Progress in the LATEX tagging project: 2024

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20.7.2024 TUG 2024

Oh no, not again

- 2021 On the road to tagged PDF
- 2023 Automated tagging of LATEX documents—what is possible today?
 - "Leslie Lamport documents"
- 2024 Progress in the LATEX tagging project
 - Why bother? HTML is more accessible
 - WTPDF (Well Tagged PDF) examples
 - Tagging Status of LATEX Packages and Classes
 - Progress in math tagging



Why bother? HTML is more accessible

HTML

- structured language
- all viewer understand the structure
- lots of books and guidelines
- behaviour of AT-tools is well understood

PDF

- page description language
- structure must be added on top
- viewer can (and do) ignore structure
- behaviour of AT-tools in large parts still unclear

Why bother? Why do we use PDF?

HTML

- many files
- scripts, cookies and session ID dependency
- no faithful representation
- difficult to use offline
- difficult to forward and distribute
- difficult to store

PDF

- one file
- faithful representation
- easy offline use
- easy to forward and distribute
- long-term storage
- good viewer support

Not every use of PDF can be replaced easily by HTML. PDF documents must be accessible and reusable too!

Goals of the Tagged PDF Project

- improve accessibility of PDF documents produced by LATEX
- tagging should be automatic and easy
- also improve conversion to HTML
- push PDF 2.0 better for accessibility
- push improvements in viewers and tools

Main entry page of the Tagged PDF Project

https://github.com/latex3/tagging-project

- documentation for prototype documents
- examples
- issue tracker
- compability status of packages and classes

New standards for PDF 2.0:

- PDF/UA-2 (Universal Accessibility) in PDF 2.0 (ISO 14289-2:2024)
 https://www.iso.org/standard/82278.html
- WTPDF (Well Tagged PDF) for Accessibility and Reuse in PDF 2.0 https://pdfa.org/wtpdf (free)



Well-Tagged PDF (WTPDF)

Using Tagged PDF for Accessibility and Reuse in PDF 2.0



PDF Association PDF Reuse TWG & PDF/UA TWG Version 1.0.0 February 2024

WTPDF examples

The PDF Association invites its members to contribute example PDF files demonstrating conformance to WTPDF. To be included such files must be:

- Valid PDF 2.0 (a clean report from the Arlington PDF Model is required);
- Valid PDF/UA-2 (and PDF/A-4 and/or PDF/X-6', for bonus points:-);
- Valid WTPDF (that is, conform to at least one WTPDF conformance level).

Additional <u>PDF Declarations</u>, such as <u>Validated as conforming to PDF/UA-2</u> or Validated as <u>WTPDF, conformance level accessibility</u>, if applicable.

Note: The PDF Association does not endorse these developers' representations but presents the examples "as is".

PDF Association Member	Example(s)
BFO (Big Faceless Organization)	BFO-WTPDF-&-PDFua2,pdf
<u>LaTeX Project</u>	Examples of various types of content?

Descriptions and links:

https://github.com/latex3/tagging-project/discussions/72

Sources:

https://github.com/latex3/tagging-project/tree/main/project-examples



WTPDF / PDF/UA-2 Examples by the LaTeX Project

The following files demonstrate various aspects of Well Tagged PDF documents conforming to PDF/UA-2.

They were all generated with LuaLaTeX (lualatex-dev in TeX Live 2024).

- Bible: pushing the limits
- Max and Moritz: multilanguage problems
- amsmath documentation (amsldoc): tagging math
- ...

https://latex3.github.io/tagging-project/tagging-status/

Thanks

Initial list Ian Thompson Largely extended by mbertucci

For users: Fast overview over the package and class status

For developers: Test files and links to open issues

Help needed!

Test and record results!



LaTeX Tagging Project

Tagging Status of LaTeX Packages and Classes

This file shows the status of 185 LaTeX Packages and Classes with respect to PDF tagging. phase-III is generally needed and not explicitly shown

The values in the Status column have the following meaning:

- compatible This package or class works without any issues when tagging is enabled. If there are problems, please open an issue in
 the tagging-project repo. (100 entries.)
- partially-compatible The package or class is currently partially compatible, e.g., some parts may not work yet, but with some
 restrictions it can already be used. See comments for details. (17 entries.)
- currently-incompatible The package or class is currently incompatible with the tagging code, but we expect it to be updated
 eventually. (30 entries.)
- no-support This package or class or class is incompatible with the tagging code and we do *not* believe that it will ever be supported.

 (3 entries.)
- unknown The status of this package or class is not known, because there aren't reliable tests yet. Help with testing to determine the

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- unknown The status of this package or class is not known, because there aren't reliable tests yet. Help with testing to determine the real status is very much appreciated. (35 entries.)

To use packages or classes together with the tagging code it is (nearly) always necessary to load at least phase-III of the tagging code, i.e., testphase=phase-III in \'DocumentMetadata. To save space in the tables, this is not explicitly mentioned below. However, if a package or class requires other settings there is an explicit remark in the comments column, e.g., Tagging support: phase-III, table which means you have to specify testphase={phase-III,table}. If package is mentioned at this point it means that the package itself provides the necessary tagging support and not one of the modules in latex-lab.

To add or edit the entries in the tables, please make a pull request to change the YAML file tagging-status, yml.

If you encounter a problem with a package or class for which there is no issue in the issue tracker yet, please add an issue in the tracker first (including a small example what goes wrong) or start a discussion in the discussion view if that seems more appropriate. Later on it

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Packages

Statistics: The table currently holds 170 packages out of which 96 are fully compatible, 15 partially-compatible, 24 currently-incompatible, and 3 have no-support. The status for the remaining 32 packages is unknown.

