

TeXLive Accessibility Conformance Report
(International Edition)
(Based upon VPAT[®] version 2.4)

TeX Users Group

Version 2.2, March 2023

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Name of Product/Version

TeXLive 2023.

Report Date

March 2023.

Product Description

TeXLive is the reference distribution of TeX and related software supported by TeX Users Group, a membership-based not-for-profit organization dedicated to support, promotion and advocacy of TeX typesetting system created by Donald Knuth and maintained by the international community of developers. As of 2023 TeXLive contains more than 470 programs and more than 7660 software packages.

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Notes

T_EXLive is a complex software suite, intended to produce typeset products in various formats (PDF, HTML, DVI, XML to name a few). In all cases it takes an *input code* written in a machine-readable form and translates it to an *output format*, suitable to publication in the traditional (hard copy) or electronic form.

This document covers only the software used to convert the input code to the output format. The creation of the input code is outside the scope of this document, since it is done by third party software. T_EXLive software can accept as input text files created in any authoring tool. T_EX Users group is aware about fully accessible authoring tools, and promotes them on its web pages and publications.

A separate issue is the accessibility of the *output documents* created with T_EXLive software. The accessibility features of these documents depend on the settings in the input code and the packages used, and thus is not covered by this document. T_EX Users Group strives to make the creation of full accessible documents using its tool as simple as possible, and to make the accessibility features the default settings of our software. This is an ongoing effort, involving many developers. T_EX Users Group welcomes any help in this work.

The tools provided by T_EXLive are accompanied by technical documentation, both included in T_EXLive itself, and separate: there are many books, courses and other materials about T_EX. Many of the latter are fully accessible. The main documentation of T_EXLive, supported by T_EXLive team, is accessible as well. Most of the documentation for several thousand software packages in T_EXLive is provided in PDF or text format. By requiring machine readable textual sources of all documentation provided by T_EXLive packages, we ensure a certain level of accessibility for all documentation. However, the full audit of the documentation for all 7300+ packages created by many thousands of volunteers is not feasible at this time. T_EX Users group supports the efforts of making all T_EX documentation fully accessible.

Evaluation methods used

The testing was based on the knowledge of the general product knowledge.

Applicable standards and guidelines

Standard/Guideline	Included in the report
Web Content Accessibility Guidelines 2.0	Level A (Yes) Level AA (Yes) Level AAA (Yes)
Web Content Accessibility Guidelines 2.1	Level A (Yes) Level AA (Yes) Level AAA (Yes)
Revised Section 508 standards published January 18, 2017 and corrected January 22, 2018	Yes
EN 301 549 Accessibility requirements suitable for public procurement of ICT products and services in Europe, - V3.1.1 (2019-11)	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.x Report

Tables 1 and 2 also document conformance with:

- EN 301 549: Chapter 9 – Web, Sections 10.1-10.4 of Chapter 10 – Non-Web documents, and Sections 11.1-11.4 and 11.8.2 of Chapter 11 – Non-Web Software (open and closed functionality), and Sections 12.1.2 and 12.2.4 of Chapter 12 – Documentation
- 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.x 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.

Introduction

This section of the report describes the documentation for T_EXLive.

There are several ways to define “the full documentation for T_EX and friends software”. In one meaning of these words it comprises all books on T_EX, L^AT_EX, ConT_EXt and other systems included in T_EXLive, all issues of the journals published by T_EX Users Group and other users produced documentation. Of course it would be impossible to estimate the accessibility of all this documentation, comprising hundreds thousands of pages written over three decades.

Another way is to count only the documentation for the packages included in T_EXLive. This includes documentation for 7300+ packages, which makes the full audit rather impractical.

In this document we discuss only the main manual for the system, available with the installation and at <https://tug.org/texlive/doc/texlive-en/texlive-en.html>. We note, however, that documentation for all T_EXLive packages is available as source text files, and thus is highly accessible.

In the tables below the success criteria apply to *Web* and *Electronic Docs* paragraphs of VPAT.

