

# CTAN:macros/latex/contrib/oberdiek/

Heiko Oberdiek

<[heiko.oberdiek at gmail.com](mailto:heiko.oberdiek@gmail.com)>

2010/03/25

## 1 Overview

<b>accsupp</b> (contents)	2010/01/16 v0.3 Accessibility support by marked content	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>aliascnt</b> (contents)	2009/09/08 v1.3 Alias counter	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>alphalph</b> (contents)	2010/03/01 v2.2 Converting numbers to letters	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>askinclude</b> (contents)	2008/08/11 v2.1 Interactive asking of included files	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>atbegshi</b> (contents)	2010/03/25 v1.12 At begin shipout hook	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>atenddvi</b> (contents)	2007/04/17 v1.1 At end DVI hook	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>attachfile2</b> (contents)	2009/09/25 v2.5 attach files into PDF	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>atveryend</b> (contents)	2010/03/24 v1.5 Hooks at very end of document	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>auxhook</b> (contents)	2009/12/14 v1.2 Hooks for auxiliary files	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>bigintcalc</b> (contents)	2007/11/11 v1.1 Expandable big integer calculations	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>bitset</b> (contents)	2007/09/28 v1.0 Data type bit set	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>bmpsize</b> (contents)	2009/09/04 v1.6 Extract size and resolution data from bitmap files	<a href="#">[pdf]</a> <a href="#">[dtx]</a>

<b>bookmark</b> (contents)	2009/12/17 v1.8 PDF bookmarks	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>catchfile</b> (contents)	2010/03/01 v1.3 Catches the contents of a file	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>centernot</b> (contents)	2007/05/31 v1.1 Centers the not symbol horizontally	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>chemarr</b> (contents)	2006/02/20 v1.2 Chemical reaction arrows	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>classlist</b> (contents)	2008/08/11 v1.3 Record loaded classes	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>colonequals</b> (contents)	2006/08/01 v1.0 Colon equals symbols	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>dvipscol</b> (contents)	2008/08/11 v1.2 Fix for dvips.def	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>embedfile</b> (contents)	2010/03/01 v2.5 embed files into PDF	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>engord</b> (contents)	2010/03/01 v1.8 Provides English ordinal numbers	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>epstopdf</b> (contents)	2010/02/09 v2.5 Conversion with epstopdf on the fly	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>etexcmds</b> (contents)	2010/01/28 v1.3 Prefix for e-TeX command names	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>flags</b> (contents)	2007/09/30 v0.4 Flag setting in bit fields	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>getttitlestring</b> (contents)	2009/12/18 v1.3 Cleanup title references	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>grfext</b> (contents)	2007/09/30 v1.0 Managing graphics extensions	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>grffile</b> (contents)	2010/01/28 v1.11 Extended file name support for graphics	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>holtxdoc</b> (contents)	2010/03/10 v0.15 Private additional ltxdoc support	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>hycolor</b> (contents)	2009/12/12 v1.6 Color options of hyperref/bookmark	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>hypbmsec</b> (contents)	2007/04/11 v2.4 Bookmarks in sectioning commands	<a href="#">[pdf]</a> <a href="#">[dtx]</a>

<b>hypcap</b> (contents)	2008/09/08 v1.10 Adjusting anchors of captions	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>hypdestopt</b> (contents)	2008/08/08 v2.2 Hyperref destination optimizer	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>hypdoc</b> (contents)	2010/02/03 v1.8 Hyper extensions for doc.sty	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>hypgotoe</b> (contents)	2007/10/30 v0.1 Experimental links to embedded files	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>hyphsubst</b> (contents)	2008/06/09 v0.2 Substitute hyphenation patterns	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>ifdraft</b> (contents)	2008/08/11 v1.3 Switch for option draft	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>iflang</b> (contents)	2007/11/11 v1.5 Language checks	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>ifluatex</b> (contents)	2010/03/01 v1.3 Provides the ifluatex switch	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>ifpdf</b> (contents)	2010/01/28 v2.1 Provides the ifpdf switch	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>ifvtex</b> (contents)	2010/03/01 v1.5 Switches for detecting VTeX and its modes	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>infwarerr</b> (contents)	2007/09/09 v1.2 Providing info/warning/message	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>inputenx</b> (contents)	2010/01/11 v1.6 Enhanced input encoding handling	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>intcalc</b> (contents)	2007/09/27 v1.1 Expandable integer calculations	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>kvdefinekeys</b> (contents)	2010/03/01 v1.0 Defining keys	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>kvoptions</b> (contents)	2010/02/22 v3.7 Keyval support for L <sup>A</sup> T <sub>E</sub> X options	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>kvsetkeys</b> (contents)	2010/03/01 v1.9 Key value parser	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>letltxmacro</b> (contents)	2008/06/24 v1.3 Let assignment for L <sup>A</sup> T <sub>E</sub> X macros	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>listingsutf8</b> (contents)	2007/11/11 v1.1 Adding support for UTF-8 to listings	<a href="#">[pdf]</a> <a href="#">[dtx]</a>