Click on the column headings to sort the table by the chosen column.

Name	Status	Comments	Relevant	Tasks	Last

you have to specify testphase={phase=III,table}. If package is mentioned at this point it means that the package itself provides the necessary tagging support and not one of the modules in latex-lab.

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Click on the column headings to sort the table by the chosen column.

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
Alegreya	compatible				2024-07-13
AlegreyaSans	compatible				2024-07-13
AnonymousPro	compatible				2024-07-13
accanthis	compatible				2024-07-13
algolrevived	compatible				2024-07-13
almendra	compatible				2024-07-13

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accanthis	compatible				2024-07-13
algolrevived	compatible				2024-07-13
almendra	compatible				2024-07-13
amscd	compatible	Use of math tagging currently requires support from external tools. Tagging support: phase-III, math.	test(s)		2024-07-12

AnonymousPro	compatible			2024-07-13
accanthis	compatible			2024-07-13
algolrevived	compatible			2024-07-13
almendra	compatible			2024-07-13
amscd	compatible	Use of math tagging currently requires support from external tools. Tagging support: phase-III, math.	test(s)	2024-07-12

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
amsopn	compatible	Use of math tagging currently requires support from external tools. Tagging support: phase-III, math.	test(s)		2024-07-09
amstext	compatible	Use of math tagging currently requires support from external tools.	test(s)		2024-07-12

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
amsopn	compatible	Use of math tagging currently requires support from external tools. Tagging support: phase-III, math.	test(s)		2024-07-09
amstext	compatible	Use of math tagging currently requires support from external tools. Tagging support: phase-III, math.	test(s)		2024-07-12
anttor	compatible				2024-07-13
arimo	compatible				2024-07-13
array	compatible	Tagging support: phase-III, table.			2024-07-06
avant	compatible	Obsolete package; suggested replacement tgadvantor			2024-07-13

		Tagging support: phase-III, math.		
amstext	compatible	Use of math tagging currently requires support from external tools. Tagging support: phase-III, math.	test(s)	2024-07-12
anttor	compatible			2024-07-13
arimo	compatible			2024-07-13
array	compatible	Tagging support: phase-III, table.		2024-07-06
avant	compatible	Obsolete package; suggested replacement tgadvantor		2024-07-13
Baskervaldx	compatible			2024-07-13
bezier	compatible	Empty compatibility package, can be removed from the preamble		2024-07-07
blindtext	compatible	Tagging support: phase-III, firstaid.		2024-07-07
bm	compatible	Use of math tagging currently requires support from external tools.	test(s)	2024-07-12

CharisSII	compatible				2024-07-13
Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
bm	compatible	Use of math tagging currently requires support from external tools. Tagging support: phase-III, math.	test(s)		2024-07-12
blindtext	compatible	Tagging support: phase-III, firstaid.			2024-07-07
bezier	compatible	Empty compatibility package, can be removed from the preamble			2024-07-07
Baskervaldx	compatible				2024-07-13
avant	compatible	Obsolete package; suggested replacement tgadvantor			2024-07-13
array	compatible	Tagging support: phase-III, table.			2024-07-06
armio	companie				202.00

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
CharisSIL	compatible				2024-07-13
Chivo	compatible				2024-07-13
ClearSans	compatible				2024-07-13

blindtext	compatible	Tagging support: phase-III, firstaid.			2024-0
bm	compatible	Use of math tagging currently requires support from external tools. Tagging support: phase-III, math.	test(s)		2024-0
Name	Status	Comments	Relevant issue(s)	Tasks	Las upda
CharisSIL	compatible				2024-0
Chivo	compatible				2024-0
ClearSans	compatible				2024-0
CormorantGaramond	compatible				2024-0
CrimsonPro	compatible				2024-0
calc	compatible				2024-0
color	compatible				2024-0
colortbl	compatible	#90 issue with longtable fixed at the last release	#90		2024-0
		Tagging support: phase-III, table.			

			issue(s)	updated
CharisSIL	compatible			2024-07-13
Chivo	compatible			2024-07-13
ClearSans	compatible			2024-07-13
CormorantGaramond	compatible			2024-07-1
CrimsonPro	compatible			2024-07-1
calc	compatible			2024-07-0
color	compatible			2024-07-0
colortbl	compatible	#90 issue with longtable fixed at the last release Tagging support: phase-III, table.	#90	2024-07-0
DejaVuSans	compatible			2024-07-1
DejaVuSansCondensed	compatible			2024-07-1
DejaVuSansMono	compatible			2024-07-1
DejaVuSerif	compatible			2024-07-1
DejaVuSerifCondensed	compatible			2024-07-1
delarray	compatible	Use of math tagging currently requires	test(s)	2024-07-1

color	compatible			2024-07-06
colortbl	compatible	#90 issue with longtable fixed at the last release Tagging support: phase-III, table.	#90	2024-07-07
DejaVuSans	compatible			2024-07-13
DejaVuSansCondensed	compatible			2024-07-13
DejaVuSansMono	compatible			2024-07-13
DejaVuSerif	compatible			2024-07-13
DejaVuSerifCondensed	compatible			2024-07-13
delarray	compatible	Use of math tagging currently requires support from external tools. Tagging support: phase-III, math, table.	test(s)	2024-07-10

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
epsfig	compatible	Obsolete, small wrapper around			2024-07-07