Table 1: Success Criteria, Level A

Criteria	Conformance Level
1.1.1 Non-text Content	Supports
1.2.1 Audio-only and Video only (Prerecorded)	Not Applicable
1.2.2 Captions Prerecorded	Not Applicable
1.2.3 Audio Description or Media Alternative (Prerecorded)	Not Applicable
1.3.1 Info and Relationships	Supports
1.3.2 Meaningful Sequence	Supports
1.3.3 Sensory Characteristics	Not Applicable
1.4.1 Use of Color	Supports
1.4.2 Audio Control	Not Applicable
2.1.1 Keyboard	Supports
2.1.2 No Keyboard Trap	Supports
2.1.4 Character Key Shortcuts (2.1 only)	Supports
2.2.1 Timing Adjustable	Supports
2.2.2 Pause, Stop, Hide	Supports
2.3.1 Three Flashes or Below Threshold	Supports
2.4.1 Bypass Blocks	Not Applicable
2.4.2 Page Titled	Supports
2.4.3 Focus Order	Supports
2.4.4 Link Purpose (In Context)	Supports
2.5.1 Pointer Gestures (2.1 only)	Supports
2.5.2 Pointer Cancellation (2.1 only)	Supports
2.5.3 Label in Name (2.1 only)	Supports
2.5.4 Motion Actuation (2.1 only)	Supports
3.1.1 Language of Page	Supports
3.2.1 On Focus	Supports
3.2.2 On Input	Supports
3.3.1 Error Identification	Supports
3.3.2 Labels or Instructions	Supports
4.1.1 Parsing	Supports
4.1.2 Name, Role, Value	Supports

Table 2: Success Criteria, Level AA

Criteria	Conformance Level
1.2.4 Captions (Live)	Not Applicable
1.2.5 Audio Description (Prerecorded)	Not Applicable
1.3.4 Orientation (2.1 only)	Supports
1.3.5 Identify Input Purpose (2.1 only)	Supports
1.4.3 Contrast (Minimum)	Supports
1.4.4 Resize text	Supports
1.4.5 Images of Text	Supports
1.4.10 Reflow (2.1 only)	Supports
1.4.11 Non-text Contrast (2.1 only)	Supports
1.4.12 Text Spacing (2.1 only)	Supports
1.4.13 Content on Hover or Focus (2.1 only)	Supports
2.4.5 Multiple Ways	Supports
2.4.6 Headings and Labels	Supports
2.4.7 Focus Visible	Supports
3.1.2 Language of Parts	Supports
3.2.3 Consistent Navigation	Supports
3.2.4 Consistent Identification	Supports
3.3.3 Error Suggestion	Not Applicable
3.3.4 Error Prevention (Legal, Financial, Data)	Not Applicable
4.1.3 Status Messages (2.1 only)	Supports

Table 3: Success Criteria, Level AAA

Criteria	Conformance Level
1.2.6 Sign Language (Prerecorded)	Not Applicable
1.2.7 Extended Audio Description (Prerecorded)	Not Applicable
1.2.8 Media Alternative (Prerecorded)	Not Applicable
1.2.9 Audio-only (Live)	Not Applicable
1.3.6 Identify Purpose (2.1 only)	Supports
1.4.6 Contrast (Enhanced)	Supports
1.4.7 Low or No Background Audio	Supports
1.4.8 Visual Presentation	Supports
1.4.9 Images of Text (No Exception)	Supports ¹
2.1.3 Keyboard (No Exception)	Supports
2.2.3 No Timing	Supports
2.2.4 Interruptions	Supports
2.2.5 Re-authenticating	Not Applicable
2.2.6 Timeouts (2.1 only)	Not Applicable
2.3.2 Three Flashes	Supports
2.3.3 Animation from Interactions (2.1 only)	Supports
2.4.8 Location	Supports
2.4.9 Link Purpose (Link Only)	Supports
2.4.10 Section Headings	Supports
2.5.5 Target Size (2.1 only)	Supports
2.5.6 Concurrent Input Mechanisms (2.1 only)	Supports
3.1.3 Unusual Words	Does Not Support
3.1.4 Abbreviations	Does Not Support
3.1.5 Reading Level	Does Not Support
3.1.6 Pronunciation	Not Applicable
3.2.5 Change on Request	Supports
3.3.5 Help	Does Not Support
3.3.6 Error Prevention (All)	Not Applicable

Note: Neither Revised Section 508 Report nor EN 301 549 Report require AAA level compliance.

¹Images of GUI screens are used only when essential to the information being conveyed.

Revised Section 508 Report

Chapter 3: Functional Performance Criteria (FPC)

Criteria	Conformance Level
302.1 Without Vision	Supports
302.2 With Limited Vision	Supports
302.3 Without Perception of Color	Supports
302.4 Without Hearing	Supports
302.5 With Limited Hearing	Supports
302.6 Without Speech	Supports
302.7 With Limited Manipulation	Supports
302.8 With Limited Reach and Strength	Supports
302.9 With Limited Language, Cognitive, and Learning Abilities	Does Not Support

Chapter 4: Hardware

Does Not Apply.

Chapter 5: Software

Criteria	Conformance Level
501.1 Scope—Incorporation of WCAG 2.0 AA	Supports ²
<i>502 Interoperability with Assistive Technology</i>	
502.2.1 User Control of Accessibility Features	Supports
502.2.2 No Disruption of Accessibility Features	Supports
<i>502.3 Accessibility Services</i>	
502.3.1 Object Information	Supports
502.3.2 Modification of Object Information	Supports
502.3.3 Row, Column, and Headers	Not Applicable
502.3.4 Values	Supports
502.3.5 Modification of Values	Supports
502.3.6 Label Relationships	Not Applicable
502.3.7 Hierarchical Relationships	Not Applicable
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

²See [Table 2: Success Criteria, Level AA](#)

Criteria	Conformance Level
502.3.14 Event Notification	Supports
502.4 Platform Accessibility Features	Supports
<i>503 Applications</i>	
503.2 User Preferences	Supports
503.3 Alternative User Interfaces	Supports
<i>503.4 User Controls for Captions and Audio Description</i>	
503.4.1 Caption Controls	Not Applicable
503.4.2 Audio Description Controls	Not Applicable
<i>504 Authoring Tools</i>	
504.2 Content Creation or Editing (if not authoring tool, enter “not applicable”)	Not Applicable
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
<i>602 Support Documentation</i>	
602.2 Accessibility and Compatibility Features	Supports
602.3 Electronic Support Documentation	Supports ³
602.4 Alternate Formats for Non-Electronic Support Documentation	Not Applicable
<i>603 Support Services</i>	
603.2 Information on Accessibility and Compatibility Features	Not Applicable
603.3 Accommodation of Communication Needs	Not Applicable

³See [WCAG 2.x Report](#)

EN 301 549 Report

Chapter 4: Functional Performance Statements (FPS)

Criteria	Conformance Level
4.2.1 Usage without vision	Supports
4.2.2 Usage with limited vision	Supports
4.2.3 Usage without perception of colour	Supports
4.2.4 Usage without hearing	Supports
4.2.5 Usage with limited hearing	Supports
4.2.6 Usage with no or limited vocal capability	Supports
4.2.7 Usage with limited manipulation or strength	Supports
4.2.8 Usage with limited reach	Supports
4.2.9 Minimize photosensitive seizure triggers	Supports
4.2.10 Usage with limited cognition, language or learning	Does not support
4.2.11 Privacy	Supports

Chapter 5: Generic Requirements

Note: EN 301 549 defines “closed functionality” as “functionality that is limited by characteristics that prevent a user from attaching, installing or using assistive technology”. Since T_EXLive utilities do not prevent users from attaching, installing or using assistive technology, most of requirements in this chapter are not applicable to them.

Criteria	Conformance Level
<i>5.1 Closed functionality</i>	
<i>5.1.2 General</i>	
5.1.2.1 Closed functionality	Not Applicable
5.1.2.2 Assistive technology	Not Applicable
<i>5.1.3 Non-visual access</i>	
5.1.3.1 Audio output of visual information	Not Applicable
5.1.3.2 Auditory output delivery including speech	Not Applicable
5.1.3.3 Auditory output correlation	Not Applicable
5.1.3.4 Speech output user control	Not Applicable
5.1.3.5 Speech output automatic interruption	Not Applicable
5.1.3.6 Speech output for non-text content	Not Applicable
5.1.3.7 Speech output for video information	Not Applicable
5.1.3.8 Masked entry	Not Applicable
5.1.3.9 Private access to personal data	Not Applicable
5.1.3.10 Non-interfering audio output	Not Applicable
5.1.3.11 Private listening volume	Not Applicable