<b>ltxcmds</b> (contents)	2010/03/09 v1.4 L <sup>A</sup> T <sub>E</sub> X kernel commands for general use	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>luacolor</b> (contents)	2010/03/09 v1.2 Coloring based on LuaTeX's node attributes	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>luatex</b> (contents)	2010/03/09 v0.4 LuaTeX basic definition package	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>magicnum</b> (contents)	2010/03/09 v1.2 Magic numbers	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>makerobust</b> (contents)	2006/03/18 v1.0 Making a macro robust	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>pagegrid</b> (contents)	2009/12/04 v1.4 Print page grid in background	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>pagesel</b> (contents)	2008/08/11 v1.8 Selecting shipout output pages	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>pdfcol</b> (contents)	2007/12/12 v1.2 Maintaining additional color stacks for pdfTeX	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>pdfcolfoot</b> (contents)	2007/09/09 v1.1 pdfTeX's color stack for footnotes	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>pdfcolmk</b> (contents)	2008/08/11 v1.2 PDFtex COLOr MaRK	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>pdfcolparallel</b> (contents)	2010/01/11 v1.3 Fixed parallel with color stacks support	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>pdfcolparcolumns</b> (contents)	2010/01/11 v1.3 Color stacks support for parcolumns	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>pdfcrypt</b> (contents)	2007/04/26 v1.0 Setting pdf encryption	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>pdfescape</b> (contents)	2010/03/01 v1.9 Provides hex, PDF name and string conversions	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>pdfscape</b> (contents)	2008/08/11 v0.10 Landscape pages in PDF	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>pdfrender</b> (contents)	2010/01/28 v1.2 Access to some PDF graphics parameters	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>pdftexcmds</b> (contents)	2010/03/01 v0.8 Utility functions of pdfTeX for LuaTeX	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>picture</b> (contents)	2009/10/11 v1.3 Dimens for picture macros	<a href="#">[pdf]</a> <a href="#">[dtx]</a>

<b>pmbboxdraw</b> (contents)	2006/05/03 v1.0 Poor man's box drawing characters	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>refcount</b> (contents)	2008/08/11 v3.1 Data extraction from references	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>rerunfilecheck</b> (contents)	2010/03/16 v1.6 Rerun checks for auxiliary files	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>resizegather</b> (contents)	2010/03/01 v1.2 Automatically resizing of too large equations	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>scrindex</b> (contents)	2008/08/11 v1.1 Package index with scr* classes	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>selinput</b> (contents)	2007/09/09 v1.2 Select input encoding	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>setouterhbox</b> (contents)	2007/09/09 v1.7 Set hbox in outer horizontal mode	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>settobox</b> (contents)	2008/08/11 v1.4 Getting box sizes	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>soulutf8</b> (contents)	2007/09/09 v1.0 Adding support for UTF-8 to soul	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>stackrel</b> (contents)	2007/11/11 v1.2 Adding subscript option to stackrel	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>stampinclude</b> (contents)	2008/07/14 v1.0 Time stamp based including	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>stringenc</b> (contents)	2010/03/01 v1.8 Converts strings between encodings	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>tabularht</b> (contents)	2007/04/11 v2.5 Tabular with height specification	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>tabularkv</b> (contents)	2006/02/20 v1.1 Key value interface for tabular parameters	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>telprint</b> (contents)	2008/08/11 v1.10 Formatting of German phone numbers	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>transparent</b> (contents)	2007/01/08 v1.0 Using a pdfTeX's color stack for transparency	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>twoopt</b> (contents)	2008/08/11 v1.5 Definitions with two optional arguments	<a href="#">[pdf]</a> <a href="#">[dtx]</a>
<b>uniquecounter</b> (contents)	2009/12/18 v1.1 Provides unlimited unique counter	<a href="#">[pdf]</a> <a href="#">[dtx]</a>

## 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.

<b>1 Documentation</b>	<b>2</b>
1.1 Macros	2
1.1.1 Feature options	2
1.1.2 Input methods	2
1.2 Workaround, option <b>space</b>	3
1.3 Driver options	3
1.3.1 Option <b>pdftex</b>	3
1.3.2 Option <b>dvipdfm</b>	3
1.3.3 Option <b>dvips</b>	4
1.3.4 Turning off page stream compression	4
<b>2 Example</b>	<b>4</b>
2.1 Example <code>\notparallel</code>	4
2.2 Example with <code>pdfstringdef</code>	4
<b>3 Implementation</b>	<b>5</b>
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	9
3.5.1 Driver <b>pdftex</b>	9
3.5.2 Driver <b>dvipdfm</b>	10
3.5.3 Driver <b>dvips</b>	10
<b>4 Test</b>	<b>10</b>
4.1 Catcode checks for loading	10
<b>5 Installation</b>	<b>11</b>
5.1 Download	11
5.2 Bundle installation	11
5.3 Package installation	12
5.4 Refresh file name databases	12
5.5 Some details for the interested	12

<b>6</b>	<b>References</b>	<b>13</b>
<b>7</b>	<b>History</b>	<b>13</b>
	[2007/03/21 v0.1] . . . . .	13
	[2007/11/14 v0.2] . . . . .	13
	[2010/01/16 v0.3] . . . . .	13
<b>8</b>	<b>Index</b>	<b>13</b>

# The aliascnt package

## Abstract

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

<b>1</b>	<b>User interface</b>	<b>1</b>
1.1	Introduction . . . . .	1
1.2	Syntax . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Identification . . . . .	2
2.2	Create new alias counter . . . . .	2
2.3	Counter clear list . . . . .	3
<b>3</b>	<b>Installation</b>	<b>3</b>
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
<b>4</b>	<b>Acknowledgement</b>	<b>5</b>
<b>5</b>	<b>References</b>	<b>5</b>
<b>6</b>	<b>History</b>	<b>5</b>
	[2006/02/20 v1.0] . . . . .	5
	[2006/08/16 v1.1] . . . . .	5
	[2006/09/25 v1.2] . . . . .	5
	[2009/09/08 v1.3] . . . . .	5
<b>7</b>	<b>Index</b>	<b>5</b>



# The alphaph package

## