

Software Product and Platform Accessibility Checklist

The guide to VPATs, ACRs, WCAG, and ADA compliance for digital products



Introduction

Does a Request for Proposal (RFP) require proof your product is accessible? Are you being asked to submit a Voluntary Product Accessibility Template (VPAT®) as part of the procurement process? Are your existing contracts at risk because your customers need accessible products to support their new global inclusion programs?

As companies increasingly prioritize diversity, equity, and inclusion (DEI), third-party product and platform accessibility is making its way to the forefront of buying decisions. So how do you know if your software platform or other digital product meets accessibility standards?

This guide will help you better understand digital product accessibility and its benefits, with recommended testing requirements. We've also included an interactive checklist for making sure your product conforms with the most recent version of the Web Content Accessibility Guidelines (WCAG).

Table of contents

<u>Introduction</u>	2
<u>Defining digital accessibility</u>	4
<u>The business case for accessible products</u> ...	5
Legal risk of non-compliance	6
Bottom line.....	6
<u>Testing your product’s accessibility</u>	7
Accessibility standards and resources.....	7
What is WCAG?	7
POUR principles.....	8
Testing against WCAG.....	9
Manual and functional testing.....	10
Automated testing.....	11
<u>WCAG 2.1 and 2.2 checklist</u>	12
Level A.....	12
Level AA.....	15
Level AAA.....	17
<u>Design, develop, and deploy</u>	20
<u>Let’s get started</u>	21

Defining digital accessibility

Digital accessibility is the practice of ensuring that digital experiences, such as websites, mobile apps, and software platforms, are barrier-free for users of all abilities. According to the [World Health Organization \(WHO\)](#), more than one billion people worldwide have some type of disability, and many disabilities impact how individuals navigate the digital world. When a digital experience is not designed and developed with accessibility in mind, a large community of users may be unable to interact with it.

Organizations that commit to digital accessibility recognize that people engage with technology in diverse ways, and work to remove barriers so that all users can benefit equitably from digital content, tools, products, and services.



The business case for accessible products

Increasingly, companies are requiring that the software products and platforms they purchase be accessible. This proof comes in the form of a VPAT. When completed, a VPAT is referred to as an Accessibility Conformance Report (ACR) and details a product's level of conformance with WCAG. VPATs allow product manufacturers and vendors to document how well their products meet applicable accessibility standards.

Completing a VPAT is beneficial in four key areas:

- Fulfilling procurement requirements when selling into the government
- Providing proof of your product's accessibility in response to an RFP (in both the public and private sectors)
- Demonstrating compliance with applicable digital accessibility policies and laws
- Demonstrating your organization's commitment to accessibility and inclusion

Without a VPAT, not only are you missing out on potential new business opportunities, your current contracts may also be at risk. As more and more companies refine their global digital accessibility policies, they simply will not renew, or do business with, companies that don't share their same standards for accessibility and inclusion.

Legal risk of non-compliance

And then there's the legal risk. The number of digital accessibility lawsuits and legal demand letters has skyrocketed over the years. These suits claim non-compliance with the Americans with Disabilities Act (ADA), and responding to legal action can be costly, time-consuming, and damaging to a brand's reputation. No company wants to put itself in legal jeopardy by integrating a product that could be the target of a digital accessibility lawsuit.

Bottom line

Accessible products ensure maximum usability for the widest possible consumer audience, elevate your product above competitors in the procurement process, reduce legal risk for your organization and your clients, and position your brand as one that prioritizes inclusion.

Testing your product's accessibility

Accessibility standards and resources

A number of accessibility guidelines and resources have been developed that help evaluate the accessibility of digital products. Depending on the product, and its intended market, different accessibility standards and guidelines may be applicable. These include [WCAG](#), [ATAG](#), [UAAG](#), [ISO/IEC 30071-1](#), and the [Game Accessibility Guidelines](#).

WCAG is the most widely recognized digital accessibility standard and should be your starting point.

While there are various versions of WCAG, as best practice, the W3C recommends conformance with the latest version. Incorporating the latest success criteria will provide improved accessibility for every user.

What is WCAG?

Developed by the Web Accessibility Initiative of the World Wide Web Consortium (W3C), WCAG provides technical specifications to improve the accessibility of digital content and products and is considered the international benchmark for web accessibility. WCAG success criteria are categorized into three levels: A, AA, and AAA, with A representing the base level of conformance and AAA the maximum. Because Level AAA is not applicable or realistic in all situations, most organizations target Level AA conformance, but some may choose to additionally adopt specific criteria at the AAA level.

There are also various versions of WCAG: 1.0, 2.0, 2.1, and 2.2. Each version builds upon the previous, adding additional success criteria to keep pace with changing technology.

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.



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.



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 be interpreted reliably by a wide variety of users and assistive technologies. As technologies evolve, code and content should remain accessible for users of common and current assistive devices and tools.

Testing against WCAG

To gauge your product's WCAG conformance level, you'll want to conduct a digital accessibility evaluation. This refers to the step-by-step process of thoroughly and diligently checking whether an internal or external-facing software application, platform, or other digital experience is usable by people with disabilities.

