

Voluntary Product Accessibility Template (VPAT)

Name of Product/Version: Mathematica Version 14.x and Wolfram Player

Report Date: June 17, 2024

Summary

This VPAT represents an assessment of how Mathematica conforms to the <u>revised 508 standards</u> for IT accessibility. The document is frequently requested by clients, especially in higher education and government, and is posted publicly on <u>the company website</u>, where it can be accessed by all interested parties.

Document Information

Document Name	Voluntary Product	Document No.	W-001
	Accessibility Template,		
	Mathematica		
Document Owner	Compliance Specialist	Version No.	4
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		Frequency	needed



Contents

Title	Page No
Introduction	2
Table 1- Success Criteria, Level A	4
Table 2- Success Criteria, Level AA	7
Table 3 – Success Criteria, Level AAA	[not evaluated]
Revised Section 508 Report	9
 Chapter 3 – Functional Performance 	9
Criteria (FPC)	
 Chapter 5 – Software 	10
 Chapter 6 – Support Documentation 	12
and Services	
Legal Disclaimer	12

Introduction

Product Description:

Mathematica Desktop is software for exploring computation, processing data, developing applications and interfaces, and authoring independent artifacts called notebooks. Thus, it has an authoring interface as well as a user interface for the generated notebooks. Users can elect to use the traditional desktop interface, but the browser-based ("Cloud") interface tends to be more performant in terms of accessibility.

Wolfram Player retains all the software features of Mathematica Desktop without the authoring capabilities. Thus, notes concerning the Authoring Tool do not apply.

Contact Information: compliance@wolfram.com

Evaluation Methods Used: Manual testing and verification.

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, (Yes)	
2017 and corrected January 22, 2018	(Tes)

Voluntary Product Accessibility Template, Mathematica Version 4



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.



Table 1: Success Criteria, Level A

Notes:

Criteria	Conformance Level	Remarks and Explanations
1.1.1 Non-text Content (Level A)	Software: Supports Authoring Tool: Not Applicable Electronic Docs: Partially Supports	Software: Author can supply alt text for images. Authoring Tool: Interface does not rely on images. Electronic Docs: Images have alt texts.
1.2.1 Audio-only and Video-only (Prerecorded) (Level A)	Software: Supports Authoring Tool: Not Applicable Electronic Docs: Not Applicable	Software: Audio and video can be created programmatically. Authoring Tool: Interface does not rely on audio or video.
1.2.2 Captions (Prerecorded) (Level A)	Software: Supports Authoring Tool: Not Applicable Electronic Docs: Not Applicable	Software: Author can supply captions to video elements. Authoring Tool: Interface does not rely on video.
1.2.3 Audio Description or Media Alternative (Prerecorded) (Level A)	Software: Supports Authoring Tool: Not Applicable Electronic Docs: Not Applicable	Author can supply audio description or other alternatives for interfaces and graphics. Authoring Tool: Interface does not rely on recorded media.
1.3.1 Info and Relationships (Level A)	Software: Supports Authoring Tool: Supports Electronic Docs: Not Applicable	
1.3.2 Meaningful Sequence (Level A)	Software: Supports Authoring Tool: Supports Electronic Docs: Supports	
1.3.3 Sensory Characteristics (Level A)	Software: Supports Authoring Tool: Supports Electronic Docs: Not Applicable	Software: Author can ensure compliance. Authoring Tool: Relationships are all communicated via text.
1.4.1 Use of Color (Level A)	Software: Supports Authoring Tool: Supports Electronic Docs: Not Evaluated	Authoring Tool: Color is only used to reinforce meaning. Electronic Docs: Color contrasts were not evaluated everywhere.
1.4.2 Audio Control (Level A)	Software: Supports Authoring Tool: Supports	Authoring Tool: No audio events are triggered automatically.



Criteria	Conformance Level	Remarks and Explanations
	Electronic Docs: Not Applicable	
2.1.1 Keyboard (Level A)	Software: Supports Authoring Tool: Supports Electronic Docs: Supports	Keyboard navigation is possible. Where keyboard access is not available, alternative methods of manipulation are available and documented. For example, items in tool palettes can be entered manually using escape sequences. Electronic Docs: Can be navigated using browsers' standard shortcuts.
2.1.2 No Keyboard Trap (Level A)	Software: Supports Authoring Tool: Supports Electronic Docs: Supports	Dialogs do not pull keyboard focus away from the interface, and can be dismissed by a keystroke. Electronic Docs: No dialogs or modals are generated.
2.2.1 Timing Adjustable (Level A)	Software: Supports Authoring Tool: Not Applicable Electronic Docs: Not Applicable	Authoring Tool: There are no time- sensitive actions in the authoring interface.
2.2.2 Pause, Stop, Hide (Level A)	Software: Supports Authoring Tool: Not Applicable Electronic Docs: Not Applicable	Animations can be created, but they are not an essential part of the user experience.
2.3.1 Three Flashes or Below Threshold (Level A)	Software: Supports Authoring Tool: Not Applicable Electronic Docs: Not Applicable	This threshold is never reached.
2.4.1 Bypass Blocks (Level A)	Software: Supports Authoring Tool: Not Applicable Electronic Docs: Not Applicable	Navigating through the interface can occur on multiple levels, allowing the user to skip blocks
2.4.2 Page Titled (Level A)	Authoring Tool: Not Applicable Electronic Docs: Supports	Authoring Tool: The notion of a page is not germane to the Mathematica desktop interface.
2.4.3 Focus Order (Level A)	Software: Supports Authoring Tool: Supports Electronic Docs: Supports	Interface elements have a logical and predictable order of focus.