DejaVuSansMono	compatible			2024-07-13
DejaVuSerif	compatible			2024-07-13
DejaVuSerifCondensed	compatible			2024-07-13
delarray	compatible	Use of math tagging currently requires support from external tools. Tagging support: phase-III, math, table.	test(s)	2024-07-10

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
epsfig	compatible	Obsolete, small wrapper around graphicx			2024-07-07
etoolbox	compatible				2024-07-12
euscript	compatible				2024-07-06
exscale	compatible				2024-07-06
FiraMono	compatible				2024-07-13
FiraSans	compatible				2024-07-13
fanouhde	compatible		toct(c)		2024-07-12

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
epsfig	compatible	Obsolete, small wrapper around graphicx			2024-07-07
etoolbox	compatible				2024-07-12
euscript	compatible				2024-07-06
exscale	compatible				2024-07-06
FiraMono	compatible				2024-07-13
FiraSans	compatible				2024-07-13
fancyhdr	compatible		test(s)		2024-07-12
fix-cm	compatible				2024-07-06
fixltx2e	compatible	This is an obsolete package which should not be needed			2024-07-06
flafter	compatible				2024-07-07
fltrace	compatible				2024-07-06
fontenc	compatible				2024-07-06

Tagging Status of Lasses Packages and Classes

Name	Status	Comments	Relevant	Tasks	Last
GoMono	compatible				2024-07-1
footmisc	compatible	Replacement code is in latex-lab	#12	integrate code properly into the package.	2024-07-0
fontspec	compatible				2024-07-1
fontenc	compatible				2024-07-0
fltrace	compatible				2024-07-0
flafter	compatible				2024-07-0
fixltx2e	compatible	This is an obsolete package which should not be needed			2024-07-0
fix-cm	compatible				2024-07-0
fancyhdr	compatible		test(s)		2024-07-
FiraSans	compatible				2024-07-
FiraMono	compatible				2024-07-
exscale	compatible				2024-07-0

flafter	compatible				2024-07-07
fltrace	compatible				2024-07-06
fontenc	compatible				2024-07-0
fontspec	compatible				2024-07-1
footmisc	compatible	Replacement code is in latex-lab	#12	integrate code properly into the package.	2024-07-0
GoMono	compatible				2024-07-1
Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
GoSans	compatible				2024-07-1
geometry	compatible	tagging of rules (showframe, crop marks) untested		needs further tests	2024-07-0
geometry					2024-07-0

				the package.	
GoMono	compatible				2024-07-13
Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
GoSans	compatible				2024-07-13
geometry	compatible	tagging of rules (showframe, crop marks) untested		needs further tests	2024-07-06
graphics	compatible	See graphicx package			2024-07-06
graphicx	compatible	Rather than \includegraphics[whatever] {whatever} one should now write \includegraphics[whatever, alt={This is the alternative text.}]{whatever} The alternative text will be ignored if tagging is not used. It seems that draft mode doesn't work at present. An old issue with height appears to be fixed. See [1]	#16 Related: #64		2024-07-06

properly into

		marks) untested		tests	
graphics	compatible	See graphicx package			2024-07-06
graphicx	compatible	Rather than \includegraphics[whatever] \{\text{whatever}\} one should now write \includegraphics[whatever,alt={This is the alternative text.}] \{\text{whatever}\} The alternative text will be ignored if tagging is not used. It seems that draft mode doesn't work at present. An old issue with height appears to be fixed. See [1]	#16 Related: #64		2024-07-06
hyperref	compatible	See [2] Tagging support: package.			2024-07-06
InriaSans	compatible				2024-07-13
InriaSerif	compatible				2024-07-13
ifthen	compatible				2024-07-06
indentfirst	compatible				2024-07-06
inputenc	compatible				2024-07-06

		tagging is not used. It seems that draft mode doesn't work at present. An old issue with height appears to be fixed. See [1]	
hyperref	compatible	See [2] Tagging support: package.	2024-07-06
InriaSans	compatible		2024-07-13
InriaSerif	compatible		2024-07-13
ifthen	compatible		2024-07-06
indentfirst	compatible		2024-07-06
inputenc	compatible		2024-07-06

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
keyval	compatible				2024-07-06
LibreBodoni	compatible				2024-07-13
l3sys-query	compatible		test(s)		2024-07-08
lastnage	compatible				2024-07-12

InriaSerif	compatible		2024-07-13
ifthen	compatible		2024-07-06
indentfirst	compatible		2024-07-06
inputenc	compatible		2024-07-06

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
keyval	compatible				2024-07-06
LibreBodoni	compatible				2024-07-13
l3sys-query	compatible		test(s)		2024-07-08
lastpage	compatible				2024-07-12
latexsym	compatible				2024-07-06
lipsum	compatible				2024-07-0
luamplib	compatible	An old issue has been fixed.	#8		2024-07-0
makeidx	compatible		test(s)		2024-07-1
microtype	compatible	Footnote patching doesn't work but otherwise supported.	#67		2024-07-0

keyval	compatible			2024-07-06
LibreBodoni	compatible			2024-07-13
l3sys-query	compatible		test(s)	2024-07-08
lastpage	compatible			2024-07-12
latexsym	compatible			2024-07-06
lipsum	compatible			2024-07-06
luamplib	compatible	An old issue has been fixed.	#8	2024-07-06
makeidx	compatible		test(s)	2024-07-1
microtype	compatible	Footnote patching doesn't work but otherwise supported.	#67	2024-07-0
multicol	compatible			2024-07-0
natbib	compatible			2024-07-0
OldStandard	compatible			2024-07-1
PTMono	compatible			2024-07-1
PTSans	compatible			2024-07-1
PTSansCaption	compatible			2024-07-1

compatible

compatible

PlayfairDisplay

luamplib	compatible	An old issue has been fixed.	#8		2024-07-06
makeidx	compatible		test(s)		2024-07-11
microtype	compatible	Footnote patching doesn't work but otherwise supported.	#67		2024-07-06
multicol	compatible				2024-07-06
natbib	compatible				2024-07-06
OldStandard	compatible				2024-07-13
PTMono	compatible				2024-07-13
PTSans	compatible				2024-07-13
PTSansCaption	compatible				2024-07-13
PTSansNarrow	compatible				2024-07-13
PTSerif	compatible				2024-07-13
PTSerifCaption	compatible				2024-07-13
Name	Status	Comments	Relevant issue(s)	Tasks	Last updated

2024-07-13

2024-07-13

OldStandard	compatible				2024-07-13
PTMono	compatible				2024-07-13
PTSans	compatible				2024-07-13
PTSansCaption	compatible				2024-07-13
PTSansNarrow	compatible				2024-07-13
PTSerif	compatible				2024-07-13
PTSerifCaption	compatible				2024-07-13
Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
PlayfairDisplay	compatible				2024-07-13
PlayfairDisplay Rosario	compatible compatible				2024-07-13
Rosario	compatible		test(s)		2024-07-13
Rosario shellesc	compatible		test(s)		2024-07-13
Rosario shellesc shortvrb	compatible compatible		test(s)		2024-07-13 2024-07-07 2024-07-08

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
PlayfairDisplay	compatible				2024-07-13
Rosario	compatible				2024-07-13
shellesc	compatible				2024-07-07
shortvrb	compatible		test(s)		2024-07-08
structuredlog	compatible				2024-07-06
TheanoDidot	compatible				2024-07-13
tabularx	compatible	An old issue has been fixed. Tagging support: phase-III, table.	#42		2024-07-06
tabulary	compatible	Tagging support: phase-III, table.	test(s)		2024-07-12
textcomp	compatible	Package no longer needed as definitions have been moved into the kernel			2024-07-07
titleps	compatible		test(s)		2024-07-12
trace	compatible				2024-07-06

Status

Name

Tagging s tible Tagging s tible Package r	sue has been fixed. support: phase-III, table. support: phase-III, table. no longer needed as is have been moved into the	#42 test(s)	20.	24-07-13 24-07-06 24-07-12 24-07-07
Tagging s tible Tagging s tible Package r definition	support: phase-III, table. support: phase-III, table. no longer needed as	test(s)	20.	24-07-12
tible Package r	no longer needed as			
definition	-		20.	24-07-07
tible		test(s)	20	24-07-12
tible			20	24-07-06
tible			20	24-07-06
tible			20	24-07-06
tible			20	24-07-12
tible An old iss	sue has been fixed.	#5	20.	24-07-06
	atible atible atible An old is:	ntible	atible atible	ntible 20.

Comments

Relevant

issure(s)

Tasks

Last

undated

		definitions have been moved into the kernel		
titleps	compatible		test(s)	2024-07-12
trace	compatible			2024-07-06
tracefnt	compatible			2024-07-06
trig	compatible			2024-07-06
unicode-math	compatible			2024-07-12
url	compatible	An old issue has been fixed.	#5	2024-07-06

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
varioref	compatible		test(s)		2024-07-11
verse	compatible	firstaid is required for the fix of issue 49 Tagging support: phase-III , firstaid .	#49		2024-07-06
XCharter	compatible				2024-07-13
xcolor	compatible				2024-07-07

Tagging Status of Lasses Packages and Classes

	р				
url	compatible	An old issue has been fixed.	#5		2024-07-06
	_	_			
Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
varioref	compatible		test(s)		2024-07-11
verse	compatible	firstaid is required for the fix of issue 49 Tagging support: phase-III, firstaid.	#49		2024-07-06
XCharter	compatible				2024-07-13
xcolor	compatible				2024-07-07
xr	compatible				2024-07-07
xr-hyper	compatible	Package now identical to xr, thus not necessary any longer when hyperref is used.			2024-07-10
xspace	compatible		test(s)		2024-07-08
afterpage	partially- compatible		test(s)	more tests needed	2024-07-12

		Tagging support: phase-III, firstaid.			
XCharter	compatible				2024-07-13
xcolor	compatible				2024-07-07
xr	compatible				2024-07-07
xr-hyper	compatible	Package now identical to xr, thus not necessary any longer when hyperref is used.			2024-07-10
xspace	compatible		test(s)		2024-07-08
afterpage	partially- compatible		test(s)	more tests needed	2024-07-12
amsbsy	partially- compatible	pmb produces extra tags from typesetting argument three times Tagging support: phase-III, math.	test(s)		2024-07-09

		used.			
xspace	compatible		test(s)		2024-07-08
afterpage	partially- compatible		test(s)	more tests needed	2024-07-12
amsbsy	partially- compatible	pmb produces extra tags from typesetting argument three times Tagging support: phase-III, math.	test(s)		2024-07-09

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
amsmath	partially- compatible	Use of math tagging currently requires support from external tools. See [1] [2] Tagging support: phase-III, math.	#77	also needs more tests	2024-07-08

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
amsmath	partially- compatible	Use of math tagging currently requires support from external tools. See [1] [2] Tagging support: phase-III, math.	#77	also needs more tests	2024-07-08
biblatex	partially- compatible	Requires hyperref. See [2]	#18 Other: biblatex/1366		2024-07-07
biblatex-chicago	partially- compatible	See biblatex. The package should at some time use sockets in its footnote adaption.	#62		2024-07-06
booktabs	partially- compatible	requires the firstaid module which contains a fix.	#69 test(s)		2024-07-08

amsmath	partially- compatible	Use of math tagging currently requires support from external tools. See [1] [2] Tagging support: phase-III, math.	#77	also needs more tests	2024-07-08
biblatex	partially- compatible	Requires hyperref. See [2]	#18 Other: biblatex/1366		2024-07-07
biblatex-chicago	partially- compatible	See biblatex. The package should at some time use sockets in its footnote adaption.	#62		2024-07-06
booktabs	partially- compatible	requires the firstaid module which contains a fix. Tagging support: phase-III, firstaid, table.	#69 test(s)		2024-07-08
cleveref	partially- compatible	Partially supported in the firstaid module, but open issue with hyperref (workaround suggested) Tagging support: phase-III, firstaid.	#2 test(s)		2024-07-08
csquotes	nartially-	blockquote can't be used	#3		2024-07-06

	compatible	some time use sockets in its footnote adaption.		
booktabs	partially- compatible	requires the firstaid module which contains a fix. Tagging support: phase-III, firstaid, table.	#69 test(s)	2024-07-08
cleveref	partially- compatible	Partially supported in the firstaid module, but open issue with hyperref (workaround suggested) Tagging support: phase-III, firstaid.	#2 test(s)	2024-07-08
csquotes	partially- compatible	blockquote can't be used.	#3	2024-07-06

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
dcolumn	partially-	d columns are set as text not math,	test(s)		2024-07-08
	compatible	which is arguably correct, but needs some further evaluation.			

	compatible	module, but open issue with hyperref (workaround suggested) Tagging support: phase-III, firstaid.	(-)	
csquotes	partially- compatible	blockquote can't be used.	#3	2024-07-06

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
dcolumn	partially- compatible	d columns are set as text not math, which is arguably correct, but needs some further evaluation.	test(s)		2024-07-0
enumitem	partially- compatible	The package itself can't be loaded right now. However, the tagging code supports (most of) the document-level syntax of enumitem, so that one can use, for example, \begin{itemize} [] out of the box. See [1]	#61 Related: #4	Check which keys are not yet supported and what else is missing.	2024-07-0

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
dcolumn	partially- compatible	d columns are set as text not math, which is arguably correct, but needs some further evaluation.	test(s)		2024-07-08
enumitem	partially- compatible	The package itself can't be loaded right now. However, the tagging code supports (most of) the document-level syntax of enumitem, so that one can use, for example, \begin{itemize} [] out of the box. See [1]	#61 Related: #4	Check which keys are not yet supported and what else is missing.	2024-07-06
graphpap	partially- compatible	tagging passes validation but is sub- optimal	test(s)		2024-07-08
latexrelease	partially- compatible	Rolling the LaTeX format too far back will result in the loss of necessary support code for tagging, rolling forward should work.		determine how far back is possible	2024-07-06
longtable	partially- compatible	longtables with page breaks works only with luatex	#22 Related: #38		2024-07-06

		syntax of enumitem, so that one can use, for example, \begin{itemize} [] out of the box. See [1]		supported and what else is missing.	
graphpap	partially- compatible	tagging passes validation but is sub- optimal	test(s)		2024-07-08
latexrelease	partially- compatible	Rolling the LaTeX format too far back will result in the loss of necessary support code for tagging, rolling forward should work.		determine how far back is possible	2024-07-06
longtable	partially- compatible	longtables with page breaks works only with luatex Tagging support: phase-III , table .	#22 Related: #38		2024-07-06
showkeys	partially- compatible	Rules drawn around labels display as Path in tags and the label in the margin is either not tagged at all (pdflatex) or	test(s)		2024-07-11
Name	Status	Comments	Relevant issue(s)	Tasks	Last updated

	companible	support code for tagging, rolling forward should work.		is possible	
longtable	partially- compatible	longtables with page breaks works only with luatex Tagging support: phase-III, table.	#22 Related: #38		2024-07-06
showkeys	partially- compatible	Rules drawn around labels display as Path in tags and the label in the margin is either not tagged at all (pdflatex) or	test(s)		2024-07-11
Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
		as artifact (lualatex). Unproblematic for a draft, but not UA compatible.			
tcolorbox	partially- compatible	Not yet fully supported, but some suggestions in the listed issues	#73 #88	needs further tests	2024-07-06
amsthm	currently- incompatible		#83 test(s)		2024-07-08

	compatible	rath in tags and the label in the margin is either not tagged at all (pdflatex) or			
Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
		as artifact (lualatex). Unproblematic for a draft, but not UA compatible.			
tcolorbox	partially- compatible	Not yet fully supported, but some suggestions in the listed issues	#73 #88	needs further tests	2024-07-06
amsthm	currently- incompatible		#83 test(s)		2024-07-08
caption	currently- incompatible	the configurations from the package are overwritten by the tagging code. Issue when hyperref and both listoffigures are used.	#84 test(s)		2024-07-08
doc	currently- incompatible		#44		2024-07-0
enumerate	currently- incompatible	See [1]			2024-07-06
fancyvrb	currently-	See [1]		needs tests	2024-07-06

	compatible	suggestions in the listed issues		tests	
amsthm	currently- incompatible		#83 test(s)		2024-07-08
caption	currently- incompatible	the configurations from the package are overwritten by the tagging code. Issue when hyperref and both listoffigures are used.	#84 test(s)		2024-07-08
doc	currently- incompatible		#44		2024-07-06
enumerate	currently- incompatible	See [1]			2024-07-06
fancyvrb	currently- incompatible	See [1]		needs tests	2024-07-06
float	currently- incompatible	[H] floats are not yet automatically tagged. See [2]		needs tests	2024-07-06
ftnright	currently- incompatible		#110 test(s)		2024-07-11

doc	currently- incompatible		#44		2024-07-06
enumerate	currently- incompatible	See [1]			2024-07-06
fancyvrb	currently- incompatible	See [1]		needs tests	2024-07-06
float	currently- incompatible	[H] floats are not yet automatically tagged. See [2]		needs tests	2024-07-06
ftnright	currently- incompatible		#110 test(s)		2024-07-11

