CTAN:macros/latex/contrib/oberdiek/

Heiko Oberdiek
<ho-tex at tug.org>

2018/01/21

1 Overview

accsupp (contents)	2010/01/16 v0.3 Accessibility support by marked content	[pdf] [dtx]
aliascnt (contents)	2009/09/08 v1.3 Alias counters	[pdf] [dtx]
alphalph (contents)	2011/05/13 v2.4 Convert numbers to letters	[pdf] [dtx]
askinclude (contents)	2011/12/02 v2.2 Interactive asking of included files	[pdf] [dtx]
atbegshi (contents)	2011/10/05 v1.16 At begin shipout hook	[pdf] [dtx]
atenddvi (contents)	2007/04/17 v1.1 At end DVI hook	[pdf] [dtx]
attachfile2 (contents)	2012/04/18 v2.7 Attach files into PDF	[pdf] [dtx]
atveryend (contents)	2011/06/30 v1.8 Hooks at the very end of document	[pdf] [dtx]
auxhook (contents)	2011/03/04 v1.3 Hooks for auxiliary files	[pdf] [dtx]
bigintcalc (contents)	2012/04/08 v1.3 Expandable calculations on big integers	[pdf] [dtx]
bitset (contents)	2011/01/30 v1.1 Handle bit-vector datatype	[pdf] [dtx]
bmpsize (contents)	2009/09/04 v1.6 Extract size/resolution from bitmap files	[pdf] [dtx]

bookmark (contents)	2011/12/02 v1.24 PDF bookmarks	[pdf] [dtx]
catchfile (contents)	2011/03/01 v1.6 Catch the contents of a file	[pdf] [dtx]
centernot (contents)	2011/07/11 v1.3 Centers the not symbol horizontally	[pdf] [dtx]
chemarr (contents)	2006/02/20 v1.2 Arrows for chemical reactions	[pdf] [dtx]
classlist (contents)	2011/10/17 v1.4 Record classes used in a document	[pdf] [dtx]
colonequals (contents)	2006/08/01 v1.0 Colon equals symbols	[pdf] [dtx]
dvipscol (contents)	2008/08/11 v1.2 Alter the usage of the dvips color stack	[pdf] [dtx]
embedfile (contents)	2011/04/13 v2.6 Embed files into PDF	[pdf] [dtx]
engord (contents)	2010/03/01 v1.8 Provides English ordinal numbers	[pdf] [dtx]
enparen (contents)	2012/01/07 v1.0 Parentheses nesting	[pdf] [dtx]
eolgrab (contents)	2011/01/12 v1.0 Catch arguments delimited by end of line	[pdf] [dtx]
epstopdf (contents)	2010/02/09 v2.5 Conversion with epstopdf on the fly	[pdf] [dtx]
etexcmds (contents)	2011/02/16 v1.5 Avoid name clashes with ε-TEX commands	[pdf] [dtx]
fibnum (contents)	2012/04/08 v1.0 Fibonacci numbers	[pdf] [dtx]
flags (contents)	2007/09/30 v0.4 Setting/clearing of flags in bit fields	[pdf] [dtx]
gettitlestring (contents)	2010/12/03 v1.4 Cleanup title references	[pdf] [dtx]
grfext (contents)	2010/08/19 v1.1 Manage graphics extensions	[pdf] [dtx]
grffile (contents)	2012/04/05 v1.16 Extended file name support for graphics	[pdf] [dtx]

hobsub	2012/04/25 v1.12	[pdf] [dtx]
(contents)	Construct package bundles	
hologo	2012/04/26 v1.10	[pdf] [dtx]
(contents)	A logo collection with bookmark support	
holtxdoc	2012/03/21 v0.24	[pdf] [dtx]
(contents)	Private additional ltxdoc support	
hopatch	2011/06/24 v1.1	[pdf] [dtx]
(contents)	Wrapper for package hooks	
hycolor	2011/01/30 v1.7	[pdf] [dtx]
(contents)	Color options for hyperref/bookmark	
hypbmsec	2007/04/11 v2.4	[pdf] [dtx]
(contents)	Bookmarks in sectioning commands	
hypcap	2011/02/16 v1.11	[pdf] [dtx]
(contents)	Adjusting the anchors of captions	
hypdestopt	2011/05/13 v2.3	[pdf] [dtx]
(contents)	Hyperref destination optimizer	
hypdoc	2011/08/19 v1.11	[pdf] [dtx]
(contents)	Hyper extensions for doc.sty	
hypgotoe	2007/10/30 v0.1	[pdf] [dtx]
(contents)	Links to embedded files	
hyphsubst	2008/06/09 v0.2	[pdf] [dtx]
(contents)	Substitute hyphenation patterns	
ifdraft	2008/08/11 v1.3	[pdf] [dtx]
(contents)	Detect class options draft and final	
iflang	2007/11/11 v1.5	[pdf] [dtx]
(contents)	Checks for the current language	
ifluatex	2010/03/01 v1.3	[pdf] [dtx]
(contents)	Provides the ifluatex switch	
ifpdf	2011/01/30 v2.3	[pdf] [dtx]
(contents)	Provides the ifpdf switch	
ifvtex	2010/03/01 v1.5	[pdf] [dtx]
(contents)	Detect VTEX and its facilities	
infwarerr	2010/04/08 v1.3	[pdf] [dtx]
(contents)	Providing info/warning/error messages	
inputenx	2011/05/27 v1.10	[pdf] [dtx]
(contents)	Enhanced input encoding handling	

intcalc (contents)	2007/09/27 v1.1 Expandable calculations with integers	[pdf] [dtx]
kvdefinekeys (contents)	2011/04/07 v1.3 Define keys	[pdf] [dtx]
kvoptions (contents)	2011/06/30 v3.11 Key value format for package options	[pdf] [dtx]
kvsetkeys (contents)	2012/04/25 v1.16 Key value parser	[pdf] [dtx]
letltxmacro (contents)	2010/09/02 v1.4 Let assignment for LaTeX macros	[pdf] [dtx]
listingsutf8 (contents)	2011/11/10 v1.2 Allow UTF-8 in listings input	[pdf] [dtx]
ltxcmds (contents)	2011/11/09 v1.22 LaTeX kernel commands for general use	[pdf] [dtx]
luacolor (contents)	2011/11/01 v1.8 Color support via LuaTeX's attributes	[pdf] [dtx]
luatex (contents)	2010/03/09 v0.4 LuaTeX basic definition package	[pdf] [dtx]
magicnum (contents)	2011/04/10 v1.4 Magic numbers	[pdf] [dtx]
makerobust (contents)	2006/03/18 v1.0 Make existing macro robust	[pdf] [dtx]
mleftright (contents)	2010/09/25 v1.0 Math left/right delim. as open/close	[pdf] [dtx]
pagegrid (contents)	2009/12/04 v1.4 Print page grid in background	[pdf] [dtx]
pagesel (contents)	2008/08/11 v1.8 Select pages of a document for output	[pdf] [dtx]
pdfcol (contents)	2007/12/12 v1.2 Handle new color stacks for pdfTeX	[pdf] [dtx]
pdfcolfoot (contents)	2012/01/02 v1.2 Color stack for footnotes with pdfTeX	[pdf] [dtx]
pdfcolmk (contents)	2008/08/11 v1.2 Color support for pdfTeX via marks	[pdf] [dtx]
pdfcolparallel (contents)	2010/01/11 v1.3 Color stacks support for parallel	[pdf] [dtx]

pdfcolparcolumns (contents)	2010/01/11 v1.3 Color stacks for parcolumns	[pdf] [dtx]
pdfcrypt (contents)	2007/04/26 v1.0 Allows the setting of PDF encryption	[pdf] [dtx]
pdfescape (contents)	2011/11/25 v1.13 Implements pdfTeX's escape features	[pdf] [dtx]
pdflscape (contents)	2008/08/11 v0.10 Display of landscape pages in PDF	[pdf] [dtx]
pdfrender (contents)	2010/01/28 v1.2 Access to some PDF graphics parameters	[pdf] [dtx]
pdftexcmds (contents)	2011/11/29 v0.20 Utility functions of pdfTeX for LuaTeX	[pdf] [dtx]
picture (contents)	2009/10/11 v1.3 Dimens for picture macros	[pdf] [dtx]
pmboxdraw (contents)	2011/03/24 v1.1 Poor man's box drawing characters	[pdf] [dtx]
protecteddef (contents)	2011/01/31 v1.0 Define protected commands	[pdf] [dtx]
refcount (contents)	2011/10/16 v3.4 Data extraction from label references	[pdf] [dtx]
rerunfilecheck (contents)	2011/04/15 v1.7 Rerun checks for auxiliary files	[pdf] [dtx]
resizegather (contents)	2010/03/01 v1.2 Resize overly large equations	[pdf] [dtx]
rotchiffre (contents)	2010/11/12 v1.0 Perform simple rotation ciphers	[pdf] [dtx]
scrindex (contents)	2008/08/11 v1.1 Package index with KOMA-Script classes	[pdf] [dtx]
selinput (contents)	2007/09/09 v1.2 Semi-automatic input encoding detection	[pdf] [dtx]
setouterhbox (contents)	2007/09/09 v1.7 Set hbox in outer horizontal mode	[pdf] [dtx]
settobox (contents)	2008/08/11 v1.4 Assign box dimensions to length registers	[pdf] [dtx]
soulutf8 (contents)	2007/09/09 v1.0 Permit use of UTF-8 characters in soul	[pdf] [dtx]

stackrel (contents)	2007/11/11 v1.2 Adding subscript option to stackrel	[pdf] [dtx]
stampinclude (contents)	2008/07/14 v1.0 Include files based on time stamps	[pdf] [dtx]
stringenc (contents)	2011/12/02 v1.10 Convert strings between diff. encodings	[pdf] [dtx]
tabularht (contents)	2007/04/11 v2.5 Tabular with height specified	[pdf] [dtx]
tabularkv (contents)	2006/02/20 v1.1 Tabular with key value interface	[pdf] [dtx]
telprint (contents)	2008/08/11 v1.10 Format German phone numbers	[pdf] [dtx]
thepdfnumber (contents)	2011/11/24 v1.0 Print PDF numbers with minimal digits	[pdf] [dtx]
transparent (contents)	2007/01/08 v1.0 Transparency via pdfTeX's color stack	[pdf] [dtx]
twoopt (contents)	2008/08/11 v1.5 Definitions with two optional arguments	[pdf] [dtx]
uniquecounter (contents)	2011/01/30 v1.2 Provide unlimited unique counter	[pdf] [dtx]
zref (contents)	2012/04/04 v2.24 A new reference scheme for LaTeX	[pdf] [dtx]

2 Packages

The accsupp package

Abstract

Since PDF 1.5 portions of a page can be marked for better accessibility support. For example, replacement texts or expansions of abbreviations can be provided. Package accsupp starts with providing a minimal low-level interface for programmers. Status is experimental.

1 Documentation **2**
1.1 Macros . . . 2
1.1.1 Feature options . . . 2
1.1.2 Input methods . . . 2
1.2 Workaround, option space . . . 3
1.3 Driver options . . . 3
1.3.1 Option pdftex . . . 3
1.3.2 Option dvipdfm . . . 4

1.3.3 Option dvips . . . 4
1.3.4 Turning off page stream compression . . . 4

2 Example **4**
2.1 Example \notparallel . . . 4
2.2 Example with pdfstringdef . . . 4

3 Implementation **5**
3.1 Package . . . 5
3.2 Space setup . . . 6
3.3 Driver detection and setup . . . 6
3.4 Main macro . . . 7
3.4.1 Input methods . . . 9
3.5 Drivers . . . 10
3.5.1 Driver pdftex . . . 10
3.5.2 Driver dvipdfm . . . 10
3.5.3 Driver dvips . . . 10

4 Test **10**
4.1 Catcode checks for loading . . . 10

5 Installation **11**
5.1 Download . . . 11
5.2 Bundle installation . . . 12
5.3 Package installation . . . 12
5.4 Refresh file name databases . . . 12
5.5 Some details for the interested . . . 12

6 Catalogue **13**

7 References **13**

8 History **13**
[2007/03/21 v0.1] . . . 13
[2007/11/14 v0.2] . . . 14
[2010/01/16 v0.3] . . . 14
[2016/05/16 v0.4] . . . 14

9 Index **14**

The aliascnt package

Abstract

Package aliascnt introduces *alias counters* that share the same counter register and clear list.

1 User interface **2**
1.1 Introduction . . . 2
1.2 Syntax . . . 2

2 Implementation **2**
2.1 Identification . . . 2
2.2 Create new alias counter . . . 2
2.3 Counter clear list . . . 3

3 Installation **3**
3.1 Download . . . 3
3.2 Bundle installation . . . 4
3.3 Package installation . . . 4
3.4 Refresh file name databases . . . 4
3.5 Some details for the interested . . . 4

4 Catalogue **5**

5 Acknowledgement **5**

6 References **5**

7 History **6**
[2006/02/20 v1.0] . . . 6
[2006/08/16 v1.1] . . . 6
[2006/09/25 v1.2] . . . 6
[2009/09/08 v1.3] . . . 6
[2016/05/16 v1.4] . . . 6

8 Index **6**

The alphalph package

Abstract

The package provides methods to represent numbers with a limited set of symbols. Both LaTeX and plain TeX are supported.

1 Documentation **2**
1.1 Introduction . . . 2
1.2 Use cases . . . 3
1.2.1 Number system based on symbols . . . 3
1.2.2 Wrap symbols around . . . 3
1.2.3 Multiple symbols . . . 3
1.3 Glossary . . . 4
1.4 Package usage . . . 4
1.5 User commands . . . 5
1.6 Programmer commands . . . 5
1.7 Design principles . . . 6
1.7.1 Number presentation commands . . . 6
1.7.2 General usability . . . 6

2 Implementation **6**
2.1 Begin of package . . . 6
2.2 Catcodes . . . 7
2.3 Package loading . . . 8
2.4 ε-TeX detection . . . 8
2.5 Help macros . . . 9
2.6 Symbol provider . . . 10
2.6.1 Alphabet . . . 10
2.7 Finding number of symbols . . . 10
2.8 Methods . . . 12
2.8.1 Common methods . . . 12
2.8.2 Method 'alph' . . . 12
2.8.3 Method 'wrap' . . . 13
2.8.4 Method 'mult' . . . 14
2.9 User interface . . . 15

3 Test **16**
3.1 Catcode checks for loading . . . 16

4 Macro tests **18**

5 Installation **21**
5.1 Download . . . 21
5.2 Bundle installation . . . 22
5.3 Package installation . . . 22
5.4 Refresh file name databases . . . 22
5.5 Some details for the interested . . . 22

6 Catalogue **23**

7 History **23**
[1999/03/19 v0.1] 23
[1999/04/12 v1.0] 24
[1999/04/13 v1.1] 24
[1999/06/26 v1.2] 24
[2006/02/20 v1.3] 24
[2006/05/30 v1.4] 24
[2007/04/11 v1.5] 24
[2007/09/09 v2.0] 24
[2008/08/11 v2.1] 24
[2010/03/01 v2.2] 24
[2010/04/18 v2.3] 24
[2011/05/13 v2.4] 25
[2016/05/16 v2.5] 25

8 Index **25**

The askinclude package

Abstract

This package replaces `\includeonly` by an interactive user interface.

1 Documentation **2**
1.1 User interface . . . 2
1.2 Single asking mode . . . 4
1.3 Regular expressions . . . 4
1.3.1 Method makematch . . . 4
1.3.2 Method pdfmatch . . . 5
1.4 History . . . 6
1.5 New features of version 2 . . . 6
1.6 Compatibility to version 1 . . . 7

2 Implementation **7**
2.1 Header and catcodes . . . 7
2.2 Delay action after preamble . . . 8
2.3 Write entry in .aux file . . . 8
2.4 Remember \include files . . . 8
2.5 Redefine \include . . . 9
2.6 Store answer and match method in .aux file . . . 10
2.7 Support for \@includeonly . . . 10
2.8 Stop if \includeonly is active . . . 10
2.9 \includeonly . . . 11
2.10 Options . . . 11
2.11 Strings . . . 12
2.12 Set defaults . . . 12
2.13 Questions . . . 13
2.13.1 Generic question header . . . 13
2.13.2 Display files . . . 13
2.13.3 Previous answer . . . 14
2.13.4 Current regular expression support . . . 14
2.13.5 Main question text . . . 15
2.13.6 Main question . . . 15
2.14 Evaluate answer of main question . . . 16
2.15 Ask for each file . . . 19

3 Test **20**
3.1 Included files . . . 20
3.2 Special test setup . . . 21
3.3 Common start . . . 21
3.4 First run tests . . . 24
3.5 Second run tests . . . 29
3.6 Compatibility for changing from old to new . . . 33
3.7 Regular expressions . . . 34
3.8 Common end . . . 35

4 Installation **35**
4.1 Download . . . 35
4.2 Bundle installation . . . 35
4.3 Package installation . . . 35
4.4 Refresh file name databases . . . 36
4.5 Some details for the interested . . . 36

5 Catalogue **37**

6 Acknowledgement **37**

7 References **37**

8 History **38**
[1991/11/05 v0.95] . . . 38
[1991/11/05 v0.99] . . . 38
[1991/11/07 v1.0] . . . 38
[1991/12/13 v1.1] . . . 38
[1994/11/02 v1.2e] . . . 38
[2007/10/15 v1.0 (askinc)] . . . 38
[2007/10/23 v2.0] . . . 38
[2008/08/11 v2.1] . . . 39
[2011/12/02 v2.2] . . . 39
[2016/05/14 v2.3] . . . 39

9 Index **39**

The atbegshi package

Abstract

This package is a modern reimplementation of package everyshi without the burden of compatibility. It makes use of ε-TEX's if available. Both LaTeX and plain-TEX are supported.

1 Documentation **2**
1.1 Examples . . . 4
1.1.1 Example: circle in background . . . 4
1.1.2 Example: adding TrimBox for dvipdfmx . . . 5

2 Method of \shipout overloading **6**
2.1 \shipout . . . 6
2.2 \afterassignment . . . 6
2.3 Test for direct or indirect boxes . . . 7
2.3.1 With ε-TEX . . . 7
2.3.2 Without ε-TEX . . . 7
2.3.3 \lastkern method . . . 8
2.4 Output . . . 9
2.5 Separate box register . . . 9
2.6 Summary . . . 9
2.6.1 With ε-TEX . . . 9
2.6.2 Without ε-TEX, traditional way . . . 10
2.6.3 \lastkern method . . . 10

3 Implementation **11**
3.1 Reload check and package identification . . . 11
3.2 Catcodes . . . 12
3.3 Preparations . . . 13
3.4 Additions to the shipout box . . . 17
3.5 Positioning . . . 19
3.6 Patches . . . 20
3.6.1 Package crop . . . 20
3.6.2 Package everyshi . . . 22
3.6.3 Class memoir . . . 23

4 Test **26**
4.1 Catcode checks for loading . . . 26

5 Installation **30**
5.1 Download . . . 30
5.2 Bundle installation . . . 30
5.3 Package installation . . . 30
5.4 Refresh file name databases . . . 30
5.5 Some details for the interested . . . 31

6 Catalogue **31**

7 History **32**
[2007/04/17 v1.0] . . . 32
[2007/04/18 v1.1] . . . 32
[2007/04/19 v1.2] . . . 32
[2007/04/26 v1.3] . . . 32
[2007/04/27 v1.4] . . . 32
[2007/06/06 v1.5] . . . 32
[2007/09/09 v1.6] . . . 32
[2008/07/18 v1.7] . . . 32
[2008/07/19 v1.8] . . . 32
[2008/07/31 v1.9] . . . 32
[2009/12/02 v1.10] . . . 32
[2010/03/01 v1.11] . . . 33
[2010/03/25 v1.12] . . . 33
[2010/08/18 v1.13] . . . 33
[2010/12/02 v1.14] . . . 33
[2011/01/30 v1.15] . . . 33
[2011/10/05 v1.16] . . . 33
[2016/05/16 v1.17] . . . 33
[2016/06/09 v1.18] . . . 33

8 Index **33**

The atenddvi package

Abstract

LaTeX offers `\AtBeginDvi`. This package atenddvi provides the counterpart `\AtEndDvi`. The execution of its argument is delayed to the end of the document at the end of the last page. Thus `\special` and `\write` remain effective, because they are put into the last page. This is the main difference to `\AtEndDocument`.

