Ubuntu Accessibility Conformance Report

International Edition
Revision 1.0
(Based on VPAT® Version 2.4)

Name of Product/Version:
Ubuntu Desktop product family including (but not limited to):
Ubuntu 18.04 LTS Desktop,
Ubuntu 20.04 LTS Desktop

Report Date:
March 19, 2021

Product Description:
Canonical's Ubuntu Desktop is a leading enterprise Linux platform. It's an open source operating system that provides the foundation from which you can scale existing apps- and roll out emerging technologies- across bare-metal, virtual, container and all types of cloud environments.

Contact Information:
vpat@canonical.com

Evaluation Methods Used:
Testing is based on general product knowledge. Functional verification testing performed on updated virtual machines of each Ubuntu 18.04 LTS Desktop and Ubuntu 20.04 LTS Desktop with the GNOME® desktop environment.

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 2.1	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.
- **Partially Supports:** Some functionality of the product does not meet the criterion.
- **Does Not Support:** 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 2.1 Report

Tables 1 and 2 also document conformance with:

- Revised Section 508: Chapter 5 – 501.1 Scope, 504.2 Content Creation or Editing, and Chapter 6 – 602.3 Electronic Support Documentation.

Note: When reporting on conformance with the WCAG 2.2 Success Criteria, they are scoped for full pages, complete processes, and accessibility-supported ways of using technology as documented in the Web Content Accessibility Guidelines 2.1.

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)	Supports	Program functions can be accessed via the Universal Access menu and keyboard shortcuts. Typing Assist (AccessX) provides access to accessibility features using the keyboard.
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)	Not applicable	There is no prerecorded audio or video in the operating system.
1.2.2 Captions (Prerecorded) (Level A) Also applies to: Revised Section 508 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs)	Not applicable	There are no captions to accompany prerecorded audio or video.
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)	Not applicable	There is no prerecorded audio or video in the operating system.
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)	Partially supports	Some input forms do change color or otherwise indicate the information is not properly formatted.
1.3.2 Meaningful Sequence (Level A) Also applies to: Revised Section 508 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs)	Supports	The sequence of information presented to the user does not change the information's meaning.

1.3.3 Sensory Characteristics (Level A) Also applies to: Revised Section 508 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs)	Supports	Buttons and other operating components do not rely solely on sensory characteristics of components such as shape, color, size, visual location, orientation, or sound.
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)	Supports	Universal Access with High Contrast enabled provides a high contrast ratio that visually notifies the user a field or form is incorrectly filled out, required, or disabled.
1.4.2 Audio Control (Level A) Also applies to: Revised Section 508 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs)	Supports	Audio can be controlled independently of the system sounds and on a per-application basis all from the 'System Settings' application.
2.1.1 Keyboard (Level A) Also applies to: Revised Section 508 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs)	Supports	Keyboard navigation and accessibility features can be controlled through options in the operating system.
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)	Supports	The keyboard focus can be moved using only a keyboard interface
2.2.1 Timing Adjustable (Level A) Also applies to: Revised Section 508 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs)	Partially supports	There are user-space time limits that are modifiable while there are some kernel-space time limits that remain immutable.
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)	Supports	The operating system, where necessary, provides the ability to display progress of download activities and installation and updates. The user also has the option to disable auto updates in the 'Software & Updates' application.
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)	Supports	There are no flashing components of the operating system and its core applications.

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
	Not applicable	Applications work independently of one another.

2.4.2 Page Titled (Level A)
Also applies to:
Revised Section 508
    501 (Web)(Software)
    504.2 (Authoring Tool)
    602.3 (Support Docs)
	Supports	Each application opens with a title bar or its name shown in the menu at the top of the screen.

2.4.3 Focus Order (Level A)
Also applies to:
Revised Section 508
    501 (Web)(Software)
    504.2 (Authoring Tool)
    602.3 (Support Docs)
	Supports	Fields and forms for operating system settings and applications provide a logical focus order.

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)
	Supports	The purpose of clicking buttons (leading to application calls) in the operating system is obvious before clicking.