Criteria	Conformance Level	Remarks and Explanations
2.4.4 Link Purpose (In Context) (Level A)	Software: Supports Authoring Tool: Supports Electronic Docs: Supports	Software: Authors can add descriptive text to web links.
3.1.1 Language of Page (Level A)	Software: Supports Authoring Tool: Does Not Support Electronic Docs: Does not Support	Software: authors can access most non-Western characters and alphabet sets for their purposes. Authoring Tool and Docs: Mathematica functions and documentation are in English, with extensive translation to traditional Chinese and to Japanese.
3.2.1 On Focus (Level A)	Software: Supports Authoring Tool: Supports Electronic Docs: Supports	No unexpected changes of focus take place.
3.2.2 On Input (Level A)	Software: Supports Authoring Tool: Supports Electronic Docs: Supports	Input events do not cause a change of context.
3.3.1 Error Identification (Level A)	Software: Supports Authoring Tool: Supports Electronic Docs: Not Applicable	Software: Author can design error messages Authoring Tool: Errors are shown, with remedies explained when appropriate.
3.3.2 Labels or Instructions (Level A)	Software: Supports Authoring Tool: Supports Electronic Docs: Supports	
4.1.1 Parsing (Level A)	Software: Supports Electronic Docs: Supports	
4.1.2 Name, Role, Value (Level A)	Software: Supports Electronic Docs: Supports	



Table 2: Success Criteria, Level AA

Notes:

Criteria	Conformance Level	Remarks and Explanations
1.2.4 Captions (Live) (Level AA)	Software: Supports Authoring Tool: Not Applicable Electronic Docs: Not Applicable	Software: Author can embed video with captions already appended. Authoring Tool: Interface does not rely on video.
1.2.5 Audio Description (Prerecorded) (Level AA)	Software: Supports Authoring Tool: Not Applicable Electronic Docs: Not Applicable	Software: Author can embed video with audio descriptions included. Authoring Tool: Interface does not rely on video.
1.4.3 Contrast (Minimum) (Level AA)	Software: Supports Authoring Tool: Supports Electronic Docs: Supports	Software: Author can create alternate color palettes. Authoring Tool: Default appearance can be adjusted to suit all color perception impairments. Electronic Docs: Compliant.
1.4.4 Resize text (Level AA)	Software: Supports Authoring Tool: Supports Electronic Docs: Supports	
a <u>1.4.5 Images of Text</u> (Level AA)	Software: Supports Authoring Tool: Supports Electronic Docs: Supports	Software: Author can provide text alternatives to images Authoring Tool: Interface does not rely solely on images to convey meaning.
2.4.5 Multiple Ways (Level AA)	Software: Supports Electronic Docs: Supports	
2.4.6 Headings and Labels (Level AA)	Software: Not Applicable Electronic Docs: Supports	Software: Does not apply to non- web software.
2.4.7 Focus Visible (Level AA)	Software: Supports Authoring Tool: Supports Electronic Docs: Supports	Software: Author can customize focus appearance. Authoring Tool: Focus is indicated through color, and focus color can be customized.
3.1.2 Language of Parts (Level AA)	Software: Supports Authoring Tool: Does Not Support Electronic Docs: Does Not Support	Software: authors can access most non-Western characters and alphabet sets for their purposes. Authoring Tool and Docs: Mathematica functions and documentation are in English, with