1 Documentation **1**

2 Implementation **2**

3 Installation **4**
3.1 Download 4
3.2 Bundle installation 4
3.3 Package installation 4
3.4 Refresh file name databases 4
3.5 Some details for the interested 5

4 Catalogue **5**

5 History **6**
[2007/03/20 v1.0] 6
[2007/04/17 v1.1] 6
[2016/05/16 v1.2] 6

6 Index **6**

The attachfile2 package

Abstract

This package can be used to attach files to a PDF document. It is a further development of Scott Pakin's package attachfile for pdfTeX. Apart from bug fixes, package attachfile2 adds support for dvips, some new options, gets and writes meta information data about the attached files.

1 Documentation **2**
1.1 Introduction . . . 2
1.1.1 Future development . . . 2
1.2 User interface . . . 3
1.2.1 New options . . . 3
1.2.2 Option color . . . 3
1.2.3 Perl script pdfatfi.pl . . . 4
1.3 Changes to attachfile . . . 4

2 Implementation **5**
2.1 Package . . . 5
2.1.1 Loading of packages . . . 5
2.1.2 Value checking . . . 5
2.1.3 Option declarations . . . 7
2.1.4 Option calling . . . 10
2.1.5 Evaluate driver options . . . 10
2.1.6 Evaluate options draft/final . . . 11
2.1.7 Load driver file . . . 12
2.1.8 Graphics . . . 12
2.1.9 Reading the .atfi file . . . 15
2.1.10 Writing the .atfi file . . . 17
2.1.11 Annotation appearance . . . 18
2.2 Drivers . . . 20
2.2.1 pdfTeX . . . 20
2.2.2 dvips . . . 23
2.2.3 dvipdfmx . . . 32
2.3 Perl script pdfatfi.pl . . . 35

3 Installation **39**
3.1 Download . . . 39
3.2 Bundle installation . . . 39
3.3 Package installation . . . 39
3.4 Refresh file name databases . . . 40
3.5 Script installation . . . 40
3.6 Some details for the interested . . . 40

4 Catalogue **40**

5 References **41**

6 History **41**
[2005/02/23 v2.0] 41
[2005/10/07 v2.1] 41
[2006/08/17 v2.2] 42
[2007/04/11 v2.3] 42
[2008/07/29 v2.4] 42
[2009/09/25 v2.5] 42
[2010/09/27 v2.6] 42
[2012/04/18 v2.7] 42
[2016/05/16 v2.8] 42

7 Index **42**

The atveryend package

Abstract

This LaTeX package provides two hooks for `\end{document}` that are executed after the hook of `\AtEndDocument`. `\AfterLastShipout` can be used for code that is to be executed right after the last `\clearpage` before the `.aux` file is closed. `\AtVeryEndDocument` is used for code after closing and final reading of the `.aux` file.

1 Documentation **2**
1.1 Related work . . . 3

2 Implementation **3**
2.1 Tools . . . 4
2.2 Hooks . . . 4
2.3 Redefining `\enddocument` . . . 6
2.3.1 LaTeX kernel . . . 6
2.3.2 LaTeX kernel 2011/06/27 . . . 7
2.3.3 Package booklet, file 2up.tex . . . 9
2.3.4 Class dinbrief . . . 9
2.3.5 Class combine . . . 10
2.3.6 Class jpsj2 . . . 11
2.3.7 Testing and redefining . . . 12
2.4 Hack into `\enddocument` . . . 13
2.5 Using hooks of other packages . . . 14
2.5.1 Package scrlfile . . . 14
2.5.2 Package etoolbox . . . 14
2.6 Class letter . . . 14

3 Test **16**
3.1 Catcode checks for loading . . . 16

4 Installation **17**
4.1 Download . . . 17
4.2 Bundle installation . . . 18
4.3 Package installation . . . 18
4.4 Refresh file name databases . . . 18
4.5 Some details for the interested . . . 18

5 Catalogue **19**

6 Acknowledgement **19**

7 References **19**

8 History **20**
[2009/12/06 v1.0] 20
[2009/12/07 v1.1] 20
[2009/12/09 v1.2] 20
[2009/12/11 v1.3] 20
[2010/01/25 v1.4] 20
[2010/03/24 v1.5] 20
[2011/04/15 v1.6] 20
[2011/04/23 v1.7] 20
[2011/06/30 v1.8] 21
[2016/05/16 v1.9] 21

9 Index **21**

The auxhook package

Abstract

Package auxhook provides hooks for adding stuff at the begin of .aux files.

1 User interface **1**

2 Implementation **2**
2.1 Identification . . . 2
2.2 Hook setup . . . 2
2.3 User macros . . . 3
2.4 Patches . . . 3
2.4.1 \document . . . 3
2.4.2 \@include . . . 4

3 Installation **4**
3.1 Download . . . 4
3.2 Bundle installation . . . 5
3.3 Package installation . . . 5
3.4 Refresh file name databases . . . 5
3.5 Some details for the interested . . . 5

4 Catalogue **6**

5 References **6**

6 History **6**
[2006/05/31 v1.0] . . . 6
[2007/04/06 v1.1] . . . 6
[2009/12/14 v1.2] . . . 6
[2011/03/04 v1.3] . . . 6
[2016/05/16 v1.4] . . . 7

7 Index **7**

The bigintcalc package

Abstract

This package provides expandable arithmetic operations with big integers that can exceed TEX's number limits.

1 Documentation **2**
1.1 Introduction . . . 2
1.2 Conditions . . . 2
1.2.1 Preconditions . . . 2
1.2.2 Postconditions . . . 3
1.3 Error handling . . . 3
1.4 Operations . . . 3
1.4.1 Num . . . 3
1.4.2 Inv, Abs, Sgn . . . 4
1.4.3 Min, Max, Cmp . . . 4
1.4.4 Odd . . . 5
1.4.5 Inc, Dec, Add, Sub . . . 5
1.4.6 Shl, Shr . . . 5
1.4.7 Mul, Sqr, Fac, Pow . . . 6
1.4.8 Div, Mul . . . 6
1.5 Interface for programmers . . . 7

2 Implementation **8**
2.1 Reload check and package identification . . . 8
2.2 Catcodes . . . 9
2.3 ε-TEX detection . . . 10
2.4 Help macros . . . 10
2.5 Expand number . . . 10
2.6 Normalize expanded number . . . 11
2.7 Num . . . 12
2.8 Inv, Abs, Sgn . . . 12
2.9 Cmp, Min, Max . . . 13
2.10 Odd . . . 15
2.11 Inc, Dec . . . 16
2.12 Add, Sub . . . 19
2.13 Shl, Shr . . . 24
2.14 \BIC@Tim . . . 27
2.15 Mul . . . 29
2.16 Sqr . . . 31
2.17 Fac . . . 31
2.18 Pow . . . 32
2.18.1 Help macros . . . 34
2.18.2 Recursive calculation . . . 35
2.19 Div . . . 36
2.20 Mod . . . 42

3 Test **45**
3.1 Catcode checks for loading . . . 45
3.2 Macro tests . . . 46
3.2.1 Preamble with test macro definitions . . . 46
3.2.2 Time . . . 50
3.2.3 Test sets . . . 50

4 Installation **59**
4.1 Download . . . 59
4.2 Bundle installation . . . 60
4.3 Package installation . . . 60
4.4 Refresh file name databases . . . 60
4.5 Some details for the interested . . . 60

5 Catalogue **61**

6 History **61**
[2007/09/27 v1.0] . . . 61
[2007/11/11 v1.1] . . . 61
[2011/01/30 v1.2] . . . 61
[2012/04/08 v1.3] . . . 62
[2016/05/16 v1.4] . . . 62

7 Index **62**

The bitset package

Abstract

This package defines and implements the data type bit set, a vector of bits. The size of the vector may grow dynamically. Individual bits can be manipulated.

1 Documentation **3**
1.1 Introduction . . . 3
1.2 Glossary . . . 3
1.3 Design principles . . . 4
1.4 Operator overview . . . 5
1.5 Package loading . . . 5
1.6 Operators . . . 5
1.6.1 Miscellaneous . . . 6
1.6.2 Import . . . 6
1.6.3 Export . . . 6
1.6.4 Logical operators . . . 7
1.6.5 Shifting . . . 7
1.6.6 Bit manipulation . . . 7
1.6.7 Bit retrieval . . . 8
1.6.8 Bit set properties . . . 8
1.6.9 Queries . . . 8

2 Implementation **9**
2.1 Reload check and package identification . . . 9
2.2 Catcodes . . . 10
2.3 Package loading . . . 11
2.4 Help macros . . . 12
2.4.1 Number constant . . . 12
2.4.2 General basic macros . . . 12
2.4.3 Tail recursion . . . 12
2.4.4 Check macros . . . 12
2.5 Miscellaneous . . . 13
2.6 Import . . . 13
2.6.1 From binary number . . . 13
2.6.2 From octal/hex number . . . 14
2.6.3 From decimal number . . . 16
2.7 Export . . . 17
2.7.1 To binary number . . . 17
2.7.2 To octal/hexadecimal number . . . 18
2.7.3 To decimal number . . . 20
2.8 Logical operators . . . 23
2.8.1 `\bitsetAnd` . . . 23
2.8.2 `\bitsetAndNot` . . . 23
2.8.3 `\bitsetOr` . . . 24
2.8.4 `\bitsetXor` . . . 25

2.8.5 Shifting . . . 26
2.8.6 \bitsetShiftLeft . . . 26
2.8.7 \bitsetShiftRight . . . 26
2.9 Bit manipulation . . . 27
2.9.1 Clear operation . . . 28
2.9.2 Set operation . . . 29
2.9.3 Flip operation . . . 29
2.9.4 Range operators . . . 30
2.10 Bit retrieval . . . 32
2.10.1 \bitsetGet . . . 32
2.10.2 \bitsetNextClearBit, \bitsetNextSetBit . . . 33
2.10.3 \bitsetGetSetBitList . . . 35
2.11 Bit set properties . . . 35
2.12 Queries . . . 37

3 Test **38**
3.1 Catcode checks for loading . . . 38
3.2 Macro tests . . . 40
3.2.1 Preamble . . . 40
3.2.2 Time . . . 40
3.2.3 Detection of unwanted space . . . 41
3.2.4 Test macros . . . 41
3.2.5 Test sets . . . 42

4 Installation **57**
4.1 Download . . . 57
4.2 Bundle installation . . . 57
4.3 Package installation . . . 58
4.4 Refresh file name databases . . . 58
4.5 Some details for the interested . . . 58

5 Catalogue **59**

6 History **59**
[2007/09/28 v1.0] . . . 59
[2011/01/30 v1.1] . . . 59
[2016/05/16 v1.2] . . . 59

7 Index **59**

The bmpsize package

Abstract

Package bmpsize analyzes bitmap images to extract size and resolution data. It adds this feature to the graphics package that now do not need separate bounding box files for bitmap images. Additionally the implementation for the inclusion of bitmap images in some drivers of package graphicx are rewritten to support options viewport, trim and clip.

1 Documentation **2**
1.1 Introduction . . . 2
1.2 Bitmap image parsers . . . 3
1.2.1 User interface . . . 3
1.2.2 Hints . . . 3
1.2.3 Test program . . . 4
1.2.4 Interface for programmers . . . 4
1.3 Improved bitmap inclusion . . . 4

2 Implementation **4**
2.1 Basic package bmpsize-base . . . 4
2.2 Bitmap formats . . . 11
2.2.1 png . . . 11
2.2.2 jpg . . . 13
2.2.3 bmp . . . 21
2.2.4 gif . . . 22
2.2.5 tiff . . . 23
2.2.6 pnm . . . 27
2.2.7 pam . . . 30
2.2.8 xpm . . . 36
2.2.9 tga . . . 41
2.2.10 pcx . . . 43
2.2.11 msp . . . 44
2.2.12 sgi . . . 45
2.3 Package bmpsize . . . 46
2.4 Drivers . . . 48
2.4.1 dvips . . . 48
2.4.2 dvipdfm and dvipdfmx . . . 50
2.5 Test program bmpsize-test.tex . . . 53

3 Installation **55**
3.1 Download . . . 55
3.2 Bundle installation . . . 56
3.3 Package installation . . . 56
3.4 Refresh file name databases . . . 56
3.5 Some details for the interested . . . 56

4 Catalogue **57**

5 References **57**
5.1 URLs for bitmap format descriptions 58
5.1.1 JPEG 58
5.1.2 PNG 58
5.1.3 GIF 58
5.1.4 BMP 58
5.1.5 PCX 58
5.1.6 MSP 58
5.1.7 TIFF 58
5.1.8 TGA 58
5.1.9 SGI 58
5.1.10 WMF 59
5.1.11 XPM 59

6 History **59**
[2006/08/24 v1.0] 59
[2007/02/18 v1.1] 59
[2007/04/11 v1.2] 59
[2007/05/01 v1.3] 59
[2007/11/11 v1.4] 59
[2008/08/11 v1.5] 59
[2009/09/04 v1.6] 59
[2016/05/16 v1.7] 59

7 Index **60**

The bookmark package

Abstract

This package implements a new bookmark (outline) organization for package hyperref. Bookmark properties such as style and color can now be set. Other action types are available (URI, GoToR, Named). The bookmarks are generated in the first compile run. Package hyperref uses two runs.

1 Documentation **3**
1.1 Introduction . . . 3
1.2 Options . . . 3
1.2.1 Options draft and final . . . 3
1.2.2 Driver options . . . 4
1.2.3 Layout options . . . 4
1.2.4 Action options . . . 4
1.2.5 Level options . . . 5
1.2.6 Style definitions . . . 6
1.2.7 Hook support . . . 6
1.3 Compatibility with hyperref . . . 7
1.4 Adding bookmarks at the end . . . 7
1.5 Limitations/ToDos . . . 8

2 Example **8**

3 Implementation **10**
3.1 Package . . . 10
3.1.1 Requirements . . . 10
3.1.2 Package options . . . 11
3.1.3 Action options . . . 15
3.1.4 Option atend . . . 19
3.1.5 Option style . . . 19
3.1.6 Options for source file location . . . 20
3.1.7 Hook support . . . 20
3.1.8 Driver setup and loading . . . 21
3.1.9 Compatibility for hyperref . . . 23
3.2 Driver for dvipdfm . . . 24
3.3 Driver for VTEX . . . 27
3.4 Driver for pdfTEX . . . 31
3.5 Drivers with pdfmark specials . . . 34
3.5.1 Driver dvips . . . 34
3.5.2 Driver dvipsone . . . 34
3.5.3 Driver textures . . . 34
3.5.4 Common part . . . 34
3.6 Common part for pdftex and pdfmark . . . 37
3.6.1 Write auxiliary file . . . 37
3.6.2 Read auxiliary data . . . 39
3.7 Option atend . . . 40

3.7.1 Hook . . . 40
3.7.2 Drivers using hooks at end of document . . . 40
3.7.3 Drivers using \AtEndDvi . . . 40

4 Installation **41**
4.1 Download . . . 41
4.2 Bundle installation . . . 41
4.3 Package installation . . . 41
4.4 Refresh file name databases . . . 42
4.5 Some details for the interested . . . 42

5 Catalogue **42**

6 References **43**

7 History **43**
[2007/02/19 v0.1] . . . 43
[2007/02/20 v0.2] . . . 43
[2007/02/21 v0.3] . . . 43
[2007/02/22 v0.4] . . . 43
[2007/03/02 v0.5] . . . 43
[2007/03/03 v0.6] . . . 43
[2007/03/07 v0.7] . . . 43
[2007/04/09 v0.8] . . . 44
[2007/04/25 v0.9] . . . 44
[2007/05/29 v1.0] . . . 44
[2007/07/13 v1.1] . . . 44
[2007/09/25 v1.2] . . . 44
[2008/08/08 v1.3] . . . 44
[2008/09/13 v1.4] . . . 44
[2009/08/13 v1.5] . . . 44
[2009/12/06 v1.6] . . . 44
[2009/12/07 v1.7] . . . 44
[2009/12/17 v1.8] . . . 44
[2010/03/30 v1.9] . . . 45
[2010/04/03 v1.10] . . . 45
[2010/04/04 v1.11] . . . 45
[2010/04/08 v1.12] . . . 45
[2010/07/23 v1.13] . . . 45
[2010/09/02 v1.14] . . . 45
[2010/09/25 v1.15] . . . 45
[2010/10/19 v1.16] . . . 45
[2010/10/25 v1.17] . . . 45
[2010/11/05 v1.18] . . . 45
[2011/03/20 v1.19] . . . 45
[2011/04/13 v1.20] . . . 46
[2011/04/21 v1.21] . . . 46

[2011/05/13 v1.22] 46
[2011/09/19 v1.23] 46
[2011/12/02 v1.24] 46
[2016/05/16 v1.25] 46
[2016/05/17 v1.26] 46

8 Index **46**

The catchfile package

Abstract

This package catches the contents of a file and puts it in a macro. It requires ε-TEX. Both LATEX and plain-TEX are supported.

1 Documentation **2**

2 Implementation **2**
2.1 Reload check and package identification . . . 2
2.2 Catcodes . . . 3
2.3 Preparations . . . 4
2.4 Looking for primitive \input . . . 4
2.5 Input file check . . . 5
2.6 Catch file contents . . . 6

3 Test **7**
3.1 Catcode checks for loading . . . 7
3.2 LATEX . . . 9
3.3 plain TEX . . . 10

4 Installation **12**
4.1 Download . . . 12
4.2 Bundle installation . . . 12
4.3 Package installation . . . 12
4.4 Refresh file name databases . . . 12
4.5 Some details for the interested . . . 13

5 Catalogue **13**

6 History **14**
[2007/05/30 v1.0] . . . 14
[2007/09/09 v1.1] . . . 14
[2007/11/11 v1.2] . . . 14
[2010/03/01 v1.3] . . . 14
[2010/04/08 v1.4] . . . 14
[2010/04/28 v1.5] . . . 14
[2011/03/01 v1.6] . . . 14
[2016/05/16 v1.7] . . . 14

7 Index **14**

The centernot package

Abstract

This package provides `\centernot` that prints the symbol `\not` on the following argument. Unlike `\not` the symbol is horizontally centered.

1 User interface **1**

2 Implementation **2**

3 Installation **2**
3.1 Download . . . 2
3.2 Bundle installation . . . 3
3.3 Package installation . . . 3
3.4 Refresh file name databases . . . 3
3.5 Some details for the interested . . . 3

4 Catalogue **4**

5 History **4**
[2006/12/02 v1.0] . . . 4
[2007/05/31 v1.1] . . . 4
[2010/03/29 v1.2] . . . 4
[2011/07/11 v1.3] . . . 5
[2016/05/16 v1.4] . . . 5

6 Index **5**

The chemarr package

Abstract

Very often chemists need a longer version of reaction arrows (`\rightleftharpoons`) with the possibility to put text above and below. Analogous to amsmath's `\xrightarrow` and `\xleftarrow` this package provides the macro `\xrightleftharpoons`.

1 Usage **1**
1.1 Example 2

2 Implementation **2**

3 Installation **3**
3.1 Download 3
3.2 Bundle installation 3
3.3 Package installation 3
3.4 Refresh file name databases 4
3.5 Some details for the interested 4

4 Catalogue **4**

5 History **5**
[2001/06/21 v1.0] 5
[2001/06/22 v1.1] 5
[2006/02/20 v1.2] 5
[2016/05/16 v1.3] 5

6 Index **5**

The classlist package

Abstract

This package records the loaded classes and stores them in a list.

1 Documentation **1**
1.1 Background 1
1.2 Usage 2

2 Implementation **2**

3 Installation **4**
3.1 Download 4
3.2 Bundle installation 4
3.3 Package installation 5
3.4 Refresh file name databases 5
3.5 Some details for the interested 5

4 Catalogue **5**

5 History **6**
[2005/06/19 v1.0] 6
[2005/06/19 v1.1] 6
[2006/02/20 v1.2] 6
[2008/08/11 v1.3] 6
[2011/10/17 v1.4] 6
[2016/05/16 v1.5] 7

6 Index **7**

The colonequals package

Abstract

Package colonequals defines poor man's symbols for math relation symbols such as "colon equals". The colon is centered around the horizontal math axis.

1 User interface **1**
1.1 Introduction . . . 1
1.2 Symbols . . . 2
1.3 Fine tuning . . . 3
1.3.1 Example . . . 3

2 Implementation **3**
2.1 Identification . . . 3
2.2 Distance control . . . 3
2.3 Centered colons . . . 3
2.4 Combined symbols . . . 4

3 Installation **5**
3.1 Download . . . 5
3.2 Bundle installation . . . 5
3.3 Package installation . . . 5
3.4 Refresh file name databases . . . 6
3.5 Some details for the interested . . . 6

4 Catalogue **6**

5 References **7**

6 History **7**
[2006/08/01 v1.0] . . . 7
[2016/05/16 v1.1] . . . 7

7 Index **7**

The dvipscol package

Abstract

Color support for dvips in `dvips.def` involves the color stack of dvips. The package tries to remove unnecessary uses of the stack to avoid the error "out of coor stack space".

