing	Text spacing can be overridden to improve the reading experience.		
1.4.13 – Content on Hover Focus	When additional content is presented on hover or on focus, the new content is persistent and dismissable.		
2.4.5 – Multiple Ways	There is more than one way to reach each page.		



#### WCAG Level AA checklist (continued)

Success criterion	Description	Pass/Fail	Complete
2.4.6 – Headings and Labels	Headings and labels are clear and descriptive.		
2.4.7 – Focus Visible	Keyboard focus is clear and visible.		
2.4.11 – Focus Not Obscured (Minimum)	When an actionable element receives focus, at least a portion of it remains visible.		
2.5.7 – Dragging Movements	If any part of a website requires a dragging movement, an alternative means of dragging, such as tapping or clicking, is provided.		
2.5.8 – Target Size (Minimum)	The size of a target is at least 24 by 24 CSS pixels (with exceptions).		
3.1.2 – Language of Parts	Assistive technology can distinguish and reflect when the human language on a page changes.		
3.2.3 – Consistent Navigation	Navigational elements are consistently displayed, including their location and the order of their content.		
3.2.4 – Consistent Identification	Components with the same functionality are consistently identified.		
3.3.3 – Error Suggestion	Users receive helpful / specific suggestions when they make errors.		
3.3.4 – Error Prevention (Legal, Financial, Data)	When users enter financial or legal data, submissions are reversible, and data is checked and confirmed before submission is finalized.		
3.3.8 – Accessible Authentication (Minimum)	When a cognitive function test is used to authenticate a user, an alternative way to authenticate, or a help mechanism to complete the authentication is provided		
4.1.3 – Status Messages	Status messages can be presented to the user by assistive technology without receiving focus.		



#### WCAG Level AAA checklist

Success criterion	Description	Pass/Fail	Complete
1.2.6 – Sign Language (Pre-recorded)	Sign-language interpretation of audio is provided for pre-recorded videos.		
1.2.7 – Extended Audio Description (Pre-recorded)	Videos without sufficient pauses for audio description are extended so that audio descriptions can be added.		
1.2.8 – Media Alternative (Pre-recorded)	A text alternative, like a descriptive transcript, is provided for all pre-recorded video with audio.		
1.2.9 – Audio-only (Live)	Live text captioning or a transcript is provided for live audio.		
<u>1.3.6 – Identify Purpose</u>	The purpose of elements is programmatically declared by adding semantics or metadata.		
1.4.6 - Contrast (Enhanced)	The contrast ratio between regular-sized, non-decorative text and its background is at least 7:1.		
1.4.7 – Low or No Background Audio	Audio contains little to no background noise, or background noise can be turned off.		
1.4.8 – Visual Presentation	Users can adjust a range of presentation options.		
1.4.9 – Images of Text (No Exception)	There are no images of text.		
2.1.3 – Keyboard (No Exception)	All page functionality is operable using a keyboard (with no exceptions).		
<u>2.2.3 – No Timing</u>	With the exception of real-time events, no content requires timed interaction.		
2.2.4 – Interruptions	Interruptions can be postponed, suppressed, or configured.		



#### WCAG Level AAA checklist (continued)

Success criterion	Description	Pass/Fail	Complete
2.2.5 - Re-authenticating	User data is saved when re-authenticating.		
2.2.6 - Timeouts	Users are warned when extended inactivity could cause data loss.		
2.3.2 - Three Flashes	No content flashes more than three times per second.		
2.3.3 – Animation from Interactions	If an animation is triggered by a user interaction, users can stop the animation.		
2.4.8 - Location	Users can orient themselves within a set of pages.		
2.4.9 – Link Purpose (Link Only)	Every link's purpose is clear from its text.		
2.4.10 – Section Headings	Content is broken up by section headings.		
2.4.12 – Focus Not Obscured (Enhanced)	When an actionable element receives focus, the entire component is visible.		
2.4.13 – Focus Appearance	Focus indicators have sufficient color contrast and are sized to be clearly visible.		
2.5.5 – Target Size	The size of the target for pointer inputs is at least 44 x 44 CSS pixels.		
2.5.6 – Concurrent Input Mechanism	Input is not restricted to a specific modality (like keyboard only or touch only).		
3.1.3 – Unusual Words	Words or phrases that are ambiguous or unfamiliar are defined.		



#### WCAG Level AAA checklist (continued)

Success criterion	Description	Pass/Fail	Complete
3.1.4 – Abbreviations	Abbreviations are explained or offered in expanded form close by.		
<u>3.1.5 – Reading Level</u>	Content is provided at an eighth grade reading level, or an alternative version at or below an eighth grade reading level is provided.		
<u>3.1.6 – Pronunciation</u>	Words that are hard to pronounce are clarified nearby.		
3.2.5 – Change on Request	Content on the page doesn't change unless users initiate it.		
<u>3.3.5 – Help</u>	Contextual instructions or cues are provided to help users complete and submit forms.		
3.3.6 – Error Prevention (All)	For any form where a user submits information, the user can reverse, verify, or confirm changes or deletions.		
3.3.9 – Accessible Authentication (Enhanced)	When a cognitive function test is used to authenticate a user, at least one other authentication method is available which is not a cognitive function test.		



### Let's get started

Whether you want help evaluating the state of accessibility for your web content, website, or web application, or you're ready to make them accessible, Level Access is here to help. Our integrated accessibility platform combines tooling, testing, and technology with access to training and expert services including manual evaluation and remediation guidance, enabling you to meet your accessibility objectives and scale with confidence.

#### <u>Request a demo</u> of our solution today.

LevelAccess.com | info@levelaccess.com

(in) 🛞 🕑

Copyright © Level Access 2023. All Rights Reserved.