2.5.1 Pointer Gestures (Level A 2.1 only) Also applies to: Revised Section 508 – Does not apply	Supports	Actions can be performed with the keyboard only. Therefore, all functionality that uses multipoint or path-based gestures for operation can be operated with a single pointer without a path-based gesture.
2.5.2 Pointer Cancellation (Level A 2.1 only) Also applies to: Revised Section 508 – Does not apply	Supports	Completion of an instruction is on the up-event of a cursor within applications and GUI interactions with the desktop environment.
2.5.3 Label in Name (Level A 2.1 only) Also applies to: Revised Section 508 – Does not apply	Partially supports	Application icons are accompanied with a descriptive text name but not all images in the operating system have a text description.
2.5.4 Motion Actuation (Level A 2.1 only) Also applies to: Revised Section 508 – Does not apply	Supports	Icons within applications and the operating system can be selected with either a pointer or using the keyboard.

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)
	Supports	Ubuntu supports internationalization including language choice.

3.2.1 On Focus (Level A)
        Also applies to:
    Revised Section 508
        501 (Web)(Software)
        504.2 (Authoring Tool)
        602.3 (Support Docs)
	Supports	When an application receives focus, it does not initiate a change of context.

3.2.2 On Input (Level A)
        Also applies to:
    Revised Section 508
        501 (Web)(Software)
        504.2 (Authoring Tool)
        602.3 (Support Docs)
	Supports	Visual contexts and submit buttons provide confirmation of input changes in applications and operating system settings.

3.3.1 Error Identification (Level A)
        Also applies to:
    Revised Section 508
        501 (Web)(Software)
        504.2 (Authoring Tool)
        602.3 (Support Docs)
	Supports	When an application errors, the user is informed.

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)
	Supports	Dialogs and forms provide hints and descriptions of the required data formats that must be entered.

4.1.1 Parsing (Level A)
        Also applies to:
    Revised Section 508
        501 (Web)(Software)
        504.2 (Authoring Tool)
        602.3 (Support Docs)
	Partially supports	For the portions of the GNOME® interface that are displayed using markup language, parsing is properly implemented in the GUI. Other dialog boxes may not produce the proper contextual information since they are not using a markup language.

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)
	Supports	When text is saved from a user input text field, the name and role could be easily programmatically determined.

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) 　　504.2 (Authoring Tool) 　　602.3 (Support Docs)	Partially supports	Some applications that provide live streaming also provide the ability for live captions.
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)	Not applicable	There is no prerecorded audio in the operating system.
1.3.4 Orientation (Level AA 2.1 only) Also applies to: Revised Section 508 – Does not apply	Supports	The orientation can be changed in the 'System Settings' application.
1.3.5 Identify Input Purpose (Level AA 2.1 only) Also applies to: Revised Section 508 – Does not apply	Supports	The purpose of each input field collecting information about the user can be programmatically determined.
1.4.3 Contrast (Minimum) (Level AA) Also applies to: Revised Section 508 　　501 (Web)(Software) 　　504.2 (Authoring Tool) 　　602.3 (Support Docs)	Supports	The visual presentation of text and images of text have a contrast ratio of at least 4.5:1 and 3:1 for large text.
1.4.4 Resize text (Level AA) Also applies to: Revised Section 508 　　501 (Web)(Software) 　　504.2 (Authoring Tool) 　　602.3 (Support Docs)	Supports	Text can be resized without assistive technology up to 200 percent without loss of content and functionality.
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)	Supports	Text is used to convey information rather than images of text except where a particular presentation of text is essential to the information being conveyed, like in logotypes.
1.4.10 Reflow (Level AA 2.1 only) Also applies to: Revised Section 508 – Does not apply	Partially supports	Content is presented without needing to scroll in two dimensions when possible. An example where the map does not fit without scrolling is in the timezone selection panel of the Ubuntu installer.
1.4.11 Non-text Contrast (Level AA 2.1 only) Also applies to: Revised Section 508 – Does not apply	Supports	The high contrast setting in the Universal Access menu sets the desktop applications as high contrast.

1.4.12 Text Spacing (Level AA 2.1 only) Also applies to: Revised Section 508 – Does not apply	Supports	For the portions of the GNOME® interface that are displayed using markup language, parsing is properly implemented in the GUI and all markup functionality is supported.
1.4.13 Content on Hover or Focus (Level AA 2.1 only) Also applies to: Revised Section 508 – Does not apply	Not applicable	There is no content on hover or focus functionality in the operating system.

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
	Not applicable	There are no web pages included with the operating system.