1 Documentation **1**
1.1 Introduction 1
1.2 Usage 2
1.2.1 With ε-TEX 2
1.2.2 Without ε-TEX 2

2 Implementation **2**

3 Installation **3**
3.1 Download 3
3.2 Bundle installation 3
3.3 Package installation 3
3.4 Refresh file name databases 4
3.5 Some details for the interested 4

4 Catalogue **4**

5 History **5**
[2000/08/31 v1.0] 5
[2006/02/20 v1.1] 5
[2008/08/11 v1.2] 5
[2016/05/16 v1.3] 5

6 Index **5**

The embedfile package

Abstract

This package embeds files to a PDF document. Currently the only supported driver is pdfTeX >= 1.30 in PDF mode.

1 Documentation **2**
1.1 Introduction . . . 2
1.1.1 Future development . . . 2
1.2 User interface . . . 3
1.3 Collection support (PDF 1.7) . . . 4
1.4 Export of object references . . . 5
1.4.1 Example . . . 6
1.5 Examples . . . 6
1.5.1 plain TeX . . . 6
1.5.2 Collection example . . . 6
1.6 Package dtx-attach . . . 8

2 Implementation **8**
2.1 Reload check and package identification . . . 8
2.2 Catcodes . . . 9
2.3 Tools . . . 10
2.4 Check for recent pdfTeX in PDF mode . . . 10
2.5 Strings . . . 11
2.6 Switches . . . 12
2.7 Key value definitions . . . 12
2.8 Embed the file . . . 17

3 Test **22**
3.1 Catcode checks for loading . . . 22
3.2 Simple test . . . 24
3.3 Test for ini-TeX . . . 24

4 Installation **25**
4.1 Download . . . 25
4.2 Bundle installation . . . 25
4.3 Package installation . . . 25
4.4 Refresh file name databases . . . 26
4.5 Some details for the interested . . . 26

5 Catalogue **26**

6 References **27**

7 History **27**
[2006/08/16 v1.0] 27
[2007/04/11 v1.1] 27
[2007/09/09 v1.2] 27
[2007/10/28 v2.0] 27
[2007/10/29 v2.1] 27
[2007/11/11 v2.2] 27
[2007/11/25 v2.3] 28
[2009/09/25 v2.4] 28
[2010/03/01 v2.5] 28
[2011/04/13 v2.6] 28
[2016/05/15 v2.7] 28

8 Index **28**

The engord package

Abstract

The package generates the suffix of English ordinal numbers. It can be used with plain and LaTeX formats.

1 Usage **2**
1.1 Package options . . . 2
1.2 Examples . . . 2

2 Implementation **3**
2.1 Reload check and identification . . . 3
2.2 Help commands for plain compatibility . . . 4
2.3 User macros . . . 5
2.4 Suffix generation . . . 6

3 Test **8**
3.1 Catcode checks for loading . . . 8

4 Installation **9**
4.1 Download . . . 9
4.2 Bundle installation . . . 10
4.3 Package installation . . . 10
4.4 Refresh file name databases . . . 10
4.5 Some details for the interested . . . 10

5 Catalogue **11**

6 History **11**
[2000/05/23 v1.0] . . . 11
[2003/04/28 v1.1] . . . 11
[2006/02/20 v1.2] . . . 11
[2007/04/11 v1.3] . . . 12
[2007/04/26 v1.4] . . . 12
[2007/09/09 v1.5] . . . 12
[2007/09/20 v1.6] . . . 12
[2008/08/11 v1.7] . . . 12
[2010/03/01 v1.8] . . . 12
[2016/05/16 v1.9] . . . 12

7 Index **12**

The enparen package

Abstract

The package defines macros to set parentheses that automatically change the symbols from inner to outer fences.

1 Documentation **2**
1.1 User macros . . . 2
1.2 Contexts . . . 3
1.3 Options . . . 3
1.4 Notes . . . 4

2 Implementation **4**
2.1 Resources . . . 4
2.2 Contexts . . . 4
2.2.1 Stack for contexts . . . 5
2.2.2 Context user macros . . . 5
2.3 Symbols . . . 6
2.4 Main user macros . . . 6
2.5 Options . . . 8
2.6 Context settings . . . 8
2.7 At end of document . . . 8

3 Installation **9**
3.1 Download . . . 9
3.2 Bundle installation . . . 9
3.3 Package installation . . . 9
3.4 Refresh file name databases . . . 10
3.5 Some details for the interested . . . 10

4 References **10**

5 History **10**
[2012/01/07 v1.0] . . . 10
[2016/05/16 v1.1] . . . 10

6 Index **11**

The eolgrab package

Abstract

This package implements a generic argument grabber to catch an argument that is delimited by the line end.

1 Documentation **2**
1.1 Examples . . . 2
1.1.1 Small LaTeX document as example . . . 4
1.1.2 LaTeX document with environments . . . 4
1.2 Limitations . . . 4

2 Implementation **5**
2.1 Reload check and package identification . . . 5
2.2 Catcodes . . . 6
2.3 Resources . . . 6
2.4 Macro `\eolgrab` . . . 7

3 Test **8**
3.1 Catcode checks for loading . . . 8
3.2 Tests for plain TeX . . . 10

4 Installation **10**
4.1 Download . . . 10
4.2 Bundle installation . . . 10
4.3 Package installation . . . 11
4.4 Refresh file name databases . . . 11
4.5 Some details for the interested . . . 11

5 Catalogue **12**

6 References **12**

7 History **12**
[2011/01/12 v1.0] . . . 12
[2016/05/16 v1.1] . . . 12

8 Index **13**

The epstopdf package

Abstract

This packages adds support of handling eps images to package graphics or graphicx with option pdftex. If an eps image is detected, epstopdf is automatically called to convert it to pdf format.

1 Documentation **2**
1.1 Introduction . . . 2
1.2 Requirements . . . 2
1.3 Usage . . . 3
1.4 Options . . . 4
1.5 Configuration . . . 5
1.5.1 System configuration file `epstopdf-sys.cfg` . . . 5
1.5.2 User configuration file `epstopdf.cfg` . . . 5
1.5.3 Conversion program . . . 5
1.6 Other image formats . . . 6

2 Implementation **6**
2.1 Wrapper package . . . 6
2.1.1 Option handling . . . 8
2.2 Base package . . . 8
2.3 Preparations . . . 8
2.3.1 Reload check and identification . . . 8
2.3.2 Catcodes . . . 9
2.3.3 Load packages . . . 10
2.4 Checks . . . 10
2.5 Package loading . . . 11
2.6 Options . . . 11
2.6.1 Default setting . . . 11
2.7 Make and verbose . . . 11
2.8 Adding conversion support . . . 12
2.9 Declare graphics rule . . . 15

3 Test **16**
3.1 Preface for standard catcode check . . . 16
3.2 Catcode checks for loading . . . 16

4 Installation **17**
4.1 Download . . . 17
4.2 Bundle installation . . . 18
4.3 Package installation . . . 18
4.4 Refresh file name databases . . . 18
4.5 Some details for the interested . . . 18

5 Catalogue **19**

6 History **19**
[2001/01/06 v1.0] . . . 19
[2001/02/04 v1.1] . . . 19
[2006/02/20 v1.2] . . . 20
[2006/08/26 v1.3] . . . 20
[2007/04/26 v1.4] . . . 20
[2007/10/02 v1.5] . . . 20
[2007/11/11 v1.6] . . . 20
[2008/05/06 v1.7] . . . 20
[2009/03/01 v1.8] . . . 20
[2009/07/06 v1.9] . . . 20
[2009/07/07 v1.10] . . . 20
[2009/07/12 v2.0] . . . 20
[2009/07/15 v2.1] . . . 21
[2009/07/16 v2.2] . . . 21
[2009/09/24 v2.3] . . . 21
[2009/10/17 v2.4] . . . 21
[2016/05/15 v2.5] . . . 21
[2016/05/15 v2.6] . . . 21

7 Index **21**

The etexcmds package

Abstract

New primitive commands are introduced in ε-TEX. Sometimes the names collide with existing macros. This package solves this name clashes by adding a prefix to ε-TEX's commands. For example, ε-TEX's `\unexpanded` is provided as `\etex@unexpanded`.

1 Documentation **2**
1.1 `\unexpanded` . . . 2
1.2 `\expanded` . . . 2

2 Implementation **2**
2.1 Reload check and package identification . . . 2
2.2 Catcodes . . . 3
2.3 Provide `\newif` . . . 4
2.4 Load package infwarerr . . . 4
2.5 `\unexpanded` . . . 5
2.6 `\expanded` . . . 5

3 Test **6**
3.1 Catcode checks for loading . . . 6
3.2 Macro tests . . . 8

4 Installation **9**
4.1 Download . . . 9
4.2 Bundle installation . . . 9
4.3 Package installation . . . 10
4.4 Refresh file name databases . . . 10
4.5 Some details for the interested . . . 10

5 Catalogue **11**

6 History **11**
[2007/05/06 v1.0] . . . 11
[2007/09/09 v1.1] . . . 11
[2007/12/12 v1.2] . . . 11
[2010/01/28 v1.3] . . . 11
[2011/01/30 v1.4] . . . 11
[2011/02/16 v1.5] . . . 12
[2016/05/16 v1.6] . . . 12

7 Index **12**

The fibnum package

Abstract

The package fibnum provides expandable fibonacci numbers for both LaTeX and plain TeX.

1 Documentation **1**

2 Implementation **3**
2.1 Identification . . . 3
2.2 Package resources . . . 5
2.3 Setup precalculated values . . . 5
2.4 Macros for precalculating values . . . 6
2.5 Expandable calculations . . . 7

3 Test **8**
3.1 Catcode checks for loading . . . 8
3.2 Test calculations . . . 10

4 Installation **12**
4.1 Download . . . 12
4.2 Bundle installation . . . 12
4.3 Package installation . . . 12
4.4 Refresh file name databases . . . 13
4.5 Some details for the interested . . . 13

5 References **13**

6 History **13**
[2012/04/08 v1.0] . . . 13
[2016/05/16 v1.1] . . . 13

7 Index **14**

The flags package

Abstract

Package flags allows the setting and clearing of flags in bit fields and converts the bit field into a decimal number. Currently the bit field is limited to 31 bits.

1 Documentation **1**
1.1 User interface . . . 2
1.2 Requirements . . . 2
1.3 ToDo . . . 2

2 Implementation **2**

3 Installation **5**
3.1 Download . . . 5
3.2 Bundle installation . . . 5
3.3 Package installation . . . 6
3.4 Refresh file name databases . . . 6
3.5 Some details for the interested . . . 6

4 Catalogue **7**

5 History **7**
[2007/02/18 v0.1] . . . 7
[2007/03/07 v0.2] . . . 7
[2007/03/31 v0.3] . . . 7
[2007/09/30 v0.4] . . . 7
[2016/05/16 v0.5] . . . 7

6 Index **8**

The gettitlestring package

Abstract

The LaTeX package addresses packages that are dealing with references to titles (`\section`, `\caption`, ...). The package tries to remove `\label` and other commands from title strings.

1 Documentation **2**
1.1 Macros . . . 2
1.2 Options . . . 2

2 Implementation **2**
2.1 Options . . . 4
2.2 `\GetTitleString` . . . 4
2.2.1 Expand method . . . 5
2.2.2 Non-expand method . . . 6

3 Test **7**
3.1 Catcode checks for loading . . . 7
3.2 Test of non-expand method . . . 9

4 Installation **10**
4.1 Download . . . 10
4.2 Bundle installation . . . 10
4.3 Package installation . . . 10
4.4 Refresh file name databases . . . 10
4.5 Some details for the interested . . . 11

5 Catalogue **11**

6 References **12**

7 History **12**
[2009/12/08 v1.0] . . . 12
[2009/12/12 v1.1] . . . 12
[2009/12/13 v1.2] . . . 12
[2009/12/18 v1.3] . . . 12
[2010/12/03 v1.4] . . . 12
[2016/05/16 v1.5] . . . 12

8 Index **12**

The grfext package

Abstract

This package provides macros for adding and reordering graphics extensions of package graphics.

1 Documentation **2**
1.1 Introduction . . . 2
1.2 User interface . . . 2
1.3 Package loading . . . 2
1.4 Option support for package graphicx . . . 3
1.5 plain TEX . . . 3

2 Implementation **3**
2.1 Relead check and identification . . . 3
2.2 Catcodes . . . 4
2.3 plain TEX . . . 5
2.4 Add . . . 5
2.5 Check . . . 6
2.6 Remove . . . 7
2.7 Print . . . 7
2.8 Defining options for package graphicx . . . 7

3 Test **8**
3.1 Catcode checks for loading . . . 8
3.2 Macro tests . . . 10
3.2.1 Preamble . . . 10
3.2.2 Detection of unwanted space . . . 10
3.2.3 Generic test macros . . . 10
3.2.4 Test for \AppendGraphicsExtensions . . . 10
3.2.5 Test for \PrependGraphicsExtensions . . . 11
3.2.6 Test for \RemoveGraphicsExtensions . . . 12

4 Installation **12**
4.1 Download . . . 12
4.2 Bundle installation . . . 12
4.3 Package installation . . . 13
4.4 Refresh file name databases . . . 13
4.5 Some details for the interested . . . 13

5 Catalogue **13**

6 References **14**

7 History **14**
[2007/09/30 v1.0] . . . 14
[2010/08/19 v1.1] . . . 14
[2016/05/16 v1.2] . . . 14

8 Index **14**

The grffile package

Abstract

The package extends the file name processing of package graphics to support a larger range of file names. For example, the file name may contain several dots. Or in case of pdfTeX in PDF mode the file name may contain spaces.

1 Usage **2**
1.1 Option multidot . . . 2
1.2 Option babel . . . 2
1.3 Option extendedchars . . . 2
1.4 Option encoding . . . 3
1.4.1 Option inputencoding . . . 3
1.4.2 Option filenameencoding . . . 3
1.4.3 Example . . . 3
1.5 Option space . . . 4
1.6 General use . . . 4
1.7 Default settings . . . 4

2 Implementation **5**
2.1 Identification . . . 5
2.2 Catcode stuff . . . 5
2.3 Options . . . 5
2.4 Fix \Gin@ii of package graphicx . . . 12

3 Test **13**
3.1 Multidot with default rule . . . 13

4 Installation **14**
4.1 Download . . . 14
4.2 Bundle installation . . . 14
4.3 Package installation . . . 15
4.4 Refresh file name databases . . . 15
4.5 Some details for the interested . . . 15

5 Catalogue **15**

6 References **16**

7 History **16**
[2004/07/18 v0.5] . . . 16
[2006/08/15 v1.0] . . . 16
[2006/08/17 v1.1] . . . 16
[2006/11/30 v1.2] . . . 16
[2007/04/11 v1.3] . . . 17
[2007/06/13 v1.4] . . . 17
[2007/08/16 v1.5] . . . 17
[2007/11/11 v1.6] . . . 17

[2007/11/24 v1.7] 17
[2008/08/11 v1.8] 17
[2008/10/13 v1.9] 17
[2009/09/25 v1.10] 17
[2010/01/28 v1.11] 17
[2010/08/26 v1.12] 17
[2010/12/09 v1.13] 17
[2011/10/04 v1.14] 17
[2011/10/17 v1.15] 17
[2012/04/05 v1.16] 18
[2016/05/16 v1.17] 18
[2017/06/30 v1.18] 18

8 Index **18**

The hobsub package

Abstract

Package hobsub implements the idea of loading several packages in one big collection package.

1 Documentation **2**
1.1 Usage . . . 2
1.2 Supported features . . . 3
1.3 Common limitations . . . 3
1.4 Package hobsub-generic . . . 3
1.5 Package hobsub-hyperref . . . 3
1.6 Package hobsub . . . 5

2 Implementation **6**
2.1 Reload check and package identification . . . 6
2.1.1 Package hobsub . . . 6
2.1.2 Package hobsub-generic . . . 7
2.1.3 Package hobsub-hyperref . . . 8
2.2 Catcodes . . . 9
2.3 Package hobsub-hyperref loads hobsub-generic . . . 10
2.4 Preamble . . . 10
2.5 End of preamble for subset packages . . . 12
2.6 Package list . . . 12
2.7 End of packages . . . 13

3 Test **13**
3.1 Catcode checks for loading . . . 13

4 Installation **14**
4.1 Download . . . 14
4.2 Bundle installation . . . 15
4.3 Package installation . . . 15
4.4 Refresh file name databases . . . 15
4.5 Some details for the interested . . . 15

5 Catalogue **16**

6 References **17**

7 History **17**
[2011/01/30 v1.0] . . . 17
[2011/04/16 v1.1] . . . 17
[2011/04/17 v1.2] . . . 17
[2011/04/18 v1.3] . . . 17
[2011/04/23 v1.4] . . . 17
[2011/06/24 v1.5] . . . 17
[2011/06/30 v1.6] . . . 17

[2011/07/01 v1.7] 17
[2011/07/28 v1.8] 17
[2011/08/22 v1.9] 17
[2011/10/16 v1.10] 17
[2011/11/29 v1.11] 17
[2012/04/25 v1.12] 18
[2012/05/28 v1.13] 18
[2016/05/16 v1.14] 18

8 Index **18**

The hologo package

Abstract

This package starts a collection of logos with support for bookmarks strings.

1 Documentation **3**
1.1 Logo macros . . . 3
1.2 Setup macros . . . 4
1.3 Options . . . 4
1.4 Driver options . . . 5
1.5 Font setup . . . 5
1.5.1 Font order . . . 6
1.6 Additional user macros . . . 6
1.7 Supported contexts . . . 7
1.8 Example . . . 7

2 Implementation **9**
2.1 Logo list . . . 11
2.2 Load resources . . . 12
2.3 Setup macros . . . 13
2.4 Options . . . 14
2.5 Break/no-break support . . . 15
2.6 Font support . . . 17
2.6.1 Font defaults . . . 17
2.6.2 Font setup . . . 19
2.7 Generic logo commands . . . 19
2.7.1 `\hologo` and friends . . . 20
2.7.2 `\hologoRobust` and friends . . . 22
2.8 Helpers . . . 24
2.8.1 Text subscript . . . 25
2.9 TEX and friends . . . 25
2.9.1 TEX . . . 25
2.9.2 plain TEX . . . 26
2.9.3 LATEX . . . 27
2.9.4 (LA)TEX . . . 28
2.9.5 LATEX 2ε . . . 30
2.9.6 LATEX3 . . . 31
2.9.7 LATEXML . . . 31
2.9.8 ε-TEX . . . 32
2.9.9 iniTEX . . . 33
2.9.10 virTEX . . . 33
2.9.11 SLITEX . . . 33
2.9.12 LuaTEX . . . 36
2.9.13 LuaLATEX . . . 36
2.9.14 XETEX, XELATEX . . . 37
2.9.15 pdfTEX, pdfLATEX . . . 41
2.9.16 VTEX . . . 41

2.9.17 $\mathcal{AMS}$, ... 42
2.9.18 BibTeX 43
2.9.19 BibTeX8 45
2.9.20 ConTeXt 45
2.9.21 emTeX 46
2.9.22 ε_{χ}TeX 46
2.9.23 MiKTeX 47
2.9.24 OzTeX and friends 48
2.9.25 PCTeX 49
2.9.26 PiCTeX 49
2.9.27 teTeX 50
2.9.28 TeX4ht 50
2.9.29 SageTeX 51
2.10 METAFONT and friends 51
2.11 Others 51
2.11.1 biber 51
2.11.2 KOMA-Script 52
2.11.3 LyX 53
2.11.4 $\mathcal{NTS}$ 54
2.11.5 TtH (TeX to HTML translator) 54
2.11.6 Hàn Thế Thành 54
2.12 Driver detection 55
2.12.1 Reflect box macros 58

3 Test **60**
3.1 Catcode checks for loading 60
3.2 Spacefactor 62
3.3 Complete list 62

4 Installation **64**
4.1 Download 64
4.2 Bundle installation 64
4.3 Package installation 64
4.4 Refresh file name databases 65
4.5 Some details for the interested 65

5 Catalogue **65**

6 References **66**

7 History **66**
[2010/04/08 v1.0] 66
[2010/04/16 v1.1] 66
[2010/04/24 v1.2] 66
[2010/11/21 v1.3] 66
[2011/03/25 v1.4] 67
[2011/04/21 v1.5] 67

[2011/10/01 v1.6] 67
[2011/11/22 v1.7] 67
[2011/11/29 v1.8] 67
[2011/12/21 v1.9] 67
[2012/04/26 v1.10] 67
[2016/05/12 v1.11] 67
[2016/05/16 v1.12] 67
[2017/05/01 v1.13] 67

8 Index **68**

The holtxdoc package

Abstract

The package is used for the documentation of my packages in DTX format. It contains some private macros and setup for my needs. Thus do not use it. I have separated the part that may be useful for others in package hypdoc.

1 No usage **2**

2 Implementation **2**
2.1 Help macros . . . 2
2.2 Font setup for LuaLaTeX . . . 2
2.3 Date . . . 3
2.4 History . . . 3
2.5 Formatting macros . . . 4
2.6 Names . . . 5
2.7 Setup . . . 6
2.7.1 Package doc . . . 6
2.7.2 Page layout . . . 6

3 Installation **6**
3.1 Download . . . 6
3.2 Bundle installation . . . 7
3.3 Package installation . . . 7
3.4 Refresh file name databases . . . 7
3.5 Some details for the interested . . . 7

4 Catalogue **8**

5 History **8**
[1999/06/26 v0.3] . . . 8
[2000/08/14 v0.4] . . . 8
[2001/08/27 v0.5] . . . 8
[2001/09/02 v0.6] . . . 8
[2006/06/02 v0.7] . . . 8
[2007/10/21 v0.8] . . . 8
[2007/11/11 v0.9] . . . 9
[2007/12/12 v0.10] . . . 9
[2008/08/11 v0.11] . . . 9
[2009/08/07 v0.12] . . . 9
[2009/12/02 v0.13] . . . 9
[2010/02/03 v0.14] . . . 9
[2010/03/10 v0.15] . . . 9
[2010/04/03 v0.16] . . . 9
[2010/04/08 v0.17] . . . 9
[2010/04/18 v0.18] . . . 9
[2010/04/24 v0.19] . . . 9

[2010/12/03 v0.20] 9
[2011/02/04 v0.21] 9
[2011/11/22 v0.22] 9
[2012/03/07 v0.23] 10
[2012/03/21 v0.24] 10
[2016/05/16 v0.25] 10
[2016/05/16 v0.26] 10
[2016/05/17 v0.27] 10

6 Index **10**

The hopatch package

Abstract

This packages provides a wrapper to various package hooks provided by other packages or classes, but does not define own hooks.

1 Documentation **1**

2 Implementation **3**
2.1 Catcodes and package identification 3
2.2 Resources 4
2.3 Package patching 4

3 Test **5**
3.1 Catcode checks for loading 6

4 Installation **8**
4.1 Download 8
4.2 Bundle installation 8
4.3 Package installation 9
4.4 Refresh file name databases 9
4.5 Some details for the interested 9

5 Catalogue **9**

6 References **10**

7 History **10**
[2011/01/30 v1.0] 10
[2011/06/24 v1.1] 10
[2012/05/28 v1.2] 10
[2016/05/16 v1.3] 11

8 Index **11**

The hycolor package

Abstract

Package hycolor implements the color option stuff that is used by packages hyperref and bookmark. It is not intended as package for the user.

1 Documentation **2**
1.1 Summary . . . 2

2 Implementation **3**
2.1 Normalization . . . 3
2.1.1 Sanitize value of color option . . . 3
2.1.2 Normalize result . . . 4
2.2 Main algorithm for color options . . . 5
2.3 Package bookmark . . . 5
2.4 Utils . . . 7
2.5 Package hyperref . . . 8
2.5.1 Options Hyp.*color . . . 8
2.5.2 Generic algorithm . . . 10
2.5.3 Field options . . . 12
2.5.4 Detection for naked RGB values . . . 12
2.5.5 Options *bordercolor . . . 14
2.6 Package attachfile2 . . . 15
2.7 Patch for package xcolor . . . 17
2.7.1 Fix fragile \@frameb@x . . . 20

3 Test **20**
3.1 Test for package attachfile2 . . . 24
3.2 Test for package xcolor . . . 26
3.2.1 Test for \@frameb@x/\fbox . . . 27

4 Installation **28**
4.1 Download . . . 28
4.2 Bundle installation . . . 28
4.3 Package installation . . . 28
4.4 Refresh file name databases . . . 29
4.5 Some details for the interested . . . 29

5 Catalogue **29**

6 History **30**
[2007/04/09 v1.0] . . . 30
[2007/04/11 v1.1] . . . 30
[2008/07/29 v1.2] . . . 30
[2008/08/01 v1.3] . . . 30
[2008/09/08 v1.4] . . . 30
[2009/10/02 v1.5] . . . 30

[2009/12/12 v1.6] 30
[2011/01/30 v1.7] 30
[2016/05/16 v1.8] 30

7 Index **30**

The hypbmsec package

Abstract

This package expands the syntax of the sectioning commands. If the argument of the sectioning commands isn't usable as outline entry, a replacement for the bookmarks can be given.

1 Usage **2**
1.1 Bookmarks restrictions . . . 2
1.2 `\texorpdfstring` . . . 2
1.3 Sectioning commands . . . 2
1.4 Places for sectioning strings . . . 2
1.5 Solution with optional arguments . . . 2
1.6 Syntax . . . 3
1.6.1 Star form . . . 3
1.6.2 Without optional arguments . . . 3
1.6.3 One optional argument . . . 3
1.6.4 Two optional arguments . . . 3
1.6.5 Optional argument in parentheses . . . 3
1.7 Without `hyperref` . . . 3
1.8 Protecting parentheses . . . 4

2 Implementation **4**

3 Installation **7**
3.1 Download . . . 7
3.2 Bundle installation . . . 7
3.3 Package installation . . . 7
3.4 Refresh file name databases . . . 7
3.5 Some details for the interested . . . 8

4 Catalogue **8**

5 History **9**
[1998/11/20 v1.0] . . . 9
[1999/04/12 v2.0] . . . 9
[2000/03/22 v2.1] . . . 9
[2006/02/20 v2.2] . . . 9
[2007/03/05 v2.3] . . . 9
[2007/04/11 v2.4] . . . 9
[2016/05/16 v2.5] . . . 9

6 Index **9**

The hypcap package

Abstract

This package tries a solution of the problem with hyperref, that links to floats points below the caption and not at the beginning of the float. Therefore this package divides the task into two part, the link setting with `\capstart` or automatically at the beginning of a float and the rest in the `\caption` command.

1 Usage **2**
1.1 Package options . . . 2
1.2 User commands . . . 2
1.3 Limitations . . . 3

2 Implementation **3**

3 Installation **5**
3.1 Download . . . 5
3.2 Bundle installation . . . 6
3.3 Package installation . . . 6
3.4 Refresh file name databases . . . 6
3.5 Some details for the interested . . . 6

4 Catalogue **7**

5 History **7**
[1999/02/13 v1.0] . . . 7
[2000/08/14 v1.1] . . . 7
[2000/09/07 v1.2] . . . 7
[2001/08/27 v1.3] . . . 7
[2001/09/06 v1.4] . . . 8
[2006/02/20 v1.5] . . . 8
[2007/02/19 v1.6] . . . 8
[2007/04/09 v1.7] . . . 8
[2008/04/14 v1.8] . . . 8
[2008/08/11 v1.9] . . . 8
[2008/09/08 v1.10] . . . 8
[2011/02/16 v1.11] . . . 8
[2016/05/16 v1.12] . . . 8

6 Index **8**

The hypdestopt package

Abstract

Package hypdestopt supports hyperref's pdftex driver. It removes unnecessary destinations and shortens the destination names or uses numbered destinations to get smaller PDF files.

1 User interface **2**
1.1 Introduction . . . 2
1.2 Requirements . . . 2
1.3 Use . . . 2
1.4 Limitations . . . 3
1.5 Future . . . 3

2 Implementation **3**
2.1 Identification . . . 3
2.2 Options . . . 3
2.2.1 Option verbose . . . 3
2.2.2 Options num and name . . . 4
2.3 Check requirements . . . 4
2.4 Preamble for auxiliary file . . . 4
2.5 Generation of destination names . . . 5
2.6 Assign destination names . . . 6
2.7 Redefinition of hyperref's hooks . . . 7
2.7.1 Destination setting . . . 7
2.7.2 Links . . . 8
2.7.3 Outlines of package hyperref . . . 8
2.7.4 Outlines of package bookmark . . . 9

3 Installation **9**
3.1 Download . . . 9
3.2 Bundle installation . . . 9
3.3 Package installation . . . 10
3.4 Refresh file name databases . . . 10
3.5 Some details for the interested . . . 10

4 Catalogue **11**

5 References **11**

6 History **11**
[2006/06/01 v1.0] . . . 11
[2006/06/01 v2.0] . . . 11
[2007/11/11 v2.1] . . . 11
[2008/08/08 v2.2] . . . 12
[2011/05/13 v2.3] . . . 12
[2016/05/16 v2.4] . . . 12
[2016/05/21 v2.5] . . . 12

7 Index **12**

The hypdoc package

Abstract

This package adds hyper features to the package doc that is used in the documentation system of LaTeX 2_ε. Bookmarks are added and references are linked as far as possible.

1 Features **2**

2 Usage **3**
2.1 Options . . . 3
2.2 Simple example . . . 3
2.3 Example source2e.tex . . . 4

3 Implementation **4**
3.1 Options . . . 4
3.2 Package loading . . . 4
3.2.1 Patch for bug latex/4096 . . . 5
3.3 Bookmarks . . . 5
3.4 \tableofcontents . . . 6
3.5 \listoffigures . . . 6
3.6 \listoftables . . . 7
3.7 \thebibliography . . . 7
3.8 \theindex . . . 7
3.9 \theglossary . . . 8
3.10 Index . . . 9
3.11 \PrintDescribeMacro . . . 11
3.12 \PrintMacroName . . . 11
3.13 \theCodelineNo . . . 12
3.14 \SpecialUsageIndex . . . 12
3.15 \autoindex . . . 12
3.16 \SpecialEnvIndex . . . 13
3.17 \SortIndex . . . 13
3.18 \@wrglossary . . . 13
3.19 \MacroIndent . . . 13

4 Installation **14**
4.1 Download . . . 14
4.2 Bundle installation . . . 14
4.3 Package installation . . . 14
4.4 Refresh file name databases . . . 15
4.5 Some details for the interested . . . 15

5 Catalogue **15**

6 History **16**
[2002/05/10 v1.0] . . . 16
[2006/02/20 v1.1] . . . 16
[2006/04/27 v1.2] . . . 16
[2006/06/01 v1.3] . . . 16
[2006/06/02 v1.4] . . . 16
[2007/04/11 v1.5] . . . 16
[2007/11/12 v1.6] . . . 16
[2009/12/10 v1.7] . . . 16
[2010/02/03 v1.8] . . . 17
[2010/03/26 v1.9] . . . 17
[2011/05/05 v1.10] . . . 17
[2011/08/19 v1.11] . . . 17
[2016/05/16 v1.12] . . . 17
[2016/10/02 v1.13] . . . 17

7 Index **17**

The hypgotoe package

Abstract

Experimental package for links to embedded files.

1 Documentation **1**
1.1 Introduction . . . 1
1.2 User interface . . . 2
1.3 Example . . . 2

2 Implementation **3**
2.1 Identification . . . 3
2.2 Load packages . . . 3
2.3 Color support . . . 3
2.4 Extend `\href` . . . 4
2.5 Implement gotoe action . . . 4
2.6 Keys for gotoe action . . . 5

3 Installation **6**
3.1 Download . . . 6
3.2 Bundle installation . . . 6
3.3 Package installation . . . 6
3.4 Refresh file name databases . . . 6
3.5 Some details for the interested . . . 7

4 Catalogue **7**

5 References **8**

6 History **8**
[2007/10/30 v0.1] . . . 8
[2016/05/16 v0.2] . . . 8

7 Index **8**

The hyphsubst package

Abstract

A TEX format file may include alternative hyphenation patterns for a language with a different name. If the naming convention follows babel's rules, then the hyphenation patterns for a language can be replaced by the alternative hyphenation patterns, provided in the format file.

1 Documentation **2**
1.1 In short . . . 2
1.2 Longer version . . . 2
1.3 LATEX . . . 3
1.4 plain TEX . . . 3

2 Implementation **3**
2.1 Reload check and package identification . . . 3
2.2 Package . . . 5

3 Test **6**
3.1 Catcode checks for loading . . . 6
3.2 Main tests . . . 8

4 Installation **9**
4.1 Download . . . 9
4.2 Bundle installation . . . 9
4.3 Package installation . . . 9
4.4 Refresh file name databases . . . 10
4.5 Some details for the interested . . . 10

5 Catalogue **10**

6 History **11**
[2008/06/07 v0.1] . . . 11
[2008/06/09 v0.2] . . . 11
[2016/05/16 v0.3] . . . 11

7 Index **11**

The ifdraft package

Abstract

The package provides an interface for selecting code depending on the options draft and final.

1 Usage **1**
1.1 Package loading 1
1.2 User macros 2

2 Implementation **2**

3 Installation **3**
3.1 Download 3
3.2 Bundle installation 3
3.3 Package installation 4
3.4 Refresh file name databases 4
3.5 Some details for the interested 4

4 Catalogue **4**

5 History **5**
[1999/12/28 v1.0] 5
[2005/10/05 v1.1] 5
[2006/02/20 v1.2] 5
[2008/08/11 v1.3] 5
[2016/05/16 v1.4] 6

6 Index **6**

The iflang package

Abstract

This package provides expandible checks for the current language based on macro `\languagename` or hyphenation patterns.

1 Documentation **2**

2 Implementation **3**
2.1 Reload check and package identification . . . 3
2.2 Tools . . . 4
2.2.1 Provide some basic macros of LaTeX . . . 4
2.2.2 Expandible existence check for macros . . . 5
2.2.3 Macros for messages . . . 5
2.2.4 Support for `etex.src` . . . 5
2.3 `\IfLanguagePatterns` . . . 6
2.4 `\IfLanguageName` . . . 6
2.5 Check plausibility of `\languagename` . . . 8

3 Test **8**
3.1 Catcode checks for loading . . . 8
3.2 Test with LaTeX . . . 10
3.3 Test with plain TeX and ε-TeX . . . 11
3.4 Test with plain TeX and without ε-TeX/pdfTeX . . . 12

4 Installation **13**
4.1 Download . . . 13
4.2 Bundle installation . . . 13
4.3 Package installation . . . 13
4.4 Refresh file name databases . . . 14
4.5 Some details for the interested . . . 14

5 Catalogue **14**

6 Acknowledgement **15**

7 History **15**
[2007/04/10 v1.0] . . . 15
[2007/04/11 v1.1] . . . 15
[2007/04/12 v1.2] . . . 15
[2007/04/26 v1.3] . . . 15
[2007/09/09 v1.4] . . . 15
[2007/11/11 v1.5] . . . 15
[2016/05/16 v1.6] . . . 15
[2018/01/21 v1.7] . . . 15

8 Index **15**

The ifluatex package

Abstract

This package looks for LuaTeX regardless of its mode and provides the switch `\ifluatex`. Also it makes `\luatexversion` available if it is not present. It works with plain-TeX or LaTeX.

1 Documentation **2**

2 Implementation **2**
2.1 Reload check and package identification . . . 2
2.2 Catcodes . . . 3
2.3 Macro for error messages . . . 4
2.4 Check for previously defined `\ifluatex` . . . 4
2.5 `\ifluatex` . . . 4
2.6 LuaTeX v0.39 . . . 5
2.7 Protocol entry . . . 6

3 Test **6**
3.1 Catcode checks for loading . . . 6

4 Reload check for plain **8**

5 Installation **8**
5.1 Download . . . 8
5.2 Bundle installation . . . 8
5.3 Package installation . . . 9
5.4 Refresh file name databases . . . 9
5.5 Some details for the interested . . . 9

6 Catalogue **10**

7 History **10**
[2007/12/12 v1.0] . . . 10
[2009/04/10 v1.1] . . . 10
[2009/04/17 v1.2] . . . 10
[2010/03/01 v1.3] . . . 10
[2016/05/16 v1.4] . . . 10

8 Index **11**

The ifpdf package

Abstract

This package looks for pdfTeX in pdf mode and implements and sets the switch `\ifpdf`. The detection is based on `\pdfoutput` and the package will not change this value. It works with plain or LaTeX formats.

1 Introduction 2

2 Implementation 2

The ifvtex package

Abstract

This package looks for VTEX, implements and sets the switches `\ifvtex`, `\ifvtex⟨mode⟩`, `\ifvtexgex`. It works with plain or LATEX formats.

1 Usage **2**

2 Implemenation **2**
2.1 Reload check and package identification . . . 2
2.2 Catcodes . . . 3
2.3 Check for previously defined `\ifvtex` . . . 4
2.4 Provide `\newif` . . . 5
2.5 `\ifvtex` . . . 5
2.6 Mode and GeX switches . . . 5
2.7 Protocol entry . . . 6

3 Test **6**
3.1 Catcode checks for loading . . . 6

4 Installation **8**
4.1 Download . . . 8
4.2 Bundle installation . . . 8
4.3 Package installation . . . 9
4.4 Refresh file name databases . . . 9
4.5 Some details for the interested . . . 9

5 Catalogue **9**

6 History **10**
[2001/09/26 v1.0] . . . 10
[2006/02/20 v1.1] . . . 10
[2007/01/10 v1.2] . . . 10
[2007/09/09 v1.3] . . . 10
[2008/11/04 v1.4] . . . 10
[2010/03/01 v1.5] . . . 10
[2016/05/16 v1.6] . . . 10

7 Index **11**

The infwarerr package

Abstract

This package provides a complete set of macros for informations, warnings and error messages with support for plain-TeX.

1 Documentation **2**

2 Implementation **2**
2.1 Reload check and package identification . . . 2
2.2 Catcodes . . . 3
2.3 LaTeX detection . . . 4
2.4 Version for LaTeX . . . 4
2.5 Version for plain TeX . . . 5

3 Test **8**
3.1 Catcode checks for loading . . . 8
3.2 Macro tests . . . 9

4 Installation **13**
4.1 Download . . . 13
4.2 Bundle installation . . . 13
4.3 Package installation . . . 13
4.4 Refresh file name databases . . . 14
4.5 Some details for the interested . . . 14

5 Catalogue **14**

6 History **15**
[2007/04/26 v1.0] . . . 15
[2007/06/14 v1.1] . . . 15
[2007/09/09 v1.2] . . . 15
[2010/04/08 v1.3] . . . 15
[2016/05/16 v1.4] . . . 15

7 Index **15**

The inputenx package

Abstract

This package provides input encodings using standard mappings and covers nearly all slots. Thus it serves as more uptodate replacement for package inputenc.