Criteria	Conformance Level	Remarks and Explanations
		extensive translation to traditional
		Chinese and to Japanese.
	Software: Not	
	Applicable	
3.2.3 Consistent Navigation (Level AA)	Authoring Tool:	Navigating the notebook interface
3.2.3 Consistent Navigation (Level AA)	Supports	is consistent and predictable.
	Electronic Docs:	
	Supports	
	Software: Not	
3.3.4 Consistent Identification (Loyal AA)	Applicable	Does not apply to non-web
3.2.4 Consistent Identification (Level AA)	Electronic Docs:	software.
	Supports	
	Software: Supports	
	Authoring Tool:	Mathematica provides a smart
3.3.3 Error Suggestion (Level AA)	Supports	predictive text interface that
	Electronic Docs: Not	provides meaningful suggestions.
	Applicable	
	Electronic Docs: Not	
	Applicable	
3.3.4 Error Prevention (Legal, Financial,	Software: Not	
Data) (Level AA)	Applicable	
	Authoring Tool: Not	
	Applicable	



Revised Section 508 Report

Chapter 3: Functional Performance Criteria (FPC)

Criteria	Conformance Level	Remarks and Explanations
302.1 Without Vision	Supports	Text elements can be accessed using SpeakSelection, but standard screen readers are unable to parse text in the desktop interface. Users relying on a screen reader should use the browser-based interface.
302.2 With Limited Vision	Supports	Visual elements can be enlarged with standard magnification tools.
302.3 Without Perception of Color	Supports	Color is not a primary conveyor of information. Software does not interfere with standard color contrast adjustment tools.
302.4 Without Hearing	Supports	Auditory cues are minimal and not essential to the operation of the software.
302.5 With Limited Hearing	Does Not Apply	Conventional assistive technologies will fulfill this criterion.
302.6 Without Speech	Does Not Apply	Conventional assistive technologies will fulfill this criterion.
302.7 With Limited Manipulation	Does Not Apply	Conventional assistive technologies will fulfill this criterion.
302.8 With Limited Reach and Strength	Does Not Apply	Conventional assistive technologies will fulfill this criterion.
302.9 With Limited Language, Cognitive, and Learning Abilities	Does Not Apply	Conventional assistive technologies will fulfill this criterion.



Chapter 5: Software

Criteria	Conformance Level	Remarks and Explanations
501.1 Scope – Incorporation of WCAG 2.0 AA	See WCAG 2.x section	See information in WCAG 2.x section.
502 Interoperability with Assistive		
<u>Technology</u>		
502.2.1 User Control of Accessibility Features	Supports	
502.2.2 No Disruption of Accessibility Features	Supports	
502.3 Accessibility Services		
502.3.1 Object Information	Supports	
502.3.2 Modification of Object Information	Supports	
502.3.3 Row, Column, and Headers	Supports	
502.3.4 Values	Supports	
502.3.5 Modification of Values	Supports	
502.3.6 Label Relationships	Supports	
502.3.7 Hierarchical Relationships	Supports	
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	Does Not Support	Not all alerts and notifications are compatible with assistive technology, such as screen readers.
502.4 Platform Accessibility Features	Does Not Support	All points are adequately covered except Section 10.6.9, "Provide speech output services." Speech output coverage is incomplete.
503 Applications		
503.2 User Preferences	Supports	
503.3 Alternative User Interfaces	Does Not Apply	
503.4 User Controls for Captions and Audio Description		
503.4.1 Caption Controls	Does Not Apply	
503.4.2 Audio Description Controls	Does Not Apply	
504 Authoring Tools		
504.2 Content Creation or Editing (if not authoring tool, enter "not applicable")	See WCAG 2.x section	See information in WCAG 2.x section.



Criteria	Conformance Level	Remarks and Explanations
504.2.1 Preservation of Information Provided for Accessibility in Format Conversion		
504.2.2 PDF Export	Does Not Support	Generated PDFs do not automatically conform to ANSI/AIIM/ISO 14289- 1:2016 (PDF/UA-1).
504.3 Prompts	Does Not Support	This feature has not been developed.
504.4 Templates	Supports	Templates can be made to conform to WCAG, but the interface is not proactive in ensuring conformance.



Chapter 6: Support Documentation and Services

Criteria	Conformance Level	Remarks and Explanations
601.1 Scope		
602 Support Documentation		
602.2 Accessibility and Compatibility Features	Supports	See Wolfram's Accessibility documentation page: https://reference.wolfram.com/language/guide/Accessibility.html
602.3 Electronic Support Documentation	See <u>WCAG 2.0</u> section	See information in WCAG 2.0 section
602.4 Alternate Formats for Non- Electronic Support Documentation	Sunnorts	Non-electronic (paper-based) documentation can be made available.
603 Support Services		
603.2 Information on Accessibility and Compatibility Features	Supports	Our Tech Support team can be reached through multiple channels, not limited to telephone, TTY, or various chat clients.
603.3 Accommodation of Communication Needs	Supports	With prior notification, our Tech Support team will provide communication accommodations as requested.

Legal Disclaimer

Wolfram takes privacy and data protection seriously, and is committed to safeguarding data you share with us. To learn more, please see our privacy policy at https://www.wolfram.com/legal/privacy/wolfram.