2.4.6 Headings and Labels (Level AA)
Also applies to:
Revised Section 508
    501 (Web)(Software)
    504.2 (Authoring Tool)
    602.3 (Support Docs)
	Partially supports	When headings and labels exist, they describe a topic or purpose.

2.4.7 Focus Visible (Level AA)
Also applies to:
Revised Section 508
    501 (Web)(Software)
    504.2 (Authoring Tool)
    602.3 (Support Docs)
	Supports	The keyboard control is indicated by some area outline.

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)
	Supports	The human language of each passage or phrase in the content can be programmatically determined as there are no changes in the language of the product.

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
	Not applicable	The operating system is non-web software.

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
	Not applicable	The operating system is non-web software.

3.3.3 Error Suggestion (Level AA)
Also applies to:
Revised Section 508
    501 (Web)(Software)
    504.2 (Authoring Tool)
    602.3 (Support Docs)
	Partially supports	Input errors are usually automatically detected, if not, they are validated after submission.

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)
	Supports	The product does not cause legal commitments or financial transactions for the user to occur or submit user test responses. Users cannot modify or delete user controllable data in data storage systems without confirming the changes and in most cases are reversible.

4.1.3 Status Messages (Level AA 2.1 only) Also applies to: Revised Section 508 – Does not apply	Supports	For the portions of the GNOME® interface that are displayed using markup language, parsing is properly implemented in the GUI and status messages can be presented to the user by assistive technologies.
2.5.4 Motion Actuation (Level A 2.1 only) Also applies to: Revised Section 508 – Does not apply	Supports	Icons within applications and the operating system can be selected with either a pointer or using the keyboard.

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)
	Supports	Ubuntu supports internationalization including language choice.

3.2.1 On Focus (Level A)
Also applies to:
Revised Section 508
    501 (Web)(Software)
    504.2 (Authoring Tool)
    602.3 (Support Docs)
	Supports	When an application receives focus, it does not initiate a change of context.

3.2.2 On Input (Level A)
Also applies to:
Revised Section 508
    501 (Web)(Software)
    504.2 (Authoring Tool)
    602.3 (Support Docs)
	Supports	Visual contexts and submit buttons provide confirmation of input changes in applications and operating system settings.

3.3.1 Error Identification (Level A)
Also applies to:
Revised Section 508
    501 (Web)(Software)
    504.2 (Authoring Tool)
    602.3 (Support Docs)
	Supports	When an application errors, the user is informed.

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)
	Supports	Dialogs and forms provide hints and descriptions of the required data formats that must be entered.

4.1.1 Parsing (Level A)
    Also applies to:
    Revised Section 508
        501 (Web)(Software)
        504.2 (Authoring Tool)
        602.3 (Support Docs)
	Partially supports	For the portions of the GNOME® interface that are displayed using markup language, parsing is properly implemented in the GUI. Other dialog boxes may not produce the proper contextual information since they are not using a markup language.

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)
	Supports	When text is saved from a user input text field, the name and role could be easily programmatically determined.

Table 3: Success Criteria, Level AAA

Notes: Level AAA is not included in this report.

Revised Section 508 Report

Chapter 3: Functional Performance Criteria (FPC)

Criteria	Conformance Level	Remarks and Explanations
302.1 Without Vision	Partially supports	Many applications offer audio assistance for visually impared but a minimal vision is required to set those up.
302.2 With Limited Vision	Supports	Sound keys when Caps Lock and Num Lock are turned on/off , screen reader, large cursor and text.
302.3 Without Perception of Color	Supports	The high contrast icons are black and white.
302.4 Without Hearing	Supports	Visual alerts can be turned on.
302.5 With Limited Hearing	Supports	Visual alerts can be turned on.
302.6 Without Speech	Supports	The operating system works without any dependency on a microphone so speech is not necessary.
302.7 With Limited Manipulation	Supports	An onscreen keyboard allows a user to type with only a mouse, which only needs to be used with one hand and the mouse can be configured in the operating system to be left or right handed.
302.8 With Limited Reach and Strength	Supports	An onscreen keyboard allows a user to type with only a mouse, which requires only a limited reach and strength.
302.9 With Limited Language, Cognitive, and Learning Abilities	Supports	Applications are all represented by icons and aim to be intuitive for the application for which they represent.