1 Documentation **3**
1.1 Definition files . . . 3
1.2 Unicode . . . 4
1.3 Verbatim . . . 4
1.4 Math . . . 5
1.5 Setting the input encoding . . . 5
1.5.1 Encoding as package option . . . 5
1.5.2 `\InputEncoding` . . . 5
1.5.3 Hooks . . . 5

2 Implementation **6**
2.1 Identification . . . 6
2.2 Encoding names . . . 6
2.2.1 Record current encoding names . . . 6
2.2.2 Catcode settings for file reading . . . 6
2.2.3 Aliases for encoding names . . . 7
2.3 Package options . . . 8
2.3.1 Declare and process options . . . 8
2.3.2 Load inputenc with encoding options . . . 8
2.3.3 `\InputEncoding` . . . 8
2.3.4 Option math . . . 9
2.4 Alias encoding file . . . 9
2.5 Encoding files . . . 10
2.5.1 Encoding ascii . . . 10
2.5.2 Encoding verbatim . . . 11
2.5.3 Encoding atarist . . . 11
2.5.4 Encoding iso-8859-1 . . . 15
2.5.5 Encoding iso-8859-2 . . . 18
2.5.6 Encoding iso-8859-3 . . . 20
2.5.7 Encoding iso-8859-4 . . . 22
2.5.8 Encoding iso-8859-5 . . . 24
2.5.9 Encoding iso-8859-8 . . . 26
2.5.10 Encoding iso-8859-9 . . . 28
2.5.11 Encoding iso-8859-10 . . . 31
2.5.12 Encoding iso-8859-13 . . . 33
2.5.13 Encoding iso-8859-14 . . . 35
2.5.14 Encoding iso-8859-15 . . . 37
2.5.15 Encoding iso-8859-16 . . . 39
2.5.16 Encoding cp437 . . . 41
2.5.17 Encoding cp850 . . . 45

2.5.18 Encoding cp852 . . . 49
2.5.19 Encoding cp855 . . . 51
2.5.20 Encoding cp858 . . . 54
2.5.21 Encoding cp865 . . . 57
2.5.22 Encoding cp866 . . . 61
2.5.23 Encoding cp1250 . . . 64
2.5.24 Encoding cp1251 . . . 67
2.5.25 Encoding cp1252 . . . 69
2.5.26 Encoding cp1255 . . . 73
2.5.27 Encoding cp1257 . . . 75
2.5.28 Encoding dec-mcs . . . 78
2.5.29 Encoding koi8-r . . . 80
2.5.30 Encoding mac-centeuro . . . 82
2.5.31 Encoding mac-cyrillic . . . 85
2.5.32 Encoding mac-roman . . . 88
2.5.33 Encoding nextstep . . . 92
2.5.34 Non-Unicode additions . . . 95
2.6 Additions for `utf8enc.dfu` . . . 95
2.7 Name list . . . 99
2.8 Mapping Slot, UC to Encodings . . . 99
2.9 Mapping UC to LICR . . . 100
2.10 Math meaning declarations . . . 100
2.11 Documentation files . . . 101
2.11.1 List of known LICR commands . . . 101
2.11.2 Commented additions for `utf8enc.dfu` . . . 103

3 Installation **103**
3.1 Download . . . 103
3.2 Bundle installation . . . 103
3.3 Package installation . . . 104
3.4 Refresh file name databases . . . 105
3.5 Some details for the interested . . . 105

4 Catalogue **105**

5 References **106**
5.1 Mappings to Unicode . . . 106

6 History **107**
[2006/03/05 v1.0] . . . 107
[2007/04/11 v1.1] . . . 107
[2007/06/16 v1.2] . . . 107
[2007/08/16 v1.3] . . . 107
[2009/08/13 v1.4] . . . 107
[2009/12/15 v1.5] . . . 107
[2010/01/11 v1.6] . . . 107
[2011/02/08 v1.7] . . . 107

[2011/04/10 v1.8] 108
[2011/04/26 v1.9] 108
[2011/05/27 v1.10] 108
[2016/05/16 v1.11] 108

7 Index **108**

The intcalc package

Abstract

This package provides expandable arithmetic operations with integers.

1 Documentation **2**
1.1 Introduction . . . 2
1.2 Conditions . . . 2
1.2.1 Preconditions . . . 2
1.2.2 Postconditions . . . 3
1.3 Error handling . . . 3
1.4 Operations . . . 3
1.4.1 Num . . . 3
1.4.2 Inv, Abs, Sgn . . . 4
1.4.3 Min, Max, Cmp . . . 4
1.4.4 Inc, Dec, Add, Sub . . . 5
1.4.5 Shl, Shr . . . 5
1.4.6 Mul, Sqr, Fac, Pow . . . 5
1.4.7 Div, Mod . . . 6
1.5 Interface for programmer . . . 6

2 Implementation **7**
2.1 Reload check and package identification . . . 7
2.2 Catcodes . . . 8
2.3 Macros independent of ε-TEX . . . 9
2.3.1 Abs, Sgn . . . 9
2.3.2 Min, Max, Cmp . . . 10
2.3.3 Fac . . . 10
2.4 Implementation based on ε-TEX . . . 11
2.4.1 Num . . . 11
2.4.2 Inv, Abs, Sgn . . . 11
2.4.3 Min, Max, Cmp . . . 11
2.4.4 Inc, Dec . . . 12
2.4.5 Add, Sub . . . 12
2.4.6 Shl, Shr . . . 12
2.4.7 Mul, Sqr, Fac . . . 13
2.4.8 Pow . . . 13
2.4.9 Div, Mod . . . 14
2.5 Implementation without ε-TEX . . . 17
2.5.1 Num . . . 17
2.5.2 Inv, Abs, Sgn . . . 17
2.5.3 Min, Max, Cmp . . . 18
2.5.4 Inc, Dec . . . 18
2.5.5 Add, Sub . . . 20
2.5.6 Shl, Shr . . . 27
2.5.7 \InCa@Tim . . . 29
2.5.8 Mul . . . 32

2.5.9 Sqr, Fac . . . 34
2.5.10 Pow . . . 34
2.5.11 Div . . . 36
2.5.12 Mod . . . 39
2.5.13 Help macros . . . 41

3 Test **41**
3.1 Catcode checks for loading . . . 41
3.2 Macro tests . . . 43
3.2.1 Preamble with test macro definitions . . . 43
3.2.2 Time . . . 46
3.2.3 Test 4: additional mod/div operations . . . 47
3.2.4 Test sets . . . 48

4 Installation **56**
4.1 Download . . . 56
4.2 Bundle installation . . . 57
4.3 Package installation . . . 57
4.4 Refresh file name databases . . . 57
4.5 Some details for the interested . . . 57

5 Catalogue **58**

6 History **58**
[2007/09/09 v1.0] . . . 58
[2007/09/27 v1.1] . . . 58
[2016/05/16 v1.2] . . . 59

7 Index **59**

The kvdefinekeys package

Abstract

Package kvdefinekeys provides `\kv@define@key` to define keys the same way as keyval's `\define@key`. However, it works also using ini-TEX.

1 Documentation **2**
1.1 Motivation 2

2 Implementation **2**
2.1 Identification 2
2.2 Package loading 4
2.3 Provide key defining macro 4

3 Test **5**
3.1 Catcode checks for loading 5

4 Installation **6**
4.1 Download 6
4.2 Bundle installation 7
4.3 Package installation 7
4.4 Refresh file name databases 7
4.5 Some details for the interested 7

5 Catalogue **8**

6 References **8**

7 History **8**
[2010/03/01 v1.0] 8
[2010/08/19 v1.1] 8
[2011/01/30 v1.2] 9
[2011/04/07 v1.3] 9
[2016/05/16 v1.4] 9

8 Index **9**

The kvoptions package

Abstract

This package is intended for package authors who want to use options in key value format for their package options.

1 Introduction **3**
1.1 The beginning . . . 3
1.2 Overview . . . 3

2 Usage **3**
2.1 Process options . . . 3
2.1.1 \ProcessKeyvalOptions . . . 3
2.1.2 \ProcessLocalKeyvalOptions . . . 4
2.1.3 \SetupKeyvalOptions . . . 4
2.2 Option declarations . . . 5
2.2.1 \DeclareStringOption . . . 5
2.2.2 \DeclareBoolOption . . . 5
2.2.3 \DeclareComplementaryOption . . . 6
2.2.4 \DeclareVoidOption . . . 6
2.2.5 \DeclareDefaultOption . . . 6
2.2.6 Local options . . . 7
2.2.7 Dynamic options . . . 7
2.2.8 \DisableKeyvalOption . . . 7
2.2.9 \AddToKeyvalOption . . . 8
2.3 Global vs. local options . . . 8
2.4 Summary of internal macros . . . 9
2.5 plain TEX . . . 9

3 Example **9**

4 Package options **11**
4.1 Package kvoptions-patch . . . 11
4.2 Option debugshow . . . 12

5 Limitations **13**
5.1 Compatibility . . . 13
5.1.1 Package kvoptions-patch vs. package xkvltxp . . . 13
5.2 Limitations . . . 13
5.2.1 Option comparisons . . . 13
5.2.2 Option list parsing with package kvoptions-patch . . . 13

6 Implementation **14**
6.1 Preamble . . . 14
6.2 Option declaration macros . . . 16
6.2.1 \SetupKeyvalOptions . . . 16
6.2.2 \DeclareBoolOption . . . 17

6.2.3 \DeclareStringOption . . . 20
6.2.4 \DeclareVoidOption . . . 20
6.2.5 \DeclareDefaultOption . . . 21
6.2.6 \DeclareLocalOptions . . . 22
6.3 Dynamic options . . . 22
6.3.1 \DisableKeyvalOption . . . 22
6.4 Change option code . . . 24
6.4.1 \AddToKeyvalOption . . . 24
6.5 Process options . . . 25
6.5.1 Get global options . . . 25
6.5.2 \ProcessKeyvalOptions . . . 25
6.5.3 \ProcessLocalKeyvalOptions . . . 28
6.5.4 Helper macros . . . 29
6.6 plain TEX . . . 29
6.7 Package kvoptions-patch . . . 30

7 Test **37**
7.1 Preface for standard catcode check . . . 37
7.2 Catcode checks for loading . . . 38

8 Installation **41**
8.1 Download . . . 41
8.2 Bundle installation . . . 41
8.3 Package installation . . . 42
8.4 Refresh file name databases . . . 42
8.5 Some details for the interested . . . 42

9 Catalogue **43**

10 References **43**

11 History **44**
[0000/00/00 v0.0] . . . 44
[2004/02/22 v1.0] . . . 44
[2006/02/16 v2.0] . . . 44
[2006/02/20 v2.1] . . . 44
[2006/06/01 v2.2] . . . 44
[2006/08/17 v2.3] . . . 44
[2006/08/22 v2.4] . . . 44
[2007/04/11 v2.5] . . . 45
[2007/05/06 v2.6] . . . 45
[2007/06/11 v2.7] . . . 45
[2007/10/02 v2.8] . . . 45
[2007/10/11 v2.9] . . . 45
[2007/10/18 v3.0] . . . 45
[2009/04/10 v3.1] . . . 45
[2009/07/17 v3.2] . . . 45

[2009/07/21 v3.3] 45
[2009/08/13 v3.4] 45
[2009/12/04 v3.5] 45
[2009/12/08 v3.6] 45
[2010/02/22 v3.7] 45
[2010/07/23 v3.8] 46
[2010/12/02 v3.9] 46
[2010/12/23 v3.10] 46
[2011/06/30 v3.11] 46
[2016/05/16 v3.12] 46

12 Index **46**

The kvsetkeys package

Abstract

Package kvsetkeys provides \kvsetkeys, a variant of package keyval's \setkeys. It allows to specify a handler that deals with unknown options. Active commas and equal signs may be used (e.g. see babel's shorthands) and only one level of curly braces is removed from the values.

1 Documentation **2**
1.1 Motivation . . . 2
1.2 Normalizing key value lists . . . 3
1.3 Parsing key value lists . . . 3
1.4 Processing key value pairs . . . 4
1.4.1 Processing similar to keyval . . . 4
1.4.2 Processing similar to \setkeys* of package xkeyval . . . 4
1.5 Default family handler . . . 5
1.6 Put it all together . . . 5
1.7 Comma separated lists . . . 6

2 Example **6**

3 Implementation **7**
3.1 Identification . . . 7
3.2 Package loading . . . 9
3.3 Check for ε-TEX . . . 10
3.4 Generic help macros . . . 10
3.5 Normalizing . . . 10
3.6 Parsing key value lists . . . 13
3.7 Parsing comma lists . . . 14
3.8 Processing key value pairs . . . 14
3.9 Error handling . . . 17
3.10 Do it all . . . 17

4 Test **18**
4.1 Catcode checks for loading . . . 18
4.2 Macro tests . . . 20
4.2.1 Preamble . . . 20
4.2.2 Time . . . 20
4.2.3 Test sets . . . 21
4.3 Tests for key value processing handler . . . 24

5 Installation **25**
5.1 Download . . . 25
5.2 Bundle installation . . . 25
5.3 Package installation . . . 25
5.4 Refresh file name databases . . . 26
5.5 Some details for the interested . . . 26

6 Catalogue **26**

7 References **27**

8 History **27**
[2006/03/06 v1.0] . . . 27
[2006/10/19 v1.1] . . . 27
[2007/09/09 v1.2] . . . 27
[2007/09/29 v1.3] . . . 27
[2009/07/19 v1.4] . . . 28
[2009/07/30 v1.5] . . . 28
[2009/12/12 v1.6] . . . 28
[2009/12/22 v1.7] . . . 28
[2010/01/28 v1.8] . . . 28
[2010/03/01 v1.9] . . . 28
[2011/01/30 v1.10] . . . 28
[2011/03/03 v1.11] . . . 28
[2011/04/05 v1.12] . . . 28
[2011/04/07 v1.13] . . . 28
[2011/06/15 v1.14] . . . 28
[2011/10/18 v1.15] . . . 28
[2012/04/25 v1.16] . . . 29
[2016/05/16 v1.17] . . . 29

9 Index **29**

The letltxmacro package

Abstract

TEX's \let assignment does not work for LATEX macros with optional arguments or for macros that are defined as robust macros by \DeclareRobustCommand. This package defines \LetLtxMacro that also takes care of the involved internal macros.

1 Documentation **2**
1.1 Supported macro definition commands . . . 2

2 Implementation **2**
2.1 Show cases . . . 2
2.1.1 letltxmacro-showcases.tex . . . 2
2.1.2 Result . . . 4
2.2 Package . . . 4
2.2.1 Catcodes and identification . . . 4
2.2.2 Main macros . . . 5

3 Test **8**
3.1 Catcode checks for loading . . . 8
3.2 Package tests . . . 8

4 Installation **12**
4.1 Download . . . 12
4.2 Bundle installation . . . 13
4.3 Package installation . . . 13
4.4 Refresh file name databases . . . 13
4.5 Some details for the interested . . . 13

5 Catalogue **14**

6 History **14**
[2008/06/09 v1.0] . . . 14
[2008/06/12 v1.1] . . . 14
[2008/06/13 v1.2] . . . 15
[2008/06/24 v1.3] . . . 15
[2010/09/02 v1.4] . . . 15
[2016/05/16 v1.5] . . . 15

7 Index **15**

The listingsutf8 package

Abstract

Package listings does not support files with multi-byte encodings such as UTF-8. In case of `\lstinputlisting` a simple workaround is possible if an one-byte encoding exists that the file can be converted to. Also ε-TEX and pdfTEX regardless of its mode are required.

1 Documentation **2**
1.1 User interface . . . 2
1.2 Future . . . 2

2 Implementation **2**
2.1 Catcodes and identification . . . 2
2.2 Package options . . . 3
2.3 Check prerequisites . . . 3
2.4 Add support for UTF-8 . . . 4
2.4.1 Conversion . . . 4
2.4.2 Convert CR/LF pairs to LF . . . 4
2.4.3 Patch `\lst@InputListing` . . . 5

3 Test **5**
3.1 Catcode checks for loading . . . 5
3.2 Test example for latin1 . . . 6

4 Installation **6**
4.1 Download . . . 6
4.2 Bundle installation . . . 7
4.3 Package installation . . . 7
4.4 Refresh file name databases . . . 7
4.5 Some details for the interested . . . 7

5 Catalogue **8**

6 References **8**

7 History **9**
[2007/10/22 v1.0] . . . 9
[2007/11/11 v1.1] . . . 9
[2011/11/10 v1.2] . . . 9
[2016/05/16 v1.3] . . . 9

8 Index **9**

The ltxcmds package

Abstract

The package ltxcmds exports some utility macros from the LaTeX kernel into a separate namespace and also provides them for other formats such as plain-TeX.

1 Documentation **3**
1.1 Introduction . . . 3
1.2 Numbers . . . 3
1.3 Scratch registers . . . 3
1.4 Argument killers . . . 3
1.5 Argument grabbers . . . 4
1.6 List helpers . . . 5
1.7 Tail recursion . . . 5
1.8 Empty macro . . . 5
1.9 Characters . . . 6
1.10 Boolean switch . . . 6
1.11 Command definitions . . . 6
1.12 Stripping . . . 6
1.13 File management . . . 7
1.13.1 File extensions . . . 7
1.13.2 Load check . . . 7
1.13.3 Version date check . . . 7
1.14 Macro additions . . . 8
1.15 Next character detection . . . 8
1.16 `\ltx@leavevmode`, `\ltx@mbox` . . . 8
1.17 Expandable test for emptiness . . . 9
1.18 Stripping spaces . . . 9
1.19 Check for emptiness of boxes . . . 9

2 Implementation **10**
2.1 Identification . . . 10
2.2 Numbers . . . 11
2.3 Scratch registers . . . 12
2.4 Argument killers . . . 14
2.5 Argument grabbers . . . 14
2.6 List helpers . . . 15
2.7 Tail recursion . . . 16
2.8 Empty macro . . . 16
2.9 Characters . . . 17
2.10 Boolean switch . . . 17
2.11 Command definitions . . . 18
2.12 Stripping . . . 19
2.13 File management . . . 19
2.13.1 File extensions . . . 19
2.13.2 Load check . . . 20

2.13.3 Version date check . . . 20
2.14 Macro additions . . . 21
2.15 Next character detection . . . 22
2.16 \ltx@leavevmode, \ltx@mbox . . . 23
2.17 Help macros . . . 24
2.18 Expandable test for emptiness . . . 24
2.18.1 Vanilla TEX . . . 24
2.18.2 With \detokenize . . . 25
2.18.3 \ltx@ifblank . . . 25
2.19 \ltx@zapspace . . . 26
2.20 \ltx@IfBoxEmpty . . . 26

3 Test **27**
3.1 Catcode checks for loading . . . 27
3.2 Test \ltx@GobbleNum . . . 29
3.3 Test \ltx@ifempty . . . 32
3.4 Test \ltx@zap@space . . . 33
3.5 Test \ltx@IfBoxEmpty . . . 34
3.6 Test for next character detection . . . 36
3.7 Test for list helpers . . . 39

4 Installation **40**
4.1 Download . . . 40
4.2 Bundle installation . . . 40
4.3 Package installation . . . 41
4.4 Refresh file name databases . . . 41
4.5 Some details for the interested . . . 41

5 Catalogue **42**

6 References **42**

7 History **43**
[2009/08/05 v1.0] . . . 43
[2009/12/12 v1.1] . . . 43
[2010/01/28 v1.2] . . . 43
[2010/03/01 v1.3] . . . 43
[2010/03/09 v1.4] . . . 43
[2010/04/08 v1.5] . . . 43
[2010/04/16 v1.6] . . . 43
[2010/04/26 v1.7] . . . 44
[2010/09/11 v1.8] . . . 44
[2010/10/25 v1.9] . . . 44
[2010/10/31 v1.10] . . . 44
[2010/11/12 v1.11] . . . 44
[2010/12/02 v1.12] . . . 44
[2010/12/04 v1.13] . . . 44

[2010/12/07 v1.14] 44
[2010/12/12 v1.15] 44
[2011/02/04 v1.16] 44
[2011/02/05 v1.17] 44
[2011/03/16 v1.18] 44
[2011/04/14 v1.19] 45
[2011/04/18 v1.20] 45
[2011/08/22 v1.21] 45
[2011/11/09 v1.22] 45
[2016/05/16 v1.23] 45

8 Index **45**

The luacolor package

Abstract

Package luacolor implements color support based on LuaTeX's node attributes.

1 Documentation **2**
1.1 Introduction . . . 2
1.2 Usage . . . 2
1.3 Limitations . . . 2

2 Implementation **3**
2.1 Catcodes and identification . . . 3
2.2 Check for LuaTeX . . . 4
2.3 Check for disabled colors . . . 4
2.4 Load module and check version . . . 4
2.5 Find driver . . . 5
2.6 Attribute setting . . . 5
2.7 Whatsit insertion . . . 6
2.8 `\pdfxform` support . . . 6
2.9 Lua module . . . 7
2.9.1 Driver detection . . . 7
2.9.2 Color strings . . . 8
2.9.3 Attribute register . . . 8
2.9.4 Whatsit insertion . . . 8

3 Test **10**
3.1 Catcode checks for loading . . . 10
3.2 Driver detection . . . 12

4 Installation **12**
4.1 Download . . . 12
4.2 Bundle installation . . . 13
4.3 Package installation . . . 13
4.4 Refresh file name databases . . . 13
4.5 Some details for the interested . . . 14

5 Catalogue **14**

6 History **15**
[2007/12/12 v1.0] . . . 15
[2009/04/10 v1.1] . . . 15
[2010/03/09 v1.2] . . . 15
[2010/12/13 v1.3] . . . 15
[2011/03/29 v1.4] . . . 15
[2011/04/22 v1.5] . . . 15
[2011/04/23 v1.6] . . . 15

[2011/10/22 v1.7] 15
[2011/11/01 v1.8] 16
[2016/05/13 v1.9] 16
[2016/05/16 v1.10] 16

7 Index **16**

The luatex package

Abstract

This package manages the new and extended features and resources that LuaTeX provides. Examples are attributes and catcode tables.