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
hhline	currently- incompatible	breaks with errors Tagging support: phase-III, table.	#66 test(s)	needs further tests	2024-07-10
layout	currently- incompatible		#111 test(s)		2024-07-11

		See [2]			
ftnright	currently- incompatible		#110 test(s)		2024-07-11
Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
hhline	currently- incompatible	breaks with errors Tagging support: phase-III, table.	#66 test(s)	needs further tests	2024-07-10
layout	currently- incompatible		#111 test(s)		2024-07-11
listings	currently- incompatible	See definition in tagpdfdocu- patches.sty. See [1]	#70 Related: #41 test(s)		2024-07-12
luatexja	currently- incompatible	overwrites tabular/array commands	#87		2024-07-06
pdfpages	currently- incompatible	Creates duplicated structures as graphics are processed more than once in trial typesetting. Correct	#86	needs tests	2024-07-06

togging of multipage includes unclear

Tagging Status of Lasses Packages and Classes

incompatible

	copacible	Tagging support: phase-III, table.			
layout	currently- incompatible		#111 test(s)		2024-07-11
listings	currently- incompatible	See definition in tagpdfdocu- patches.sty. See [1]	#70 Related: #41 test(s)		2024-07-12
luatexja	currently- incompatible	overwrites tabular/array commands	#87		2024-07-06
pdfpages	currently- incompatible	Creates duplicated structures as graphics are processed more than once in trial typesetting. Correct tagging of multipage includes unclear.	#86	needs tests	2024-07-06
pstricks	currently- incompatible	Tagging passes validation but is suboptimal. Future compatibility will only be with lualatex; dvips cannot properly support PDF/UA.	test(s)		2024-07-12
rotating	currently- incompatible		#112 test(s)		2024-07-11
showidy	currently-		#115 toct(c)		2024-07-11

tests

luatexja	currently- incompatible	overwrites tabular/array commands	#87		2024-07-06
pdfpages	currently- incompatible	Creates duplicated structures as graphics are processed more than once in trial typesetting. Correct tagging of multipage includes unclear.	#86	needs tests	2024-07-06
pstricks	currently- incompatible	Tagging passes validation but is suboptimal. Future compatibility will only be with lualatex; dvips cannot properly support PDF/UA.	test(s)		2024-07-12
rotating	currently- incompatible		#112 test(s)		2024-07-11
showidx	currently- incompatible		#115 test(s)		2024-07-11

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
subcaption	currently- incompatible	Issue when hyperref and both listoffigures are used.	#85		2024-07-06
					2024 07 40

		properly support PDF/UA.		
rotating	currently- incompatible		#112 test(s)	2024-07-11
showidx	currently- incompatible		#115 test(s)	2024-07-11

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
subcaption	currently- incompatible	Issue when hyperref and both listoffigures are used.	#85		2024-07-0
theorem	currently- incompatible		test(s)		2024-07-1
tikz	currently- incompatible	See [2]			2024-07-0
tikz-cd	currently- incompatible		#30		2024-07-0
titlesec	currently- incompatible		#24		2024-07-0

Tagging Status of Lasses Packages and Classes

Name	Status	Comments	issue(s)	Iasks	updated
subcaption	currently- incompatible	Issue when hyperref and both listoffigures are used.	#85		2024-07-06
theorem	currently- incompatible		test(s)		2024-07-10
tikz	currently- incompatible	See [2]			2024-07-06
tikz-cd	currently- incompatible		#30		2024-07-06
titlesec	currently- incompatible		#24		2024-07-06
titletoc	currently- incompatible	Mentioned in issue.	#24		2024-07-06
tocloft	currently- incompatible	Packages attempts to redefine \@starttoc and fails.	#74 test(s)		2024-07-12
varwidth	currently- incompatible	Tagging structure looks ok, but the formatting is wrong when the tagging code is used.	#71 test(s)	adjustments in block code needed?	2024-07-10

tikz-cd	currently- incompatible		#30		2024-07-06
titlesec	currently- incompatible		#24		2024-07-06
titletoc	currently- incompatible	Mentioned in issue.	#24		2024-07-06
tocloft	currently- incompatible	Packages attempts to redefine \@starttoc and fails.	#74 test(s)		2024-07-12
varwidth	currently- incompatible	Tagging structure looks ok, but the formatting is wrong when the tagging code is used.	#71 test(s)	adjustments in block code needed?	2024-07-10
wrapfig	currently- incompatible	generated tagging structure is incorrect	#40 test(s)		2024-07-10

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
b		Incompatible with DDF management			2024 07 07

ently- mpatible	Tagging structure looks ok, but the formatting is wrong when the tagging code is used.	#71 test(s)	adjustments in block code needed?	2024-07-10
 ently- npatible	generated tagging structure is incorrect	#40 test(s)		2024-07-10