Chapter 4: Hardware

Chapter 5: Software

Criteria	Conformance Level	Remarks and Explanations
501.1 Scope – Incorporation of WCAG 2.0 AA	See WCAG 2.1 section	See information in WCAG 2.1 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	There is user control of accessibility features as defined in the documentation.
502.2.2 No Disruption of Accessibility Features	Supports	Accessibility features are not disrupted by software
502.3 Accessibility Services	Heading cell – no response required	Heading cell – no response required
502.3.1 Object Information	Supports	Object's information is programmatically determinable.
502.3.2 Modification of Object Information	Supports	Users can set properties using assistive technologies set in the Universal Access menu.
502.3.3 Row, Column, and Headers	Supports	Information in applications is passed around via widgets instead of data tables, but is still programmatically determinable.
502.3.4 Values	Supports	Current settings values can be obtained programmatically with gsettings
502.3.5 Modification of Values	Supports	Current settings values can be changed programmatically with gsettings.
502.3.6 Label Relationships	Supports	Where labels are used, they are programmatically determinable.
502.3.7 Hierarchical Relationships	Supports	Hierarchical (parent-child) relationships between processes are determinable programmatically with ps.
502.3.8 Text	Supports	Text boundary and content information can be determined programmatically.
502.3.9 Modification of Text	Supports	Text that can be set by the user is capable of being set programmatically, including through assistive technology.
502.3.10 List of Actions	Supports	A list of all actions that can be executed on an object is programmatically determinable.
502.3.11 Actions on Objects	Supports	Actions on objects can be taken through the assistive technologies.
502.3.12 Focus Cursor	Supports	Applications expose information needed to track the cursor focus.

502.3.13 Modification of Focus Cursor	Partially supports	Some aspects of the Focus Cursor can be controlled programmatically such as cursor size.
502.3.14 Event Notification	Supports	System event notifications alert a user using assistive technologies.
502.4 Platform Accessibility Features	Partially supports	Ubuntu supports many accessibility features with the exception of chorded keystrokes.
[503 Applications](#)	Heading cell – no response required	Heading cell – no response required
503.2 User Preferences	Supports	Applications support all types of user preferences to be defined.
503.3 Alternative User Interfaces	Supports	Applications that use assistive technologies use the platform assistive technology services.
503.4 User Controls for Captions and Audio Description	Heading cell – no response required	Heading cell – no response required
503.4.1 Caption Controls	Supports	Applications that play audio/video generally offer support for using captions.
503.4.2 Audio Description Controls	Supports	Where applicable, the audio description controls are displayed at the same level as the volume.
[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")	See WCAG 2.1 section	See information in WCAG 2.1 section
504.2.1 Preservation of Information Provided for Accessibility in Format Conversion	Not supported	The accessibility information is not necessarily stored in various format conversions.
504.2.2 PDF Export	Partially supports	Not all pdf export applications support the PDF/UA or ISO 14289. Currently, Libreoffice writer includes this support but the other Libreoffice applications do not.
504.3 Prompts	Supports	New content conforms to Level A and Level AA Success Criteria and Conformance Requirements in WCAG 2.1.
504.4 Templates	Supports	Templates conform to Level A and Level AA Success Criteria and Conformance Requirements in WCAG 2.1.

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	Supports	There is detailed documentation regarding the accessibility features in the operating system.
602.3 Electronic Support Documentation	See WCAG 2.1 section	See information in WCAG 2.x section
602.4 Alternate Formats for Non-Electronic Support Documentation	Not supported	Canonical is not responsible for providing anyone with documentation other than in electronic formats.
[603 Support Services](#)	Heading cell – no response required	Heading cell – no response required
603.2 Information on Accessibility and Compatibility Features	Supports	If requested, Ubuntu support could provide further information on accessibility options.
603.3 Accommodation of Communication Needs	Supports	Any Ubuntu support services would take necessary measures to accommodate the communication needs of individuals with disabilities.

Legal Disclaimer (Canonical Limited)

This document describes Canonical's understanding of the technical attributes of the standard versions of the Ubuntu software as of the most recent publication date. It applies to such versions as they were made available by Canonical on such date, and not necessarily to versions which were updated after the publication date. Canonical makes no representation as to conformance to any regulatory standard. This document is provided as-is and Canonical disclaims all warranties.

ubuntu®
Delivered by Canonical