Google Accessibility Conformance Report

Revised Section 508 Edition

(Based on VPAT® Version 2.4)

Name of Product/Version: Chrome OS version 84

Report Date: 9/1/2020

Product Description: Chrome OS is the operating system that runs on Chromebooks

Contact Information: **chrome-vpats@google.com**

Notes:

Chrome OS is an operating system with the Google Chrome browser built-in that allows users to browse the web. This document makes no claims of conformance for any third-party content that users access through the web or through any app stores supported by Chrome OS. The scope of this VPAT is limited to the Chrome OS software and does not apply directly to hardware devices. Please refer to the VPAT for the specific Chromebook models for additional details.

The scope of this document asserts conformance for these core Chrome OS features:

1. Onboarding and account creation
2. App Launcher
3. Notification Center
4. Settings
5. Files
6. Chrome Browser

The following features are considered experimental and are not available on all Chrome OS devices, and are therefore outside of the scope of this document:

1. Google Play Store
2. Linux shell

Evaluation Methods Used:

This evaluation was conducted by the American Foundation for the Blind using expert usability testers and accessibility engineers to thoroughly evaluate checkpoint.

Applicable Standards/Guidelines

This report covers the degree of conformance for the following accessibility standard/guidelines:

Standard/Guideline	Included In Report
Web Content Accessibility Guidelines 2.0	Level A (Yes) Level AA (Yes) Level AAA (No)
Revised Section 508 standards published January 18, 2017 and corrected January 22, 2018	(Yes)

Terms

The terms used in the Conformance Level information are defined as follows:

- **Supports**: The functionality of the product has at least one method that meets the criterion without known defects or meets with equivalent facilitation.
- **Supported with Exceptions**: Some functionality of the product does not meet the criterion.
- **Not Supported**: The majority of product functionality does not meet the criterion.
- **Not Applicable**: The criterion is not relevant to the product.
- **Not Evaluated**: The product has not been evaluated against the criterion. This can be used only in WCAG 2.0 Level AAA.

WCAG 2.0 Report

Tables 1 and 2 also document conformance with Revised Section 508:

- Chapter 5 – 501.1 Scope, 504.2 Content Creation or Editing
- Chapter 6 – 602.3 Electronic Support Documentation

Note: When reporting on conformance with the WCAG 2.0 Success Criteria, they are scoped for full pages, complete processes, and accessibility-supported ways of using technology as documented in the WCAG 2.0 Conformance Requirements.

Table 1: Success Criteria, Level A

Criteria	Conformance Level	Remarks and Explanations
1.1.1 Non-text Content (Level A) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Partially Supports	Software (Chrome OS): Chrome OS supports alternative text in all areas of the user interface except the following: • The Files app has an unlabeled button in each header of the files table that resize the column.
1.2.1 Audio-only and Video-only (Prerecorded) (Level A) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Not Applicable	
1.2.2 Captions (Prerecorded) (Level A) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	
1.2.3 Audio Description or Media Alternative (Prerecorded) (Level A) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	
1.3.1 Info and Relationships (Level A) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Partially Supports	Software (Chrome OS): Chrome OS supports appropriate info and relationships in all areas of the user interface except the following: • In the Search Engine configuration screen, the table headers are not properly associated with the table • In the Files app, the word "search" appears three times after search button on the Action

Criteria	Conformance Level	Remarks and Explanations
		menu with no direct relationship to the search field.
1.3.2 Meaningful Sequence (Level A) Also applies to: Revised Section 508 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	
1.3.3 Sensory Characteristics (Level A) Also applies to: Revised Section 508 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	
1.4.1 Use of Color (Level A) Also applies to: Revised Section 508 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	
1.4.2 Audio Control (Level A) Also applies to: Revised Section 508 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	
2.1.1 Keyboard (Level A) Also applies to: Revised Section 508 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	

Criteria	Conformance Level	Remarks and Explanations
2.1.2 No Keyboard Trap (Level A) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Partially Supports	Software (Chrome OS): Chrome OS contains no keyboard traps in any areas of the user interface except the following: • In the notification center, there is a keyboard trap when the notification content scrolls.
2.2.1 Timing Adjustable (Level A) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Not Applicable	
2.2.2 Pause, Stop, Hide (Level A) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Not Applicable	
2.3.1 Three Flashes or Below Threshold (Level A) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Not Applicable	
2.4.1 Bypass Blocks (Level A) Also applies to: Revised Section 508 • 501 (Web)(Software) – Does not apply to non-web software • 504.2 (Authoring Tool) • 602.3 (Support Docs) – Does not apply to non-web docs	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	
2.4.2 Page Titled (Level A) Also applies to: Revised Section 508 • 501 (Web)(Software)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	