Accessibility evaluations of software products are typically conducted through manual and functional testing by experts and may also leverage automated testing tools.

Manual and functional testing:

During manual and functional testing, accessibility experts and users with disabilities should check website features and critical user flows using assistive technology. This will give you an understanding as to how people with disabilities operate within your product, and, more importantly, it will identify the barriers they experience.



When conducting a manual review, a sample test plan should include the following components:

- Conduct a critical path analysis to clearly understand your most important user flows and where there are barriers.
- Manually test those flows using a variety of assistive technologies on multiple browsers (it's important that tests are also conducted by individuals with disabilities who are native users of assistive technologies).
- Prioritize identified issues based on their impact to the end user.
- Conduct a keyboard accessibility check, a code validation check, and an automated accessibility tool check, when appropriate.
- Consider the ability of the individual user when testing:
 - A keyboard-only user needs the ability to reach all links (text or image), form controls, and page functions, so that they can perform an action or navigate to the proper place by tabbing through.
 - A user who is hard of hearing needs captioning functionality so that they can access all information provided in a video clip.

Getting started with manual testing

There are a number of ways organizations can conduct manual testing:

Option 1

Build an in-house team of accessibility testers to perform quality assurance (QA) on digital properties in development.

Option 2

Hire an outside consultant to test your digital products. They will provide you with a one-time report outlining some issues and barriers encountered, but more testing will likely be required to understand the full scope of issues.

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.


Automated testing:

If your software product is a web application, automated testing provides an easy, efficient way to gauge the high-level accessibility of the experience and identify common barriers. However, it's important to note that manual testing and functional testing are still essential for flagging less-common issues, as well as those that can only be detected by a human.

Beyond driving efficiency in the assessment of live experiences, automated testing plays an integral role in a holistic, sustainable digital accessibility practice. Teams can use automated testing tools to conduct ongoing monitoring, so they can track remediation progress and stay on top of changes to accessibility as products are updated. Because certain tools, like browser extensions, support automated testing in local and pre-production environments, it's also key to embedding accessibility checks into your development cycles, reducing the amount of remediation work you'll have to perform on live digital experiences in the future.

To get started with automated testing, you can leverage our [free online scanner](#) or WebAIM's [WAVE tool](#) to help identify common WCAG violations in live web applications. A digital accessibility platform, like the Level Access Platform, can equip you with tools for monitoring and weaving accessibility into your development process.

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.		
<u>1.2.1 – Audio-only and Video-only (Pre-recorded)</u>	A transcript is provided for audio-only content and a transcript or audio description is provided for video-only content.		
<u>1.2.2 – Captions (Pre-recorded)</u>	Captions are provided for video with audio.		
<u>1.2.3 – Audio Description or Media Alternative (Pre-recorded)</u>	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.		
<u>1.3.2 – Meaningful Sequence</u>	The reading order of content is meaningful, no matter how a user accesses or consumes it.		
<u>1.3.3 – Sensory Characteristics</u>	Instructions rely on more than one sense.		
<u>1.4.1 – Use of Color</u>	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.		
<u>2.1.1 – Keyboard</u>	All functionality is operable using a keyboard (with exceptions).		
<u>2.1.2 – No Keyboard Trap</u>	The focus does not get trapped on any element in keyboard-only navigation.		
<u>2.1.4 – Character Key Shortcuts</u>	No single-key shortcuts are used, or a way to turn them off or change them is provided.		
<u>2.2.1 – Timing Adjustable</u>	If a page has a time limit, users can turn the time limit off, adjust it, or extend it.		
<u>2.2.2 – Pause, Stop, Hide</u>	User controls are provided for moving or dynamically changing content.		
<u>2.3.1 – Three Flashes or Below</u>	No content flashes more than three times per second, or the flash is below flash thresholds.		
<u>2.4.1 – Bypass Blocks</u>	When blocks of content are repeated on multiple pages, a mechanism is provided to bypass / skip them.		
<u>2.4.2 – Page Titled</u>	Page titles clearly describe the page topic or page purpose.		
<u>2.4.3 – Focus Order</u>	The tabbing order of the content is meaningful and supports operation.		
<u>2.4.4 – Link Purpose (In Context)</u>	The purpose of each link can be determined from the link text alone or from the link text and its related context.		
<u>2.5.1 – Pointer Gestures</u>	A single pointer alternative to complex pointer or touch gestures is provided.		
<u>2.5.2 – Pointer Cancellation</u>	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
<u>2.5.3 - Label in Name</u>	The programmatic name contains the text that is presented visually.		
<u>2.5.4 - Motion Actuation</u>	For functions that are triggered by moving a device or by gesturing toward a device, an alternative way of triggering the response is provided.		
<u>3.1.1 - Language of Page</u>	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.		
<u>3.2.6 - Consistent Help</u> 	Help options provided are consistently available and in the same relative place throughout.		
<u>3.3.1 - Error Identification</u>	When input error is detected, the user is notified and the error is described.		
<u>3.3.2 - Labels or Instructions</u>	A persistent visible label and / or instructions are provided for elements that require user input.		
<u>3.3.7 - Redundant Entry</u> 	Information that the user has already entered during a process is made available to them.		
<u>4.1.1 - Parsing</u>	HTML code is clean and well formed in a way that it can be interpreted by browsers and assistive technology. *Note: Criterion 4.1.1 - Parsing, has been removed in version 2.2 and is now considered automatically met for versions 2.1 and 2.0.		
<u>4.1.2 - Name, Role, Value</u>	All user interface components communicate their accessibility properties and actions to assistive technology.		