1 Documentation **2**
1.1 Introduction . . . 2
1.1.1 LaTeX . . . 2
1.1.2 plain TeX . . . 2
1.2 Register allocation . . . 3
1.2.1 Register with 16 bit . . . 3
1.2.2 Insertions . . . 3
1.3 Attributes . . . 3
1.4 Catcode tables . . . 4
1.4.1 Interface proposal . . . 4
1.5 Lua module loading . . . 5
1.5.1 Package luatex-loader . . . 6

2 Implementation **6**
2.1 Reload check and package identification . . . 6
2.2 Catcodes . . . 7
2.3 Check for LuaTeX . . . 8
2.4 Provide LuaTeX primitives . . . 8
2.5 Inherit support for ε-TeX . . . 9
2.6 Adaption of ε-TeX's register allocation . . . 10
2.7 plain TeX compatibility . . . 10
2.8 Attributes . . . 12
2.8.1 Allocation . . . 12
2.8.2 Interface . . . 12
2.9 Catcode tables . . . 13
2.9.1 Allocation . . . 13
2.9.2 `\SetCatcodeRange` . . . 14
2.9.3 Predefined catcode tables . . . 14
2.9.4 Number stack . . . 15
2.9.5 Catcode regime macros . . . 15
2.10 Lua module loader . . . 15
2.11 Lua script . . . 17

3 Test **18**
3.1 Catcode checks for loading . . . 18
3.2 Catcode tables . . . 20
3.2.1 Predefined catcode tables . . . 20
3.2.2 Catcode table number stack . . . 21
3.2.3 Catcode table stack . . . 21
3.2.4 Catcode regime macros . . . 22
3.3 Attribute allocation . . . 22
3.4 Short test for plain TeX . . . 22

4 Installation **23**
4.1 Download . . . 23
4.2 Bundle installation . . . 23
4.3 Package installation . . . 23
4.4 Refresh file name databases . . . 24
4.5 Some details for the interested . . . 24

5 Catalogue **24**

6 History **25**
[2007/12/12 v0.1] . . . 25
[2009/04/10 v0.2] . . . 25
[2009/12/02 v0.3] . . . 25
[2010/03/09 v0.4] . . . 25
[2016/05/10 v0.5] . . . 25
[2016/05/16 v0.6] . . . 25

7 Index **25**

The magicnum package

Abstract

This packages allows to access magic numbers by a hierarchical name system.

1 Documentation **2**
1.1 Introduction . . . 2
1.2 User interface . . . 2
1.2.1 \magicnum . . . 2
1.2.2 Properties . . . 3
1.3 Data . . . 3
1.3.1 Category tex.catcode . . . 3
1.3.2 Category etex.grouptype . . . 3
1.3.3 Category etex.iftype . . . 4
1.3.4 Category etex.nodetype . . . 4
1.3.5 Category etex.interactionmode . . . 4
1.3.6 Category luatex.pdfliteral.mode . . . 4

2 Implementation **4**
2.1 Reload check and package identification . . . 5
2.2 Catcodes . . . 6
2.3 Check for previous definition . . . 7
2.4 Without LuaTeX . . . 7
2.5 With LuaTeX . . . 7
2.6 Data . . . 8
2.6.1 Plain data . . . 8
2.6.2 Data for TeX . . . 10
2.6.3 Lua module . . . 12

3 Test **15**
3.1 Catcode checks for loading . . . 15
3.2 Test data . . . 17
3.3 Small test for iniTeX . . . 18

4 Installation **18**
4.1 Download . . . 18
4.2 Bundle installation . . . 18
4.3 Package installation . . . 18
4.4 Refresh file name databases . . . 19
4.5 Some details for the interested . . . 19

5 Catalogue **19**

6 History **20**
[2007/12/12 v1.0] 20
[2009/04/10 v1.1] 20
[2010/03/09 v1.2] 20
[2011/03/24 v1.3] 20
[2011/04/10 v1.4] 20
[2016/05/16 v1.5] 20

7 Index **20**

The makerobust package

Abstract

Package makerobust provides \MakeRobustCommand that converts an existing macro to a robust one.

1 User interface **1**
1.1 Example 2

2 Implementation **2**

3 Installation **3**
3.1 Download 3
3.2 Bundle installation 3
3.3 Package installation 3
3.4 Refresh file name databases 4
3.5 Some details for the interested 4

4 Catalogue **4**

5 History **5**
[2006/03/18 v1.0] 5
[2016/05/16 v1.1] 5

6 Index **5**

The mleftright package

Abstract

TEX sets subformulas by `\left` and `\right` as inner formulas with additional surrounding spaces in some situations. This package provides `\mleft` and `\mright` that call `\left` and `\right`, but the delimiters will act as normal `\mathopen` and `\mathclose` delimiters without the additional space of an inner formula.

1 Documentation **1**
1.1 Use 2

2 Implementation **2**

3 Test **7**
3.1 Catcode checks for loading 7

4 Installation **8**
4.1 Download 8
4.2 Bundle installation 9
4.3 Package installation 9
4.4 Refresh file name databases 9
4.5 Some details for the interested 9

5 Catalogue **10**

6 Acknowledgement **10**

7 References **10**

8 History **11**
[2010/09/25 v1.0] 11
[2016/05/16 v1.1] 11

9 Index **11**

The pagegrid package

Abstract

The LaTeX package prints a page grid in the background.

1 Documentation **2**
1.1 Options . . . 2
1.1.1 Options enable, disable . . . 2
1.1.2 Grid origins . . . 2
1.1.3 Grid unit . . . 2
1.1.4 Color options . . . 3
1.1.5 Arrow options . . . 3
1.1.6 Miscellaneous options . . . 3

2 Implementation **3**

3 Test **10**
3.1 Catcode checks for loading . . . 10

4 Installation **11**
4.1 Download . . . 11
4.2 Bundle installation . . . 12
4.3 Package installation . . . 12
4.4 Refresh file name databases . . . 12
4.5 Some details for the interested . . . 12

5 Catalogue **13**

6 Acknowledgement **13**

7 History **13**
[2009/11/06 v1.0] . . . 13
[2009/11/06 v1.1] . . . 13
[2009/12/02 v1.2] . . . 13
[2009/12/03 v1.3] . . . 14
[2009/12/04 v1.4] . . . 14
[2016/05/16 v1.5] . . . 14

8 Index **14**

The pagesel package

Abstract

Single pages or page areas can be selected for output.

1 Usage **2**
1.1 Page selecting . . . 2
1.1.1 Options for selecting pages . . . 2
1.1.2 Examples . . . 2
1.2 Auxiliary files . . . 2
1.2.1 Options for handling auxiliary files . . . 3
1.2.2 Package `hyperref` . . . 3

2 Implementation **3**
2.1 Package . . . 3
2.2 AtBeginDvi hook support . . . 6

3 Installation **7**
3.1 Download . . . 7
3.2 Bundle installation . . . 7
3.3 Package installation . . . 8
3.4 Refresh file name databases . . . 8
3.5 Some details for the interested . . . 8

4 Catalogue **9**

5 History **9**
[1999/03/01 v0.9] . . . 9
[1999/04/05 v1.0] . . . 9
[1999/04/13 v1.1] . . . 9
[2003/06/05 v1.2] . . . 10
[2006/02/20 v1.3] . . . 10
[2006/03/02 v1.4] . . . 10
[2006/03/07 v1.5] . . . 10
[2007/04/11 v1.6] . . . 10
[2007/04/12 v1.7] . . . 10
[2008/08/11 v1.8] . . . 10
[2016/05/16 v1.9] . . . 10

6 Index **10**

The pdfcol package

Abstract

Since version 1.40 pdfTeX supports color stacks. The driver file `pdftex.def` for package color defines and uses a main color stack since version v0.04b. Package pdfcol is intended for package writers. It defines macros for setting and maintaining new color stacks.

1 Documentation **2**
1.1 Requirements . . . 2
1.2 Interface . . . 2

2 Implementation **3**
2.1 Reload check and package identification . . . 3
2.2 Catcodes . . . 4
2.3 Check requirements . . . 5
2.3.1 Check package luacolor . . . 5
2.3.2 Check PDF mode . . . 5
2.3.3 Check version of pdfTeX . . . 6
2.3.4 Check `pdftex.def` . . . 6
2.4 Enabled interface macros . . . 6
2.5 Disabled interface macros . . . 8

3 Test **9**
3.1 Catcode checks for loading . . . 9
3.2 Very simple test . . . 10
3.3 Detection of package luacolor . . . 11

4 Installation **11**
4.1 Download . . . 11
4.2 Bundle installation . . . 12
4.3 Package installation . . . 12
4.4 Refresh file name databases . . . 12
4.5 Some details for the interested . . . 12

5 Catalogue **13**

6 History **13**
[2007/09/09 v1.0] . . . 13
[2007/12/09 v1.1] . . . 13
[2007/12/12 v1.2] . . . 14
[2016/05/16 v1.3] . . . 14
[2016/05/17 v1.4] . . . 14

7 Index **14**

The pdfcolfoot package

Abstract

Since version 1.40 pdfTeX supports several color stacks. This package uses a separate color stack for footnotes that can break across pages.

1 User interface **2**
1.1 Other packages or classes 2

2 Interface for package or class writers **2**
2.1 Macro \pdfcolfoot@switch 2
2.2 Macro \pdfcolfoot@current 2

3 Implementation **3**
3.1 Identification 3
3.2 Load package pdfcol 3
3.3 Color stack for footnotes 3
3.4 Patch \@makefntext 3
3.5 Patch \@makecol 3

4 Test **6**

5 Installation **6**
5.1 Download 6
5.2 Bundle installation 6
5.3 Package installation 7
5.4 Refresh file name databases 7
5.5 Some details for the interested 7

6 Catalogue **7**

7 References **8**

8 History **8**
[2007/01/08 v1.0] 8
[2007/09/09 v1.1] 8
[2012/01/02 v1.2] 8
[2016/05/16 v1.3] 8

9 Index **8**

The pdfcolmk package

Abstract

This package tries a solution for the missing color stack of pdfTEX.

1 Documentation **2**
1.1 Introduction . . . 2
1.2 Background . . . 2
1.3 Limitations . . . 2
1.4 Recommendation . . . 2
1.5 Usage . . . 2
1.6 Compatibility . . . 2

2 Implementation **3**
2.1 `\marginpar` fix . . . 4
2.1.1 latex/base/latex.ltx . . . 4
2.1.2 memoir.cls . . . 5
2.1.3 poemscol/marn.sty, poemscol/newmarn.sty . . . 6
2.1.4 refman/refart.cls, refnam/refrep.cls . . . 7
2.2 Color fix . . . 9

3 Installation **10**
3.1 Download . . . 10
3.2 Bundle installation . . . 10
3.3 Package installation . . . 11
3.4 Refresh file name databases . . . 11
3.5 Some details for the interested . . . 11

4 Catalogue **12**

5 History **12**
[2000/08/27 v0.1] . . . 12
[2000/09/02 v0.2] . . . 12
[2000/09/02 v0.3] . . . 12
[2000/09/06 v0.4] . . . 12
[2000/09/06 v0.5] . . . 13
[2005/06/15 v0.6] . . . 13
[2005/07/09 v0.7] . . . 13
[2006/02/20 v0.8] . . . 13
[2007/01/01 v1.0] . . . 13
[2007/04/11 v1.1] . . . 13
[2008/08/11 v1.2] . . . 13
[2016/05/16 v1.3] . . . 13

6 Index **13**

The pdfcolparallel package

Abstract

This packages fixes bugs in parallel and improves color support by using several color stacks that are provided by pdfTEX since version 1.40.

1 Usage **2**
1.1 Option rulebetweencolor . . . 2
1.2 Future . . . 2

2 Implementation **2**
2.1 Identification . . . 2
2.2 Load and fix package parallel . . . 2
2.3 Color stack support . . . 7
2.4 Redefinitions . . . 7

3 Test **10**

4 Installation **12**
4.1 Download . . . 12
4.2 Bundle installation . . . 12
4.3 Package installation . . . 12
4.4 Refresh file name databases . . . 12
4.5 Some details for the interested . . . 13

5 Catalogue **13**

6 References **14**

7 History **14**
[2007/09/09 v1.0] . . . 14
[2007/12/12 v1.1] . . . 14
[2008/08/11 v1.2] . . . 14
[2010/01/11 v1.3] . . . 14
[2016/05/16 v1.4] . . . 14

8 Index **14**

The pdfcolparcolumns package

Abstract

Since version 1.40 pdfTeX supports several color stacks. This package uses them to fix color problems in package parcolumns.

1 Usage **2**
1.1 Option rulebetweencolor . . . 2
1.2 Future . . . 2

2 Implementation **2**
2.1 Identification . . . 2
2.2 Load packages . . . 2
2.2.1 Package parcolumns . . . 2
2.2.2 Package pdfcol . . . 3
2.2.3 Package infwarerr . . . 3
2.3 Color stack macros . . . 3
2.4 Patches . . . 3
2.4.1 Init stacks . . . 3
2.4.2 Switch stack . . . 3
2.4.3 Set current stack color . . . 4

3 Test **6**

4 Installation **7**
4.1 Download . . . 7
4.2 Bundle installation . . . 7
4.3 Package installation . . . 7
4.4 Refresh file name databases . . . 7
4.5 Some details for the interested . . . 8

5 Catalogue **8**

6 References **9**

7 History **9**
[2007/07/26 v1.0] . . . 9
[2007/09/09 v1.1] . . . 9
[2008/08/11 v1.2] . . . 9
[2010/01/11 v1.3] . . . 9
[2016/05/16 v1.4] . . . 9

8 Index **9**

The pdfcrypt package

Abstract

This package supports the setting of pdf encryption options for VTEX and some older versions of pdfTEX.

1 Documentation **2**
1.1 Alternatives . . . 2
1.2 Usage . . . 2
1.2.1 Special characters . . . 3
1.2.2 \nopdfcrypt . . . 3
1.2.3 Configuration file . . . 3
1.2.4 Support for plain TEX . . . 3
1.3 Hints for pdfTEX . . . 3

2 Implementation **4**
2.1 Help macros for plain TEX . . . 4
2.2 Package Identification and checks . . . 5
2.3 Driver detection . . . 5
2.4 Load package keyval . . . 6
2.5 Define options . . . 7
2.6 support of configuration file . . . 11
2.7 Package options . . . 11

3 Installation **12**
3.1 Download . . . 12
3.2 Bundle installation . . . 12
3.3 Package installation . . . 12
3.4 Refresh file name databases . . . 12
3.5 Some details for the interested . . . 13

4 Catalogue **13**

5 History **14**
[2001/04/02 v0.1] . . . 14
[2001/07/19 v0.2] . . . 14
[2001/07/19 v0.3] . . . 14
[2001/07/19 v0.4] . . . 14
[2001/08/05 v0.5] . . . 14
[2001/08/09 v0.6] . . . 14
[2001/10/28 v0.7] . . . 14
[2006/02/20 v0.8] . . . 14
[2007/04/11 v0.9] . . . 14
[2007/04/26 v1.0] . . . 15
[2016/05/16 v1.1] . . . 15

6 Index **15**

The pdfescape package

Abstract

This package implements pdfTeX's escape features (`\pdfescapehex`, `\pdfunescapehex`, `\pdfescapename`, `\pdfescapestring`) using TeX or ε-TeX.

1 Documentation **2**
1.1 Additional unescape macros . . . 2
1.2 Sanitizing macro . . . 3

2 Implementation **3**
2.1 Reload check and package identification . . . 3
2.2 Catcodes . . . 4
2.3 Load package . . . 5
2.4 Sanitizing . . . 5
2.4.1 Space characters . . . 6
2.4.2 Space normalization . . . 6
2.5 `\EdefUnescapeName` . . . 6
2.6 `\EdefUnescapeString` . . . 8
2.7 User macros (pdfTeX analogues) . . . 11
2.8 Help macros . . . 12
2.8.1 Characters . . . 12
2.8.2 Switch for ε-TeX . . . 13
2.9 Conversions . . . 13
2.9.1 Conversion to hex string . . . 13
2.9.2 Character code to octal number . . . 14
2.9.3 Unpack hex string . . . 14
2.9.4 Conversion to PDF name . . . 15
2.9.5 Conversion to PDF string . . . 16

3 Test **17**
3.1 Catcode checks for loading . . . 17
3.2 Macro tests . . . 19
3.3 Test with `\pdfescape...` commands . . . 19
3.4 Test without `\pdfescape...`, with ε-TeX . . . 19
3.5 Test without `\pdfescape...` and ε-TeX . . . 19
3.6 Test with LuaTeX . . . 19
3.7 Check/ensure test preconditions . . . 19
3.7.1 Check `\pdfescape...` . . . 19
3.7.2 Check ε-TeX . . . 19
3.7.3 Check LuaTeX . . . 20
3.8 Common part . . . 20
3.8.1 Test for iniTeX . . . 26

4 Installation **28**
4.1 Download . . . 28
4.2 Bundle installation . . . 28
4.3 Package installation . . . 29
4.4 Refresh file name databases . . . 29
4.5 Some details for the interested . . . 29

5 Catalogue **30**

6 History **30**
[2007/02/21 v1.0] . . . 30
[2007/02/25 v1.1] . . . 30
[2007/03/20 v1.2] . . . 30
[2007/04/11 v1.3] . . . 31
[2007/04/21 v1.4] . . . 31
[2007/08/27 v1.5] . . . 31
[2007/09/09 v1.6] . . . 31
[2007/10/27 v1.7] . . . 31
[2007/11/11 v1.8] . . . 31
[2010/03/01 v1.9] . . . 31
[2010/11/12 v1.10] . . . 31
[2011/01/30 v1.11] . . . 31
[2011/04/04 v1.12] . . . 31
[2011/11/25 v1.13] . . . 31
[2016/05/16 v1.14] . . . 31

7 Index **31**

The pdflscape package

Abstract

Package pdflscape adds PDF support to the environment `landscape` of package lscape by setting the PDF page attribute `/Rotate`.

1 Documentation **2**
1.1 Supported drivers . . . 2
1.2 Caveat . . . 2
1.3 Requirements . . . 2
1.4 Usage . . . 2

2 Implementation **2**
2.1 Package identification . . . 2
2.2 Driver options . . . 2
2.3 Autodetection of driver . . . 3
2.3.1 Driver pdftex . . . 3
2.3.2 Driver xetex . . . 3
2.3.3 Detect driver based on `\Gin@driver` . . . 4
2.3.4 Driver dvips . . . 4
2.4 Driver implementation . . . 4
2.4.1 pdfTeX . . . 5
2.4.2 PostScript driver . . . 5
2.4.3 Driver dvipdfm . . . 6
2.5 Driver independent stuff . . . 6

3 Test **7**
3.1 Driver detection tests . . . 7
3.2 Test for `\PLS@CheckAngle` . . . 8
3.3 Test for rotate . . . 9

4 Installation **10**
4.1 Download . . . 10
4.2 Bundle installation . . . 10
4.3 Package installation . . . 10
4.4 Refresh file name databases . . . 11
4.5 Some details for the interested . . . 11

5 Catalogue **11**

6 History **12**
[2001/01/15 v0.1] . . . 12
[2001/02/04 v0.2] . . . 12
[2004/05/11 v0.3] . . . 12
[2004/05/12 v0.4] . . . 12
[2006/02/20 v0.5] . . . 12
[2006/04/24 v0.6] . . . 12

[2007/04/11 v0.7] 13
[2007/04/17 v0.8] 13
[2007/10/21 v0.9] 13
[2008/08/11 v0.10] 13
[2016/05/14 v0.11] 13

7 Index **13**

The pdfrender package

Abstract

The PDF format has some graphics parameter like line width or text rendering mode. This package provides an interface for setting these parameters.

1 Documentation **2**
1.1 Usage . . . 2
1.2 Macros . . . 2
1.3 Parameters . . . 2
1.3.1 Details . . . 3
1.4 Color stack . . . 4

2 Implementation **4**
2.1 Look for pdfTeX, its mode and features . . . 6
2.2 Enable color support of LaTeX . . . 8
2.3 Hook into `\normalcolor` . . . 8
2.4 Declare and setup parameters . . . 13
2.5 Fill and stroke color support . . . 14

3 Test **18**
3.1 Catcode checks for loading . . . 18
3.2 Simple test file . . . 19
3.3 Further tests . . . 20
3.4 Compatibility with plain TeX . . . 22

4 Installation **22**
4.1 Download . . . 22
4.2 Bundle installation . . . 22
4.3 Package installation . . . 23
4.4 Refresh file name databases . . . 23
4.5 Some details for the interested . . . 23

5 Catalogue **24**

6 Acknowledgement **24**

7 References **24**

8 History **25**
[2010/01/26 v1.0] . . . 25
[2010/01/27 v1.1] . . . 25
[2010/01/28 v1.2] . . . 25
[2016/05/14 v1.3] . . . 25
[2016/05/17 v1.4] . . . 25

9 Index **25**

The pdftexcmds package

Abstract

LuaTeX provides most of the commands of pdfTeX 1.40. However a number of utility functions are removed. This package tries to fill the gap and implements some of the missing primitive using Lua.

1 Documentation **2**
1.1 General principles . . . 3
1.2 Macros . . . 3
1.2.1 Strings . . . 3
1.2.2 Files . . . 4
1.2.3 Timekeeping . . . 4
1.2.4 Miscellaneous . . . 5
1.2.5 Additional macro: `\pdf@isprimitive` . . . 6
1.2.6 Experimental . . . 6

2 Implementation **7**
2.1 Reload check and package identification . . . 7
2.2 Catcodes . . . 8
2.3 Load packages . . . 9
2.4 Without LuaTeX . . . 9
2.5 `\pdf@primitive`, `\pdf@ifprimitive` . . . 10
2.5.1 Using LuaTeX's `tex.enableprimitives` . . . 11
2.5.2 Trying various names to find the primitives . . . 11
2.5.3 Result . . . 12
2.6 XeTeX . . . 12
2.7 `\pdf@isprimitive` . . . 13
2.8 `\pdf@draftmode` . . . 14
2.9 Load Lua module . . . 15
2.10 Lua functions . . . 16
2.10.1 Helper macros . . . 16
2.10.2 Strings . . . 17
2.10.3 Files . . . 18
2.10.4 Timekeeping . . . 19
2.10.5 Shell escape . . . 20
2.11 Lua module . . . 21
2.11.1 Strings . . . 21
2.11.2 Files . . . 23
2.11.3 Timekeeping . . . 25
2.11.4 Miscellaneous . . . 25

3 Test **26**
3.1 Catcode checks for loading . . . 26
3.2 Test for `\pdf@isprimitive` . . . 28
3.3 Test for `\pdf@shellescape` . . . 29
3.4 Test for escape functions . . . 30

4 Installation **32**
4.1 Download . . . 32
4.2 Bundle installation . . . 33
4.3 Package installation . . . 33
4.4 Refresh file name databases . . . 33
4.5 Some details for the interested . . . 33

5 Catalogue **34**

6 References **34**

7 History **35**
[2007/11/11 v0.1] . . . 35
[2007/11/12 v0.2] . . . 35
[2007/12/12 v0.3] . . . 35
[2009/04/10 v0.4] . . . 35
[2009/09/22 v0.5] . . . 35
[2009/09/23 v0.6] . . . 35
[2009/12/12 v0.7] . . . 35
[2010/03/01 v0.8] . . . 35
[2010/04/01 v0.9] . . . 35
[2010/11/04 v0.10] . . . 35
[2010/11/11 v0.11] . . . 35
[2011/01/30 v0.12] . . . 35
[2011/03/04 v0.13] . . . 35
[2011/04/10 v0.14] . . . 36
[2011/04/16 v0.15] . . . 36
[2011/04/22 v0.16] . . . 36
[2011/06/29 v0.17] . . . 36
[2011/07/01 v0.18] . . . 36
[2011/07/28 v0.19] . . . 36
[2011/11/29 v0.20] . . . 36
[2016/05/10 v0.21] . . . 36
[2016/05/21 v0.22] . . . 36
[2016/10/02 v0.23] . . . 36
[2017/01/29 v0.24] . . . 36
[2017/03/19 v0.25] . . . 36
[2018/01/21 v0.26] . . . 36

8 Index **37**

The picture package

Abstract

There are macro and environment arguments that expect numbers that will internally be multiplicated with `\unitlength`. This package extends the syntax of these arguments that dimens with calculation support can be added for these arguments.

1 User interface **2**
1.1 Introduction . . . 2
1.2 Options . . . 2
1.3 Example . . . 2
1.4 Supported packages . . . 2

2 Implementation **3**
2.1 Identification . . . 3
2.2 Options . . . 3
2.3 Calculation method . . . 3
2.3.1 Method calc . . . 3
2.3.2 Method etex . . . 4
2.3.3 Method plain . . . 4
2.3.4 Help macros . . . 4
2.4 Redefinitions . . . 5
2.4.1 LaTeX base macros . . . 6
2.4.2 Package pspicture . . . 6
2.5 Check package loading order . . . 6

3 Installation **7**
3.1 Download . . . 7
3.2 Bundle installation . . . 7
3.3 Package installation . . . 7
3.4 Refresh file name databases . . . 8
3.5 Some details for the interested . . . 8

4 Catalogue **8**

5 History **9**
[2006/08/26 v1.0] . . . 9
[2007/04/11 v1.1] . . . 9
[2008/11/26 v1.2] . . . 9
[2009/10/11 v1.3] . . . 9
[2016/05/16 v1.4] . . . 9

6 Index **9**

The pmboxdraw package

Abstract

Package pmboxdraw declares box drawings characters of old code pages, e.g. cp437. It uses rules instead of using a font.

1 User interface **2**
1.1 Introduction . . . 2
1.2 Setup . . . 2
1.3 Symbol list . . . 3

2 Implementation **9**
2.1 Initial stuff . . . 9
2.2 Resources . . . 11
2.3 Dummy font encoding . . . 11
2.4 Setup . . . 11
2.4.1 Options . . . 11
2.4.2 Setup commands of version 1.0 . . . 13
2.5 Utils . . . 14
2.6 Block elements . . . 16
2.6.1 U+2580 . . . 16
2.6.2 U+2581 . . . 16
2.6.3 U+2582 . . . 16
2.6.4 U+2583 . . . 17
2.6.5 U+2584 . . . 17
2.6.6 U+2585 . . . 17
2.6.7 U+2586 . . . 17
2.6.8 U+2587 . . . 17
2.6.9 U+2588 . . . 17
2.6.10 U+2589 . . . 18
2.6.11 U+258A . . . 18
2.6.12 U+258B . . . 18
2.6.13 U+258C . . . 18
2.6.14 U+258D . . . 18
2.6.15 U+258E . . . 18
2.6.16 U+258F . . . 18
2.6.17 U+2590 . . . 19
2.6.18 U+2594 . . . 19
2.6.19 U+2595 . . . 19
2.7 Shade characters . . . 19
2.7.1 U+2591 . . . 19
2.7.2 U+2592 . . . 20
2.7.3 U+2593 . . . 20
2.7.4 Color warning . . . 20
2.8 Terminal graphics characters . . . 20
2.8.1 U+2596 . . . 20
2.8.2 U+2597 . . . 21

2.8.3 U+2598 . . . 21
2.8.4 U+2599 . . . 21
2.8.5 U+259A . . . 21
2.8.6 U+259B . . . 21
2.8.7 U+259C . . . 22
2.8.8 U+259D . . . 22
2.8.9 U+259E . . . 22
2.8.10 U+259F . . . 22
2.9 Box drawing . . . 22
2.9.1 U+2500 . . . 23
2.9.2 U+2501 . . . 23
2.9.3 U+2502 . . . 23
2.9.4 U+2503 . . . 24
2.9.5 U+250C . . . 24
2.9.6 U+250D . . . 24
2.9.7 U+250E . . . 25
2.9.8 U+250F . . . 25
2.9.9 U+2510 . . . 26
2.9.10 U+2511 . . . 26
2.9.11 U+2512 . . . 27
2.9.12 U+2513 . . . 27
2.9.13 U+2514 . . . 28
2.9.14 U+2515 . . . 28
2.9.15 U+2516 . . . 29
2.9.16 U+2517 . . . 29
2.9.17 U+2518 . . . 30
2.9.18 U+2519 . . . 30
2.9.19 U+251A . . . 30
2.9.20 U+251B . . . 31
2.9.21 U+251C . . . 31
2.9.22 U+251D . . . 32
2.9.23 U+251E . . . 32
2.9.24 U+251F . . . 33
2.9.25 U+2520 . . . 34
2.9.26 U+2521 . . . 34
2.9.27 U+2522 . . . 35
2.9.28 U+2523 . . . 35
2.9.29 U+2524 . . . 36
2.9.30 U+2525 . . . 36
2.9.31 U+2526 . . . 37
2.9.32 U+2527 . . . 37
2.9.33 U+2528 . . . 38
2.9.34 U+2529 . . . 38
2.9.35 U+252A . . . 39
2.9.36 U+252B . . . 39
2.9.37 U+252C . . . 40

2.9.38 U+252D . . . 40
2.9.39 U+252E . . . 41
2.9.40 U+252F . . . 42
2.9.41 U+2530 . . . 42
2.9.42 U+2531 . . . 43
2.9.43 U+2532 . . . 43
2.9.44 U+2533 . . . 44
2.9.45 U+2534 . . . 45
2.9.46 U+2535 . . . 45
2.9.47 U+2536 . . . 46
2.9.48 U+2537 . . . 47
2.9.49 U+2538 . . . 47
2.9.50 U+2539 . . . 47
2.9.51 U+253A . . . 48
2.9.52 U+253B . . . 49
2.9.53 U+253C . . . 49
2.9.54 U+253D . . . 50
2.9.55 U+253E . . . 50
2.9.56 U+253F . . . 51
2.9.57 U+2540 . . . 51
2.9.58 U+2541 . . . 52
2.9.59 U+2542 . . . 53
2.9.60 U+2543 . . . 53
2.9.61 U+2544 . . . 54
2.9.62 U+2545 . . . 54
2.9.63 U+2546 . . . 55
2.9.64 U+2547 . . . 56
2.9.65 U+2548 . . . 57
2.9.66 U+2549 . . . 57
2.9.67 U+254A . . . 58
2.9.68 U+254B . . . 58
2.10 Box drawing, double lines . . . 59
2.10.1 U+2550 . . . 59
2.10.2 U+2551 . . . 60
2.10.3 U+2552 . . . 60
2.10.4 U+2553 . . . 61
2.10.5 U+2554 . . . 61
2.10.6 U+2555 . . . 62
2.10.7 U+2556 . . . 62
2.10.8 U+2557 . . . 63
2.10.9 U+2558 . . . 63
2.10.10 U+2559 . . . 64
2.10.11 U+255A . . . 64
2.10.12 U+255B . . . 65
2.10.13 U+255C . . . 66
2.10.14 U+255D . . . 66

2.10.15 U+255E . . . 67
2.10.16 U+255F . . . 68
2.10.17 U+2560 . . . 68
2.10.18 U+2561 . . . 69
2.10.19 U+2562 . . . 69
2.10.20 U+2563 . . . 70
2.10.21 U+2564 . . . 71
2.10.22 U+2565 . . . 71
2.10.23 U+2566 . . . 71
2.10.24 U+2567 . . . 72
2.10.25 U+2568 . . . 73
2.10.26 U+2569 . . . 73
2.10.27 U+256A . . . 74
2.10.28 U+256B . . . 74
2.10.29 U+256C . . . 75
2.10.30 U+2574 . . . 75
2.10.31 U+2575 . . . 76
2.10.32 U+2576 . . . 76
2.10.33 U+2577 . . . 76
2.10.34 U+2578 . . . 77
2.10.35 U+2579 . . . 77
2.10.36 U+257A . . . 77
2.10.37 U+257B . . . 77
2.10.38 U+257C . . . 78
2.10.39 U+257D . . . 78
2.10.40 U+257E . . . 78
2.10.41 U+257F . . . 79
2.11 Box drawing, light single lines . . . 79
2.12 Unicode support file . . . 79

3 Test **82**
3.1 Catcode checks for loading . . . 82

4 Installation **84**
4.1 Download . . . 84
4.2 Bundle installation . . . 84
4.3 Package installation . . . 84
4.4 Refresh file name databases . . . 84
4.5 Some details for the interested . . . 85

5 Catalogue **85**

6 References **86**

7 History **86**
[2006/05/03 v1.0] 86
[2011/03/24 v1.1] 86
[2016/05/16 v1.2] 86

8 Index **86**

The **protecteddef** package

Abstract

This packages provides `\ProtectedDef` for defining robust macros for both plain TEX and LATEX. First ε-TEX's `\protected` is tried, then LATEX's `\DeclareRobustCommand` is used. Otherwise the macro is not made robust.

1 Documentation **1**
1.1 The LATEX's way . . . 2
1.2 The ε-TEX's way . . . 2
1.3 The way of this package . . . 2
1.4 Usage . . . 2

2 Implementation **2**
2.1 Reload check and package identification . . . 2
2.2 Catcodes . . . 4
2.3 Resources . . . 4

3 Test **6**
3.1 Catcode checks for loading . . . 6
3.2 Test without LATEX and `\protected` . . . 8

4 Installation **11**
4.1 Download . . . 11
4.2 Bundle installation . . . 11
4.3 Package installation . . . 11
4.4 Refresh file name databases . . . 11
4.5 Some details for the interested . . . 12

5 Catalogue **12**

6 History **13**
[2011/01/31 v1.0] . . . 13
[2016/05/16 v1.1] . . . 13

7 Index **13**

The refcount package

Abstract

References are not numbers, however they often store numerical data such as section or page numbers. `\ref` or `\pageref` cannot be used for counter assignments or calculations because they are not expandable, generate warnings, or can even be links. The package provides expandable macros to extract the data from references. Packages hyperref, nameref, titleref, and babel are supported.

1 Usage **2**
1.1 Setting counters . . . 2
1.2 Expandable commands . . . 2
1.3 Undefined references . . . 3
1.3.1 Check for undefined references . . . 3
1.4 Notes . . . 3

2 Implementation **3**
2.1 Loading packages . . . 5
2.2 Defining commands . . . 5
2.3 `\setrefcountdefault` . . . 7
2.4 `\refused` . . . 7
2.5 Setting counters by reference data . . . 7
2.5.1 Generic setting . . . 7
2.5.2 User commands . . . 8
2.6 Extracting references . . . 8
2.7 Macros for checking undefined references . . . 10

3 Test **11**
3.1 Catcode checks for loading . . . 11
3.2 Macro tests . . . 12
3.3 Test with package titleref . . . 15

4 Installation **17**
4.1 Download . . . 17
4.2 Bundle installation . . . 17
4.3 Package installation . . . 17
4.4 Refresh file name databases . . . 18
4.5 Some details for the interested . . . 18

5 Catalogue **18**

6 History **19**
[1998/04/08 v1.0] . . . 19
[2000/09/07 v2.0] . . . 19
[2006/02/20 v3.0] . . . 19
[2008/08/11 v3.1] . . . 20
[2010/12/01 v3.2] . . . 20

[2011/06/22 v3.3] 20
[2011/10/16 v3.4] 20
[2016/05/16 v3.5] 20

7 Index **20**

The rerunfilecheck package

Abstract

The package provides additional rerun warnings if some auxiliary files have changed. It is based on MD5 checksum, provided by pdfTEX.

1 Documentation **2**
1.1 Options . . . 2
1.2 Interface for class/package authors . . . 2

2 Implementation **3**
2.1 Options . . . 4
2.2 Check for checksum feature . . . 4
2.3 Standard .aux files . . . 5
2.4 Rerun check . . . 7

3 Test **9**
3.1 Catcode checks for loading . . . 9

4 Installation **10**
4.1 Download . . . 10
4.2 Bundle installation . . . 11
4.3 Package installation . . . 11
4.4 Refresh file name databases . . . 11
4.5 Some details for the interested . . . 11

5 Catalogue **12**

6 History **12**
[2009/12/10 v1.0] . . . 12
[2009/12/12 v1.1] . . . 12
[2009/12/18 v1.2] . . . 12
[2010/01/25 v1.3] . . . 13
[2010/02/22 v1.4] . . . 13
[2010/03/15 v1.5] . . . 13
[2010/03/16 v1.6] . . . 13
[2011/04/15 v1.7] . . . 13
[2016/05/16 v1.8] . . . 13

7 Index **13**

The resizegather package

Abstract

Equations that are too large are resized to fit the available space. The environment gather of package amsmath is supported. Also the environments equation and displaymath are redefined using gather and its starred version.

1 Documentation **1**
1.1 Options 2
1.2 Options for packages amsmath or graphics 2

2 Implementation **3**

3 Test **8**
3.1 Catcode checks for loading 8

4 Installation **9**
4.1 Download 9
4.2 Bundle installation 10
4.3 Package installation 10
4.4 Refresh file name databases 10
4.5 Some details for the interested 10

5 Catalogue **11**

6 Acknowledgement **11**

7 History **11**
[2009/12/04 v1.0] 11
[2009/12/05 v1.1] 11
[2010/03/01 v1.2] 11
[2016/05/16 v1.3] 12

8 Index **12**

The rotchiffre package

Abstract

This package implements chiffres ROT13 with its variants ROT5, ROT18, and ROT47.

1 Documentation **2**
1.1 Motivation . . . 2
1.2 Usage . . . 2
1.2.1 Examples . . . 2

2 Implementation **3**
2.1 Reload check and package identification . . . 3
2.2 Catcodes . . . 4
2.3 Loading resources . . . 5
2.4 `\EdefRot` as robust macro . . . 5
2.5 Set `\lccode` on a range of characters . . . 5
2.6 Chiffres . . . 6
2.6.1 ROT13 . . . 6
2.6.2 ROT5 . . . 7
2.6.3 ROT18 . . . 7
2.6.4 ROT47 . . . 7
2.7 `\RotCh@rot` with big char support . . . 7
2.8 `\RotCh@rot` without big char support . . . 8

3 Test **8**
3.1 Catcode checks for loading . . . 8
3.2 Macro tests . . . 10
3.2.1 Preamble . . . 10
3.2.2 ROT13 . . . 13
3.2.3 ROT5 . . . 13
3.2.4 ROT18 . . . 13
3.2.5 ROT47 . . . 13
3.2.6 Big chars . . . 14

4 Installation **14**
4.1 Download . . . 14
4.2 Bundle installation . . . 15
4.3 Package installation . . . 15
4.4 Refresh file name databases . . . 15
4.5 Some details for the interested . . . 15

5 Catalogue **16**

6 References **16**

7 History **17**
[2010/11/12 v1.0] 17
[2016/05/16 v1.1] 17

8 Index **17**

The scrindex package

Abstract

This package redefines environment ‘theindex’ of package index, if a class from KOMA-Script is loaded. Also option idxtotoc is supported. Index preambles can be given either by means of package index or via the interface provided by KOMA-Script.

1 Documentation **1**
1.1 Usage . . . 2
1.2 Preambles . . . 2
1.2.1 Class scrartcl . . . 2
1.2.2 Classes scrreprt and scrbook . . . 2

2 Implementation **3**

3 Installation **6**
3.1 Download . . . 6
3.2 Bundle installation . . . 6
3.3 Package installation . . . 6
3.4 Refresh file name databases . . . 7
3.5 Some details for the interested . . . 7

4 Catalogue **7**

5 History **8**
[2008/07/07 v1.0] . . . 8
[2008/08/11 v1.1] . . . 8
[2016/05/16 v1.2] . . . 8

6 Index **8**

The selinput package

Abstract

This package selects the input encoding by specifying between input characters and their glyph names.

1 Documentation **1**
1.1 Introduction . . . 1
1.2 User interface . . . 2
1.3 Options . . . 3
1.4 Encodings . . . 3

2 Implementation **3**

3 Test **7**

4 Installation **9**
4.1 Download . . . 9
4.2 Bundle installation . . . 9
4.3 Package installation . . . 10
4.4 Refresh file name databases . . . 10
4.5 Some details for the interested . . . 10

5 Catalogue **11**

6 References **11**

7 History **11**
[2007/06/16 v1.0] . . . 11
[2007/06/20 v1.1] . . . 11
[2007/09/09 v1.2] . . . 11
[2016/05/16 v1.3] . . . 12
[2016/05/17 v1.4] . . . 12

8 Index **12**

The setouterhbox package

Abstract

If math stuff is set in an `\hbox`, then TeX performs some optimization and omits the implicite penalties `\binoppenalty` and `\relpenalty`. This packages tries to put stuff into an `\hbox` without getting lost of those penalties.