Criteria	Conformance Level
5.1.3.12 Speaker volume	Not Applicable
5.1.3.13 Volume reset	Not Applicable
5.1.3.14 Spoken languages	Not Applicable
5.1.3.15 Non-visual error identification	Not Applicable
5.1.3.16 Receipts, tickets, and transactional outputs	Not Applicable
5.1.4 Functionality closed to text enlargement	Not Applicable
5.1.5 Visual output for auditory information	Not Applicable
<i>5.1.6 Operation without keyboard interface</i>	
5.1.6.2 Input focus	Not Applicable
5.1.7 Access without speech	Not Applicable
5.2 Activation of accessibility features	Not Applicable
5.3 Biometrics	Not Applicable
5.4 Preservation of accessibility information during conversion	Not Applicable
<i>5.5 Operable parts</i>	
5.5.1 Means of operation	Not Applicable
5.5.2 Operable parts discernibility	Not Applicable
<i>5.6 Locking or toggle controls</i>	
5.6.1 Tactile or auditory status	Not Applicable
5.6.2 Visual status	Not Applicable
5.7 Key repeat	Not Applicable
5.8 Double-strike key acceptance	Not Applicable
5.9 Simultaneous user actions	Not Applicable

Chapter 6: ICT with Two-Way Voice Communication

Not Applicable.

Chapter 7: ICT with Video Capabilities

Not Applicable.

Chapter 8: Hardware

Not Applicable.

Chapter 9: Web

See [WCAG 2.x Report](#).

Chapter 10: Non-Web Software

Criteria	Conformance Level
10.1.1.1 through 10.4.1.3	Supports ⁴
10.5 Caption positioning	Not Applicable
10.6 Audio description timing	Not Applicable

Chapter 11: Software

Criteria	Conformance Level
11.1.1.1 through 11.4.1.3	Supports ⁵
<i>11.5 Interoperability with assistive technology</i>	
<i>11.5.1 Closed functionality</i>	
<i>11.5.2 Accessibility services</i>	
11.5.2.1 Platform accessibility service support for software that provides a user interface	Supports ⁶
11.5.2.2 Platform accessibility service support for assistive technologies	Supports ⁷
11.5.2.3 Use of accessibility services	Not Applicable
11.5.2.4 Assistive technology	Not Applicable
11.5.2.5 Object information	Not Applicable
11.5.2.6 Row, column, and headers	Not Applicable
11.5.2.7 Values	Not Applicable
11.5.2.8 Label relationships	Not Applicable
11.5.2.9 Parent-child relationships	Not Applicable
11.5.2.10 Text	Supports
11.5.2.11 List of available actions	Supports
11.5.2.12 Execution of available actions	Supports
11.5.2.13 Tracking of focus and selection attributes	Not Applicable
11.5.2.14 Modification of focus and selection attributes	Not Applicable
11.5.2.15 Change notification	Supports
11.5.2.16 Modifications of states and properties	Supports
11.5.2.17 Modifications of values and text	Supports

⁴WCAG 2.x Report

⁵See WCAG 2.x Report

⁶See information in 11.5.2.5 through 11.5.2.17

⁷See information in 11.5.2.5 through 11.5.2.17

Criteria	Conformance Level
<i>11.6 Documented accessibility usage</i>	
11.6.1 User control of accessibility features	Not Applicable
11.6.2 No disruption of accessibility features	Supports
11.7 User preferences	Not Applicable
<i>11.8 Authoring tools</i>	
11.8.2 Accessible content creation	Not Applicable
11.8.3 Preservation of accessibility information in transformations	Not Applicable
11.8.4 Repair assistance	Not Applicable
11.8.5 Templates	Not Applicable

Chapter 12: Documentation and Support Services

Criteria	Conformance Level
<i>12.1 Product documentation</i>	
12.1.1 Accessibility and compatibility features	Not Applicable
12.1.2 Accessible documentation	Supports ⁸
<i>12.2 Support Services</i>	
12.2.2 Information on accessibility and compatibility features	Not Applicable
12.2.3 Effective communication	Not Applicable
12.2.4 Accessible documentation	Not Applicable

Chapter 13: ICT Providing Relay or Emergency Service Access

Not Applicable.

⁸See [WCAG 2.x Report](#)

Legal Disclaimer

While all efforts were made to provide an accurate description of the software, T_EX Users Group cannot make any guarantee, explicit or implied, of the accuracy of this report. This report is provided “As Is” and for information purposes only.