Criteria	Conformance Level	Remarks and Explanations
• 504.2 (Authoring Tool) • 602.3 (Support Docs)		

2.4.3 Focus Order (Level A)
Also applies to:
Revised Section 508
    • 501 (Web)(Software)
    • 504.2 (Authoring Tool)
    • 602.3 (Support Docs)
	Web Content (Chrome Browser): Supports
	Support Docs: Supports
	Software (Chrome OS): Supports	

2.4.4 Link Purpose (In Context) (Level A)
Also applies to:
Revised Section 508
    • 501 (Web)(Software)
    • 504.2 (Authoring Tool)
    • 602.3 (Support Docs)
	Web Content (Chrome Browser): Supports
	Support Docs: Supports
	Software (Chrome OS): Supports	

3.1.1 Language of Page (Level A)
Also applies to:
Revised Section 508
    • 501 (Web)(Software)
    • 504.2 (Authoring Tool)
    • 602.3 (Support Docs)
	Web Content (Chrome Browser): Supports
	Support Docs: Supports
	Software (Chrome OS): Supports	

3.2.1 On Focus (Level A)
Also applies to:
Revised Section 508
    • 501 (Web)(Software)
    • 504.2 (Authoring Tool)
    • 602.3 (Support Docs)
	Web Content (Chrome Browser): Supports
	Support Docs: Supports
	Software (Chrome OS): Supports	

3.2.2 On Input (Level A)
Also applies to:
Revised Section 508
    • 501 (Web)(Software)
    • 504.2 (Authoring Tool)
    • 602.3 (Support Docs)
	Web Content (Chrome Browser): Supports
	Support Docs: Supports
	Software (Chrome OS): Supports	

Criteria	Conformance Level	Remarks and Explanations
3.3.1 Error Identification (Level A) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Partially Supports	Software (Chrome OS): Chrome OS supports appropriate info and relationships in all areas of the user interface except the following: • In settings, the passphrase sync input field does not properly expose error messages to the screen reader
3.3.2 Labels or Instructions (Level A) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	
4.1.1 Parsing (Level A) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	
4.1.2 Name, Role, Value (Level A) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Partially Supports	Software (Chrome OS): Chrome OS supports proper name, role, and value in all areas of the user interface except the following: • During account creation, ChromeVox does not provide value information when interacting when interacting with the month or gender dropdown buttons.

Table 2: Success Criteria, Level AA

Criteria	Conformance Level	Remarks and Explanations
1.2.4 Captions (Live) (Level AA) Also applies to: Revised Section 508 • 501 (Web)(Software)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports	

Criteria	Conformance Level	Remarks and Explanations
• 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Software (Chrome OS):** Supports	

1.2.5 Audio Description (Prerecorded) (Level AA)
Also applies to:
Revised Section 508
    • 501 (Web)(Software)
    • 504.2 (Authoring Tool)
    • 602.3 (Support Docs)
	Web Content (Chrome Browser): Supports
	Support Docs: Supports
	Software (Chrome OS): Supports	

1.4.3 Contrast (Minimum) (Level AA)
Also applies to:
Revised Section 508
    • 501 (Web)(Software)
    • 504.2 (Authoring Tool)
    • 602.3 (Support Docs)
	Web Content (Chrome Browser): Supports
	Support Docs: Supports
	Software (Chrome OS): Supports	

1.4.4 Resize text (Level AA)
Also applies to:
Revised Section 508
    • 501 (Web)(Software)
    • 504.2 (Authoring Tool)
    • 602.3 (Support Docs)
	Web Content (Chrome Browser): Supports
	Support Docs: Supports
	Software (Chrome OS): Supports	

1.4.5 Images of Text (Level AA)
Also applies to:
Revised Section 508
    • 501 (Web)(Software)
    • 504.2 (Authoring Tool)
    • 602.3 (Support Docs)
	Web Content (Chrome Browser): Supports
	Support Docs: Supports
	Software (Chrome OS): Supports	

2.4.5 Multiple Ways (Level AA)
Also applies to:
Revised Section 508
    • 501 (Web)(Software) – Does not apply to non-web software
    • 504.2 (Authoring Tool)
    • 602.3 (Support Docs) – Does not apply to non-web docs
	Web Content (Chrome Browser): Supports
	Support Docs: Supports
	Software (Chrome OS): Supports	