WCAG Level AA checklist

Success criterion	Description	Pass/Fail	Complete
<u>1.2.4 - Captions (Live)</u>	Synchronized captions are provided for live videos containing audio.		
<u>1.2.5 - Audio Description (Pre-recorded)</u>	If there is important visual content in a video that is not presented in the accompanying audio, an audio description is provided.		
<u>1.3.4 - Orientation</u>	Screen orientation is not restricted unless the orientation is considered essential.		
<u>1.3.5 - Identify Input Purpose</u>	For each form field collecting user information, the purpose of the field is programmatically declared.		
<u>1.4.3 - Contrast (Minimum)</u>	The contrast ratio between regular-sized, non-decorative text and its background is at least 4.5:1.		
<u>1.4.4 - Resize Text</u>	Text can be resized up to 200% without loss of content or function.		
<u>1.4.5 - Images of Text</u>	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.		
<u>1.4.11 - Non-Text Contrast</u>	The contrast ratio between non-text elements (including any states) and their background is at least 3:1.		
<u>1.4.12 - Text Spacing</u>	Text spacing can be overridden to improve the reading experience.		
<u>1.4.13 - Content on Hover Focus</u>	When additional content is presented on hover or on focus, the new content is persistent and dismissable.		
<u>2.4.5 - Multiple Ways</u>	There is more than one way to reach each page.		



WCAG Level AA checklist *(continued)*

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


WCAG Level AAA checklist

Success criterion	Description	Pass/Fail	Complete
<u>1.2.6 - Sign Language (Pre-recorded)</u>	Sign-language interpretation of audio is provided for pre-recorded videos.		
<u>1.2.7 - Extended Audio Description (Pre-recorded)</u>	Videos without sufficient pauses for audio description are extended so that audio descriptions can be added.		
<u>1.2.8 - Media Alternative (Pre-recorded)</u>	A text alternative, like a descriptive transcript, is provided for all pre-recorded video with audio.		
<u>1.2.9 - Audio-only (Live)</u>	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.		
<u>1.4.6 - Contrast (Enhanced)</u>	The contrast ratio between regular-sized, non-decorative text and its background is at least 7:1.		
<u>1.4.7 - Low or No Background Audio</u>	Audio contains little to no background noise, or background noise can be turned off.		
<u>1.4.8 - Visual Presentation</u>	Users can adjust a range of presentation options.		
<u>1.4.9 - Images of Text (No Exception)</u>	There are no images of text.		
<u>2.1.3 - Keyboard (No Exception)</u>	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.		
<u>2.2.4 - Interruptions</u>	Interruptions can be postponed, suppressed, or configured.		

WCAG Level AAA checklist *(continued)*

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

WCAG Level AAA checklist *(continued)*

Success criterion	Description	Pass/Fail	Complete
<u>3.1.4 - Abbreviations</u>	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.		
<u>3.2.5 - Change on Request</u>	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.		
<u>3.3.6 - Error Prevention (All)</u>	For any form where a user submits information, the user can reverse, verify, or confirm changes or deletions.		
<u>3.3.9 - Accessible Authentication (Enhanced)</u> 	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.		

Design, develop, and deploy accessible products with Level Access

Level Access works closely with software companies to validate product accessibility and support the development of a sustainable digital accessibility practice. By combining advanced technology with the market's deepest bench of accessibility expertise, we empower teams to deliver exceptional experiences for all users. Our holistic approach to software accessibility includes:

- Identifying and manually testing the accessibility of your most important user flows, including performing functional testing by native users of assistive technologies.
- Regularly delivering focused, immediately actionable test results detailing any accessibility barriers our testing revealed, including guidance to fix those errors
- Partnering with your team to help resolve complex errors
- Providing regular monitoring and re-evaluation to ensure you maintain accessibility compliance as new features of your product are released
- Completing a VPAT and delivering an objective, unbiased ACR, helping you satisfy procurement requirements in both the public and private sectors
- Updating your ACR, when applicable, to demonstrate accessibility improvements over time
- Assisting with the development of an accessibility statement, which is a public-facing declaration of your commitment to accessibility
- Equipping your team with tooling and training to embed accessibility in the software development life cycle (SDLC), so new products are accessible by default.

Let's get started

Whether you need a VPAT or want to scale an organization-wide accessibility practice, Level Access is ready to help.

Engage with our team today

LevelAccess.com | info@levelaccess.com



Copyright © Level Access 2023. All Rights Reserved.