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
hyperxmp	no-support	Incompatible with PDF management, loading is suppressed. XMP-metadata are handled by the kernel code.			2024-07-0
mdframed	no-support	Recommended alternative: tcolorbox.	#73		2024-07-0
pdfx	no-support	Incompatible with PDF-management, loading is suppressed. Standards should be set with \DocumentMetadata keys.			2024-07-0

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
hyperxmp	no-support	Incompatible with PDF management, loading is suppressed. XMP-metadata are handled by the kernel code.			2024-07-07
mdframed	no-support	Recommended alternative: tcolorbox.	#73		2024-07-06
pdfx	no-support	Incompatible with PDF-management, loading is suppressed. Standards should be set with \DocumentMetadata keys.			2024-07-07
abraces	unknown			needs tests	2024-07-13
abstract	unknown			needs tests	2024-07-13
accents	unknown			needs tests	2024-07-13
acro	unknown			needs tests	2024-07-13

marramea	no-support	Recommended alternative, (COIOIDOX,	#15		2024-01-00
pdfx	no-support	Incompatible with PDF-management, loading is suppressed. Standards should be set with \DocumentMetadata keys.			2024-07-07
abraces	unknown			needs tests	2024-07-13
abstract	unknown			needs tests	2024-07-13
accents	unknown			needs tests	2024-07-13
acro	unknown			needs tests	2024-07-13
addlines	unknown			needs tests	2024-07-13
adforn	unknown			needs tests	2024-07-13
adjustbox	unknown			needs tests	2024-07-13
alltt	unknown			needs tests	2024-07-06

accents	unknown		needs tests	2024-07-13
acro	unknown		needs tests	2024-07-13
addlines	unknown		needs tests	2024-07-13
adforn	unknown		needs tests	2024-07-13
adjustbox	unknown		needs tests	2024-07-13
alltt	unknown		needs tests	2024-07-06

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
amsfonts	unknown			needs tests	2024-07-13
amsrefs	unknown			needs tests	2024-07-13
amssymb	unknown			needs tests	2024-07-13
amsxtra	unknown			needs tests	2024-07-06

adjustbox	unknown			needs tests	2024-07-13
alltt	unknown			needs tests	2024-07-06
Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
amsfonts	unknown			needs tests	2024-07-13
amsrefs	unknown			needs tests	2024-07-13
amssymb	unknown			needs tests	2024-07-13
amsxtra	unknown			needs tests	2024-07-06
antpolt	unknown			needs tests	2024-07-13
apalike	unknown			needs tests	2024-07-13
arabi	unknown			needs tests	2024-07-13
arabicfront	unknown			needs tests	2024-07-13

ams	refs	unknown		needs tests	2024-07-13
ams	symb	unknown		needs tests	2024-07-13
ams	extra	unknown		needs tests	2024-07-06
antp	polt	unknown		needs tests	2024-07-13
apal	like	unknown		needs tests	2024-07-13
arab	i	unknown		needs tests	2024-07-13
arab	picfront	unknown		needs tests	2024-07-13
arab	oluatex	unknown		needs tests	2024-07-13
aryd	dshin	unknown		needs tests	2024-07-13
ascii	ilist	unknown		needs tests	2024-07-13
askii	nclude	unknown		needs tests	2024-07-13
astro	on	unknown		needs tests	2024-07-13

apanke	unknown		necus tests	202.0
arabi	unknown		needs tests	2024-07-13
arabicfront	unknown		needs tests	2024-07-13
arabluatex	unknown		needs tests	2024-07-13
arydshin	unknown		needs tests	2024-07-13
asciilist	unknown		needs tests	2024-07-13
askinclude	unknown		needs tests	2024-07-13
astron	unknown		needs tests	2024-07-13

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
authblk	unknown			needs tests	2024-07-13
authordate1-4	unknown			needs tests	2024-07-13

unknown

unknown

footnote

alossaries

asciilist	unknown			needs tests	2024-07-13
askinclude	unknown			needs tests	2024-07-13
astron	unknown			needs tests	2024-07-13
Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
authblk	unknown			needs tests	2024-07-13
authordate1-4	unknown			needs tests	2024-07-13
bigfoot	unknown	To be supported or not?		needs tests	2024-07-04
СЈК	unknown			needs tests	2024-07-13
СТеХ	unknown			needs tests	2024-07-13
	unknown			needs tests	2024 07 13

2024-07-06

2024-07-06

needs tests

needs tests

#48

To be supported or not?

An old issue appears to be fixed.

			issue(s)		updated
authblk	unknown			needs tests	2024-07-13
authordate1-4	unknown			needs tests	2024-07-13
bigfoot	unknown	To be supported or not?		needs tests	2024-07-04
СЈК	unknown			needs tests	2024-07-13
СТеХ	unknown			needs tests	2024-07-13
footnote	unknown	To be supported or not?		needs tests	2024-07-06
glossaries	unknown	An old issue appears to be fixed.	#48	needs tests	2024-07-06
Iscape	unknown			needs tests	2024-07-06
manyfoot	unknown	To be supported or not?		needs tests	2024-07-06
mathtools	unknown			needs tests	2024-07-06
verbatim	unknown			needs tests	2024-07-06

СТеХ	unknown			needs tests	2024-07-13
footnote	unknown	To be supported or not?		needs tests	2024-07-06
glossaries	unknown	An old issue appears to be fixed.	#48	needs tests	2024-07-06
Iscape	unknown			needs tests	2024-07-06
manyfoot	unknown	To be supported or not?		needs tests	2024-07-06
mathtools	unknown			needs tests	2024-07-06
verbatim	unknown			needs tests	2024-07-06

Classes

Statistics: The table currently holds 15 classes out of which 4 are fully compatible, 2 partially-compatible, 6 currently-incompatible, and 0 have no-support. The status for the remaining 3 classes is unknown.