2.4.6 Headings and Labels (Level AA) Also applies to:	**Web Content (Chrome Browser):** Supports	

Criteria	Conformance Level	Remarks and Explanations
Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Support Docs:** Supports **Software (Chrome OS):** Supports	
2.4.7 Focus Visible (Level AA) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	
3.1.2 Language of Parts (Level AA) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	
3.2.3 Consistent Navigation (Level AA) Also applies to: Revised Section 508 • 501 (Web)(Software) – Does not apply to non-web software • 504.2 (Authoring Tool) • 602.3 (Support Docs) – Does not apply to non-web docs	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	
3.2.4 Consistent Identification (Level AA) Also applies to: Revised Section 508 • 501 (Web)(Software) – Does not apply to non-web software • 504.2 (Authoring Tool) • 602.3 (Support Docs) – Does not apply to non-web docs	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	
3.3.3 Error Suggestion (Level AA) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	

Criteria	Conformance Level	Remarks and Explanations
3.3.4 Error Prevention (Legal, Financial, Data) (Level AA) Also applies to: Revised Section 508 • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs)	**Web Content (Chrome Browser):** Supports **Support Docs:** Supports **Software (Chrome OS):** Supports	

Revised Section 508 Report

Chapter 3: Functional Performance Criteria (FPC)

Criteria	Conformance Level	Remarks and Explanations
302.1 Without Vision	Supports	**Screen Reader** - ChromeVox includes a full-featured screen reader that enables users without vision to access all parts of Chrome OS **Braille** - ChromeVox is compatible with most refreshable braille displays that can connect via USB or Bluetooth
302.2 With Limited Vision	Supports	**Page Zoom** – Chrome allows for per-page zoom within websites up to 500% **Magnifier** – Chrome OS has a system wide magnifier that can be docked to the side of the screen **Reverse color brightness** – Chrome OS includes an option for system-wide reverse brightness **Font Size Adjustment** – In addition to the system-wide magnification option, Chrome OS supports adjusting the font size of the system UI
302.3 Without Perception of Color	Supports	Color perception is not required to operate Chrome OS. The Chrome Web Store contains third-party applications that can improve the usability of websites for people without perception of color.
302.4 Without Hearing	Supports	Audio is not required to operate Chrome OS. **Captions** – Chrome OS supports captions for conformant media

Criteria	Conformance Level	Remarks and Explanations
		Braille - ChromeVox is compatible with most refreshable braille displays that can connect via USB or Bluetooth
302.5 With Limited Hearing	Supports	**Mono audio** – Chrome OS supports routing all audio through a mono channel **Audio Device Selection** – ChromeVox supports wired and Bluetooth audio devices, and provides a mechanism for switching between audio outputs
302.6 Without Speech	Supports	Speech is not required to operate Chrome OS
302.7 With Limited Manipulation	Supports	**Dictation** – Chrome OS supports text input via speech for all text input fields **On screen keyboard** – Chrome OS supports an on screen keyboard that can be configured to work with external devices that emulate a mouse **Automatic clicks –** Chrome OS supports a configurable automatic click when the cursor stops moving **Sticky keys** – Chrome OS supports sticky keys to enable chorded input by one key input at a time
302.8 With Limited Reach and Strength	Supports	**Dictation** – Chrome OS supports text input via speech for all text input fields **On screen keyboard** – Chrome OS supports an on screen keyboard that can be configured to work with external devices that emulate a mouse **Automatic clicks –** Chrome OS supports a configurable automatic click when the cursor stops moving **Sticky keys** – Chrome OS supports sticky keys to enable chorded input by one key input at a time
302.9 With Limited Language, Cognitive, and Learning Abilities	Supports	**Spell check** – Chrome browser has a sophisticated spell checker that works in any input field **Remember passwords** – Chrome browser will securely remember passwords for websites **Dictation** – Chrome OS supports text input via speech for all text input fields **Google Assistant** – Google Assistant is included in Chrome OS and can be used to help to find information and accelerate many kinds of tasks.

Criteria	Conformance Level	Remarks and Explanations
		Select-to-Speak – allows a user to select a region of the screen to be read out loud by text to speech

Chapter 4: Hardware

Chrome OS is not a hardware device. Refer to VPAT for specific Chromebook devices.

Chapter 5: Software

Criteria	Conformance Level	Remarks and Explanations
501.1 Scope – Incorporation of WCAG 2.0 AA	See WCAG 2.0 section	See information in WCAG 2.0 section
502 Interoperability with Assistive Technology	Heading cell – no response required	Heading cell – no response required
502.2.1 User Control of Accessibility Features	Supports	
502.2.2 No Disruption of Accessibility Features	Supports	
502.3 Accessibility Services	Heading cell – no response required	Heading cell – no response required
502.3.1 Object Information	Supports with exceptions	Supported in all areas except: The Files app has an unlabeled button in each header of the files table that resize the column.
502.3.2 Modification of Object Information	Supports	
502.3.3 Row, Column, and Headers	Supports with exceptions	Supported in all areas except: In the Search Engine configuration screen, the table headers are not properly associated with the table
502.3.4 Values	Supports	
502.3.5 Modification of Values	Supports with exceptions	Supported in all areas except: During account creation, ChromeVox does not provide value information when interacting when interacting with the month or gender dropdown buttons.
502.3.6 Label Relationships	Supports with exceptions	Supported in all areas except: In settings, the passphrase sync input field does not properly expose error messages to the screen reader
502.3.7 Hierarchical Relationships	Supports	

Criteria	Conformance Level	Remarks and Explanations
502.3.8 Text	Supports	
502.3.9 Modification of Text	Supports	
502.3.10 List of Actions	Supports	
502.3.11 Actions on Objects	Supports	
502.3.12 Focus Cursor	Supports	
502.3.13 Modification of Focus Cursor	Supports	
502.3.14 Event Notification	Supports	
502.4 Platform Accessibility Features Platforms and platform software shall conform to the requirements in ANSI/HFES 200.2, Human Factors Engineering of Software User Interfaces — Part 2: Accessibility (2008) (incorporated by reference, see 702.4.1) listed below: A. Section 9.3.3 Enable sequential entry of multiple (chorded) keystrokes; B. Section 9.3.4 Provide adjustment of delay before key acceptance; C. Section 9.3.5 Provide adjustment of same-key double-strike acceptance; D. Section 10.6.7 Allow users to choose visual alternative for audio output; E. Section 10.6.8 Synchronize audio equivalents for visual events; F. Section 10.6.9 Provide speech output services; and G. Section 10.7.1 Display any captions provided.	Supports with exceptions	The following features are supported: • Sequential key entry (sticky keys) • Adjustable delay before key repeat • Speech output • Display captions from conformant audio sources The following features are not yet supported: • Adjustable delay before key acceptance • Adjustable same-key double-strike acceptance • Visual alternative for all audio output • Synchronize audio equivalents for visual events
503 Applications	Heading cell – no response required	Heading cell – no response required
503.2 User Preferences	Supports with exception	Chrome OS allows users to set preferences for font size, zoom level, reverse brightness. Users can install extensions from the Chrome Web Store to enable additional control over the display of web content.
503.3 Alternative User Interfaces	Not Applicable	
503.4 User Controls for Captions and Audio Description	Heading cell – no response required	Heading cell – no response required
503.4.1 Caption Controls	Supported	
503.4.2 Audio Description Controls	Supported	

Criteria	Conformance Level	Remarks and Explanations
504 Authoring Tools	Heading cell – no response required	Heading cell – no response required
504.2 Content Creation or Editing (if not authoring tool, enter "not applicable")	Not Applicable	Chrome OS supports many applications on the web through the Chrome browser, some of which are authoring tools, but is not an authoring tool on its own.
504.2.1 Preservation of Information Provided for Accessibility in Format Conversion	Not Applicable	
504.2.2 PDF Export	Not Applicable	
504.3 Prompts	Not Applicable	
504.4 Templates	Not Applicable	

Chapter 6: [Support Documentation and Services](#)

Criteria	Conformance Level	Remarks and Explanations
601.1 Scope	Heading cell – no response required	Heading cell – no response required
602 Support Documentation	Heading cell – no response required	Heading cell – no response required
602.2 Accessibility and Compatibility Features	Supported	Chrome OS provides documentation for accessibility features through the help feature. It can also be found here: https://support.google.com/chromebook/answer/177893
602.3 Electronic Support Documentation	See [WCAG 2.0](#) section	See information in WCAG 2.0 section
602.4 Alternate Formats for Non-Electronic Support Documentation	Not Applicable	All supporting documentation is electronic
603 Support Services	Heading cell – no response required	Heading cell – no response required
603.2 Information on Accessibility and Compatibility Features	Supports	The [Google Disability Support](#) team can answer questions about the accessibility of Chrome OS through various support channels.
603.3 Accommodation of Communication Needs	Supports	The [Google Disability Support](#) team can answer questions about the accessibility of Chrome OS through various support channels.

Legal Disclaimer