1 Documentation **2**
1.1 Introduction . . . 2
1.2 Acknowledgement . . . 2
1.3 Usage . . . 2
1.4 Option hyperref . . . 3
1.5 Example . . . 3

2 Implementation **4**
2.1 Package start stuff . . . 4
2.2 Interface macros . . . 6
2.3 Main part . . . 6
2.4 Environment support . . . 8
2.5 Option hyperref . . . 9

3 Test **9**
3.1 Catcode checks for loading . . . 9
3.2 Test with package url . . . 11

4 Installation **11**
4.1 Download . . . 11
4.2 Bundle installation . . . 12
4.3 Package installation . . . 12
4.4 Refresh file name databases . . . 12
4.5 Some details for the interested . . . 12

5 Catalogue **13**

6 References **13**

7 History **14**
[2005/10/05 v1.0] . . . 14
[2005/10/07 v1.1] . . . 14
[2005/10/18 v1.2] . . . 14
[2006/02/12 v1.3] . . . 14
[2006/08/26 v1.4] . . . 14
[2007/04/26 v1.5] . . . 14
[2007/05/17 v1.6] . . . 14
[2007/09/09 v1.7] . . . 14
[2016/05/16 v1.8] . . . 14

8 Index **14**

The settobox package

Abstract

Commands are defined for getting box sizes similar to LaTeX's `\settowidth` commands.

1 Usage **2**
1.1 Get box dimensions . . . 2
1.2 Set box dimensions . . . 2
1.3 Move box . . . 2
1.4 Example . . . 2
1.4.1 Short example . . . 2
1.4.2 Test file that shows box manipulations . . . 2

2 Implementation **4**

3 Installation **6**
3.1 Download . . . 6
3.2 Bundle installation . . . 6
3.3 Package installation . . . 6
3.4 Refresh file name databases . . . 7
3.5 Some details for the interested . . . 7

4 Catalogue **7**

5 History **8**
[2000/02/11 v1.0] . . . 8
[2000/09/07 v1.1] . . . 8
[2006/02/20 v1.2] . . . 8
[2007/04/11 v1.3] . . . 8
[2008/08/11 v1.4] . . . 8
[2016/05/16 v1.5] . . . 8

6 Index **9**

The soulutf8 package

Abstract

This package extends package soul and adds some support for UTF-8. Namely the input encodings `utf8.def` from package inputenc and package ucs's `utf8x.def` are supported.

1 Documentation **2**
1.1 Patch . . . 2
1.2 Future . . . 2

2 Implementation **2**
2.1 Reload check and package identification . . . 2
2.2 Catcodes . . . 4
2.3 Loading packages . . . 5
2.3.1 plain TeX . . . 5
2.3.2 LaTeX . . . 5
2.3.3 ε-TeX . . . 6
2.4 Macro for redefinitions . . . 6
2.5 Redefinition of `\SOUL@eval` . . . 6
2.6 UTF-8 analysis . . . 9
2.6.1 Help strings . . . 9
2.6.2 Support for `utf8.def` . . . 10
2.6.3 Support for `utf8x.def` . . . 10
2.7 Actions for UTF-8 sequences . . . 11
2.7.1 Redefinition of `\SOUL@splittoken` . . . 12
2.8 Patches . . . 12

3 Test **15**
3.1 Catcode checks for loading . . . 15
3.2 LaTeXtests . . . 16
3.2.1 Driver definitions . . . 17
3.2.2 Test macros . . . 19
3.2.3 Testing . . . 22

4 Installation **22**
4.1 Download . . . 22
4.2 Bundle installation . . . 23
4.3 Package installation . . . 23
4.4 Refresh file name databases . . . 23
4.5 Some details for the interested . . . 24

5 Catalogue **24**

6 References **25**

7 History **25**
[2007/09/09 v1.0] 25
[2016/05/16 v1.1] 25

8 Index **25**

The stackrel package

Abstract

This package adds an optional argument to `\stackrel` for putting something below the relational symbol and defines `\stackbin` for binary symbols.

1 User interface **1**

2 Implementation **2**

3 Installation **3**
3.1 Download . . . 3
3.2 Bundle installation . . . 3
3.3 Package installation . . . 3
3.4 Refresh file name databases . . . 3
3.5 Some details for the interested . . . 4

4 Catalogue **4**

5 History **5**
[2006/12/02 v1.0] . . . 5
[2007/05/06 v1.1] . . . 5
[2007/11/11 v1.2] . . . 5
[2016/05/16 v1.3] . . . 5

6 Index **6**

The stampinclude package

Abstract

The package replaces `\includeonly` and selects the files for `\include` by inspecting the time stamp of the `.aux` file. The file is selected for inclusion if the `.aux` file does not yet exist or is older than the corresponding `.tex` file.

1 Documentation **1**
1.1 Introduction . . . 1
1.2 Usage . . . 2
1.3 Limitations . . . 2
1.3.1 Other file dependencies . . . 2
1.3.2 `\include` dependencies . . . 3
1.3.3 Summary . . . 3
1.4 Requirements . . . 3

2 Implementation **3**

3 Installation **5**
3.1 Download . . . 5
3.2 Bundle installation . . . 5
3.3 Package installation . . . 5
3.4 Refresh file name databases . . . 5
3.5 Some details for the interested . . . 6

4 Catalogue **6**

5 References **7**

6 History **7**
[2008/07/14 v1.0] . . . 7
[2016/05/16 v1.1] . . . 7

7 Index **7**

The stringenc package

Abstract

This package provides `\StringEncodingConvert` for converting a string between different encodings. Both LaTeX and plain-TeX are supported.

1 Documentation **2**
1.1 User interface . . . 2
1.2 Supported encodings . . . 3

2 Implementation **4**
2.1 Reload check and package identification . . . 4
2.2 Catcodes . . . 5
2.3 Tools . . . 6
2.4 Encoding aliases . . . 16
2.5 Encoding files . . . 18
2.5.1 UTF-32BE, UTF-32LE . . . 18
2.5.2 UTF-8 . . . 21
2.5.3 UTF-16LE . . . 26
2.5.4 PDFDocEncoding . . . 26
2.5.5 ISO-8859-1 . . . 28
2.5.6 CP1252 . . . 29
2.5.7 US-ASCII . . . 30
2.5.8 Encoding ascii-print . . . 31
2.5.9 Clean7Bit . . . 31
2.5.10 Other encodings (8 bit) . . . 33

3 Test **75**
3.1 Catcode checks for loading . . . 75
3.2 Conversion tests . . . 76
3.2.1 UTF8/16/32 encodings . . . 78
3.2.2 ASCII . . . 80
3.2.3 PDFDocEncoding . . . 80
3.2.4 ISO-8859-1 . . . 81
3.2.5 CP1252 . . . 81
3.2.6 KOI8-R . . . 81
3.2.7 DEC-MCS . . . 81
3.3 Removal of byte order marks . . . 82

4 Installation **82**
4.1 Download . . . 82
4.2 Bundle installation . . . 82
4.3 Package installation . . . 83
4.4 Refresh file name databases . . . 84
4.5 Some details for the interested . . . 84

5 Catalogue **85**

6 History **85**
[2007/06/14 v1.0] 85
[2007/06/16 v1.1] 86
[2007/09/09 v1.2] 86
[2007/10/22 v1.3] 86
[2007/11/11 v1.4] 86
[2007/11/25 v1.5] 86
[2008/10/27 v1.6] 86
[2009/12/15 v1.7] 86
[2010/03/01 v1.8] 86
[2011/07/26 v1.9] 86
[2011/12/02 v1.10] 86
[2016/05/16 v1.11] 86

7 Index **86**

The tabularht package

Abstract

This package defines some environments that adds a height specification to tabular and array.

1 Usage **2**
1.1 Option vlines . . . 2
1.2 Limitations . . . 3
1.3 Compatibility . . . 3
1.4 Examples . . . 3
1.4.1 Example 1 . . . 3
1.4.2 Example 2 . . . 3

2 Implementation **4**
2.1 Environments . . . 4
2.2 Options . . . 6
2.3 Option vlines, driver independent stuff . . . 7
2.4 Driver pdftex . . . 7
2.5 DVI drivers . . . 11

3 Installation **13**
3.1 Download . . . 13
3.2 Bundle installation . . . 13
3.3 Package installation . . . 14
3.4 Refresh file name databases . . . 14
3.5 Some details for the interested . . . 14

4 Catalogue **15**

5 History **15**
[2005/09/22 v1.0] . . . 15
[2005/10/16 v2.0] . . . 15
[2005/10/18 v2.1] . . . 15
[2006/02/20 v2.2] . . . 16
[2006/12/22 v2.3] . . . 16
[2007/03/21 v2.4] . . . 16
[2007/04/11 v2.5] . . . 16
[2016/05/16 v2.6] . . . 16

6 Index **16**

The tabularkv package

Abstract

This package adds a key value interface for tabular by the new environment `tabularkv`. Thus the TEX source code looks better by named parameters, especially if package tabularht is used.

1 Usage **1**
1.1 Example 2

2 Implementation **2**

3 Installation **3**
3.1 Download 3
3.2 Bundle installation 3
3.3 Package installation 3
3.4 Refresh file name databases 3
3.5 Some details for the interested 4

4 Catalogue **4**

5 History **5**
[2005/09/22 v1.0] 5
[2006/02/20 v1.1] 5
[2016/05/16 v1.2] 5

6 Index **5**

The telprint package

Abstract

Package telprint provides `\telprint` for formatting German phone numbers.

1 Documentation **2**
1.1 Introduction . . . 2
1.2 Short overview in English . . . 2
1.2.1 Configuration . . . 2
1.3 Documentation in German . . . 2

2 Implementation **3**
2.1 Reload check and package identification . . . 3
2.2 Catcodes . . . 4
2.3 Package macros . . . 5

3 Test **7**
3.1 Catcode checks for loading . . . 7

4 Installation **9**
4.1 Download . . . 9
4.2 Bundle installation . . . 9
4.3 Package installation . . . 9
4.4 Refresh file name databases . . . 10
4.5 Some details for the interested . . . 10

5 Catalogue **10**

6 History **11**
[1996/11/28 v1.0] . . . 11
[1997/09/16 v1.1] . . . 11
[1997/10/16 v1.2] . . . 11
[1997/12/09 v1.3] . . . 11
[2004/11/02 v1.4] . . . 11
[2005/09/30 v1.5] . . . 11
[2006/02/12 v1.6] . . . 11
[2006/08/26 v1.7] . . . 12
[2007/04/11 v1.8] . . . 12
[2007/09/09 v1.9] . . . 12
[2008/08/11 v1.10] . . . 12
[2016/05/16 v1.11] . . . 12

7 Index **12**

The thepdfnumber package

Abstract

The package converts real numbers to a minimal representation that is stripped from leading or trailing zeros, plus signs and decimal point if not necessary.

1 Documentation **2**
1.1 Introduction . . . 2
1.2 Usage . . . 2
1.3 User macros . . . 2
1.4 Input number . . . 3
1.5 Error handling . . . 4

2 Implementation **4**
2.1 Reload check and package identification . . . 4
2.2 Catcodes . . . 5
2.3 Helper macros . . . 6
2.4 Detect ε-TEX . . . 6
2.5 User macro `\thepdfnumber` . . . 6
2.5.1 State definitions for sign . . . 7
2.5.2 State definitions for integer part . . . 8
2.5.3 State definitions for decimal digits . . . 9
2.6 Norm macro . . . 11
2.6.1 State definitions for sign . . . 11
2.6.2 State definitions for integer part . . . 13
2.6.3 State definitions for decimal digits . . . 13

3 Test **14**
3.1 Catcode checks for loading . . . 14
3.2 Macro tests . . . 16
3.2.1 Preamble . . . 16
3.2.2 Test with active catcodes . . . 17
3.2.3 Test cases for `\thepdfnumber` . . . 17
3.2.4 Test cases for `\thepdfnumberNormZeroOne` . . . 18

4 Installation **19**
4.1 Download . . . 19
4.2 Bundle installation . . . 19
4.3 Package installation . . . 19
4.4 Refresh file name databases . . . 20
4.5 Some details for the interested . . . 20

5 References **20**

6 History **20**
[2011/11/24 v1.0] . . . 20
[2016/05/16 v1.1] . . . 20

7 Index **20**

The transparent package

Abstract

Since version 1.40 pdfTeX supports several color stacks. This package shows, how a separate color stack can be used for transparency, a property besides color.

1 User interface **1**

2 Implementation **2**
2.1 Identification . . . 2
2.2 Initial checks . . . 2
2.2.1 Check for pdfTeX in PDF mode . . . 2
2.2.2 Check pdfTeX version . . . 2
2.3 Transparency . . . 2

3 Installation **4**
3.1 Download . . . 4
3.2 Bundle installation . . . 4
3.3 Package installation . . . 5
3.4 Refresh file name databases . . . 5
3.5 Some details for the interested . . . 5

4 Catalogue **6**

5 History **6**
[2007/01/08 v1.0] . . . 6
[2016/05/16 v1.1] . . . 6

6 Index **6**

The twoopt package

Abstract

This package provides commands to define macros with two optional arguments.

1 Usage **1**

2 Implementation **2**

3 Installation **3**
3.1 Download . . . 3
3.2 Bundle installation . . . 4
3.3 Package installation . . . 4
3.4 Refresh file name databases . . . 4
3.5 Some details for the interested . . . 4

4 Catalogue **5**

5 History **5**
[1998/10/30 v1.0] . . . 5
[1998/10/30 v1.1] . . . 5
[1998/11/04 v1.2] . . . 6
[1999/04/12 v1.3] . . . 6
[2006/02/20 v1.4] . . . 6
[2008/08/11 v1.5] . . . 6
[2016/05/16 v1.6] . . . 6

6 Index **6**

The uniquecounter package

Abstract

This package provides a kind of counter that provides unique number values. Several counters can be created by different names. The numeric values are not limited.

1 Documentation **2**
1.1 Example . . . 2

2 Implementation **2**
2.1 Reload check and package identification . . . 2
2.2 Catcodes . . . 4

3 Test **6**
3.1 Catcode checks for loading . . . 6
3.2 Macro tests . . . 8
3.2.1 Test with LaTeX . . . 8
3.2.2 Test with plain-TeX . . . 9

4 Installation **10**
4.1 Download . . . 10
4.2 Bundle installation . . . 11
4.3 Package installation . . . 11
4.4 Refresh file name databases . . . 11
4.5 Some details for the interested . . . 11

5 Catalogue **12**

6 History **12**
[2009/09/11 v1.0] . . . 12
[2009/12/18 v1.1] . . . 12
[2011/01/30 v1.2] . . . 12
[2016/05/16 v1.3] . . . 13

7 Index **13**

The zref package

Abstract

Package zref tries to get rid of the restriction in LaTeX's reference system that only two properties are supported. The package implements an extensible referencing system, where properties are handled in a more flexible way. It offers an interface for macro programmers for the access to the system and some applications that uses the new reference scheme.

1 Introduction **4**
1.1 Standard LaTeX behaviour . . . 4
1.2 Basic idea . . . 4
1.3 Interfaces . . . 5

2 Interface for programmers **5**
2.1 Entities . . . 5
2.2 Property list . . . 6
2.3 Property . . . 6
2.4 Reference generation . . . 7
2.5 Data extraction . . . 7
2.6 Setup . . . 8
2.7 Declared properties . . . 9
2.8 Wrapper for advanced situations . . . 10
2.9 Counter for unique names . . . 10

3 User interface **10**
3.1 Module user . . . 10
3.2 Module abspage . . . 11
3.3 Module lastpage . . . 11
3.3.1 Tests for last page . . . 12
3.3.2 Example . . . 12
3.4 Module thepage . . . 13
3.5 Module nextpage . . . 13
3.5.1 Configuration . . . 13
3.5.2 Example . . . 14
3.6 Module totpages . . . 14
3.7 Module pagelayout . . . 15
3.8 Module marks . . . 15
3.9 Module runs . . . 16
3.10 Module perpage . . . 16
3.11 Module counter . . . 16
3.12 Module titleref . . . 17
3.13 Module savepos . . . 17
3.14 Module dotfill . . . 18
3.15 Module env . . . 18
3.16 Module xr . . . 18

4 ToDo **19**

5 Example **19**

6 Implementation **22**
6.1 Package zref . . . 22
6.1.1 Identification . . . 22
6.1.2 Load basic module . . . 22
6.1.3 Process options . . . 22
6.2 Module base . . . 22
6.2.1 Prefixes . . . 22
6.2.2 Identification . . . 23
6.2.3 Utilities . . . 23
6.2.4 Check for ε-TEX . . . 24
6.2.5 Auxiliary file stuff . . . 24
6.2.6 Property lists . . . 25
6.2.7 Properties . . . 29
6.2.8 Reference generation . . . 31
6.2.9 Reference querying and extracting . . . 34
6.2.10 Compatibility with babel . . . 37
6.2.11 Unique counter support . . . 38
6.2.12 Utilities . . . 38
6.2.13 Setup . . . 38
6.3 Module user . . . 39
6.4 Module abspage . . . 40
6.5 Module counter . . . 41
6.6 Module lastpage . . . 41
6.7 Module thepage . . . 42
6.8 Module nextpage . . . 43
6.9 Module totpages . . . 45
6.10 Module pagelayout . . . 45
6.10.1 Support for LuaTEX . . . 45
6.10.2 Define layout properties . . . 46
6.11 Module pageattr . . . 48
6.12 Module marks . . . 51
6.13 Module runs . . . 53
6.14 Module perpage . . . 53
6.15 Module titleref . . . 55
6.15.1 Implementation . . . 55
6.15.2 User interface . . . 57
6.15.3 Patches for section and caption commands . . . 57
6.15.4 Environment description . . . 58
6.15.5 Class memoir . . . 58
6.15.6 Class beamer . . . 59
6.15.7 Package titlesec . . . 59
6.15.8 Package longtable . . . 60

6.15.9 Package listings . . . 60
6.15.10 Theorems . . . 60
6.16 Module xr . . . 60
6.17 Module hyperref . . . 68
6.18 Module savepos . . . 68
6.18.1 Identification . . . 68
6.18.2 Availability . . . 69
6.18.3 Setup . . . 69
6.18.4 User macros . . . 69
6.19 Module abspos . . . 70
6.19.1 Identification . . . 70
6.19.2 Media . . . 73
6.19.3 Paper . . . 74
6.19.4 Origin . . . 75
6.19.5 Header . . . 75
6.19.6 Body . . . 76
6.19.7 Footer . . . 77
6.19.8 Marginal notes . . . 77
6.19.9 Stock paper . . . 78
6.20 Module dotfill . . . 78
6.21 Module env . . . 79

7 Test **80**
7.1 \zref@localaddprop . . . 80
7.2 Module base . . . 80
7.3 Module runs . . . 81
7.4 Module titleref . . . 81

8 Installation **83**
8.1 Download . . . 83
8.2 Bundle installation . . . 83
8.3 Package installation . . . 83
8.4 Refresh file name databases . . . 84
8.5 Some details for the interested . . . 84

9 Catalogue **85**

10 References **85**

11 History **86**
[2006/02/20 v1.0] . . . 86
[2006/05/03 v1.1] . . . 86
[2006/05/25 v1.2] . . . 86
[2006/09/08 v1.3] . . . 86
[2007/01/23 v1.4] . . . 86
[2007/02/18 v1.5] . . . 86
[2007/04/06 v1.6] . . . 86

[2007/04/17 v1.7] . . . 86
[2007/04/22 v1.8] . . . 86
[2007/05/02 v1.9] . . . 86
[2007/05/06 v2.0] . . . 86
[2007/05/28 v2.1] . . . 87
[2008/09/21 v2.2] . . . 87
[2008/10/01 v2.3] . . . 87
[2009/08/07 v2.4] . . . 87
[2009/12/06 v2.5] . . . 87
[2009/12/07 v2.6] . . . 87
[2009/12/08 v2.7] . . . 87
[2010/03/26 v2.8] . . . 87
[2010/03/29 v2.9] . . . 87
[2010/04/08 v2.10] . . . 87
[2010/04/15 v2.11] . . . 88
[2010/04/17 v2.12] . . . 88
[2010/04/19 v2.13] . . . 88
[2010/04/22 v2.14] . . . 88
[2010/04/23 v2.15] . . . 88
[2010/04/28 v2.16] . . . 88
[2010/05/01 v2.17] . . . 89
[2010/05/13 v2.18] . . . 89
[2010/10/22 v2.19] . . . 89
[2011/02/12 v2.20] . . . 89
[2011/03/18 v2.21] . . . 89
[2011/10/05 v2.22] . . . 89
[2011/12/05 v2.23] . . . 89
[2012/04/04 v2.24] . . . 89
[2016/05/16 v2.25] . . . 89
[2016/05/21 v2.26] . . . 90

12 Index **91**