Click on the column headings to sort the table by the chosen column.

Name	Status	Comments	Relevant	Tasks	Last	
			issue(s)		updated	

mathtools	unknown		needs tests	2024-07-06
verbatim	unknown		needs tests	2024-07-06

Classes

Statistics: The table currently holds 15 classes out of which 4 are fully compatible, 2 partially-compatible, 6 currently-incompatible, and 0 have no-support. The status for the remaining 3 classes is unknown.

Click on the column headings to sort the table by the chosen column.

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
article	compatible	Tagging support: phase-III, title.			2024-07-05
book	compatible	Tagging support: phase-III, title.			2024-07-05
proc	compatible	Based on article class Tagging support: phase-III, title.	test(s)		2024-07-11
report	compatible	Tagging support: phase-III, title.			2024-07-05

and 0 have no-support. The status for the remaining 3 classes is unknown.

Click on the column headings to sort the table by the chosen column.

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
article	compatible	Tagging support: phase-III, title.			2024-07-05
book	compatible	Tagging support: phase-III, title.			2024-07-05
proc	compatible	Based on article class Tagging support: phase-III, title.	test(s)		2024-07-11
report	compatible	Tagging support: phase-III , title .			2024-07-05
amsart	partially- compatible	theorem environments not compatible, see amsthm. Used by project example arxiv3 Tagging support: phase-III, firstaid, title.		needs further tests	2024-07-07
amsbook	partially- compatible	theorem environments not compatible, see amsthm. Tagging support: phase-III, firstaid, title.		needs further tests	2024-07-07

proc	compatible	Based on article class Tagging support: phase-III, title.	test(s)		2024-07-11
report	compatible	Tagging support: phase-III, title.			2024-07-05
amsart	partially- compatible	theorem environments not compatible, see amsthm. Used by project example arxiv3 Tagging support: phase-III, firstaid, title.		needs further tests	2024-07-07
amsbook	partially- compatible	theorem environments not compatible, see amsthm. Tagging support: phase-III, firstaid, title.		needs further tests	2024-07-07
amsldoc	currently- incompatible	See some needed adjustments in project example ams1doc		needs further tests	2024-07-07
beamer	currently- incompatible				2024-07-07

Name Status	Comments	Relevant	Tasks	Last
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		ragging support. phase-iii, iiistaid, title.		
amsbook	partially- compatible	theorem environments not compatible, see amsthm. Tagging support: phase-III, firstaid, title.	needs further tests	2024-07-07
amsldoc	currently- incompatible	See some needed adjustments in project example ams1doc	needs further tests	2024-07-07
beamer	currently- incompatible			2024-07-07

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
memoir	currently- incompatible	Some code showing the needed adjustments can be found in the bible example			2024-07-05
scrartcl	currently- incompatible		Related: #88		2024-07-10
scrbook	currently- incompatible		Related: #88		2024-07-10

beamer	currently-		2024-07-07
	incompatible		

Name	Status	Comments	Relevant issue(s)	Tasks	Last updated
memoir	currently- incompatible	Some code showing the needed adjustments can be found in the bible example			2024-07-05
scrartcl	currently- incompatible		Related: #88		2024-07-10
scrbook	currently- incompatible		Related: #88		2024-07-10
scrreport	currently- incompatible		Related: #88		2024-07-10
letter	unknown			needs tests	2024-07-06
scrletter	unknown		Related: #88		2024-07-10
scrlttr2	unknown		Related: #88		2024-07-10

scrartcl	currently- incompatible	Related: #88		2024-07-10
scrbook	currently- incompatible	Related: #88		2024-07-10
scrreport	currently- incompatible	Related: #88		2024-07-10
letter	unknown		needs tests	2024-07-06
scrletter	unknown	Related: #88		2024-07-10
scrlttr2	unknown	Related: #88		2024-07-10

References

- 1. U. Fischer and F. Mittelbach. Automated tagging of LaTeX documents what is possible today, in 2023? TUGboat, 44(2):262–266, 2023
- 2. F. Mittelbach and U. Fischer. Enhancing LaTeX to automatically produce tagged and accessible PDF. TUGboat, 45(1), 2024

scrletter	unknown	Related: #88	2024-07-10
scrlttr2	unknown	Related: #88	2024-07-10

References

- $\textbf{1.} \text{ U. Fischer and F. Mittelbach. Automated tagging of LaTeX documents} \\ \textbf{--what is possible today, in 2023? TUGboat, 44(2):262-266, 2023.} \\$
- 2. F. Mittelbach and U. Fischer. Enhancing LaTeX to automatically produce tagged and accessible PDF. TUGboat, 45(1), 2024

2. F. Mittelbach and U. Fischer, Enhancing LaieX to automatically produce tagged and accessible PDF. IUGboat, 45(1), 2024

Progress in math tagging

- good math tagging requires PDF 2.0!
- the WTPDF examples embed math as MathML "associated file" (AF)
- the next Foxit version will pass the MathML to AT-tools like NVDA
- MathCAT plug-in for NVDA will process and read the MathML

Progress in math tagging – example

Math

$$|-1| = 1$$

Output in NVDA Speechviewer

the absolute value of negative 1 is equal to 1

Progress in math tagging

How to get the MathML?

- semi-automatic: latexml
- semi-automatic: tex4ht
- browser with mathjax
- manually
- plan: automate
- ..

Next steps

- enumitem
- caption
- language switches
- extend package support
- ..

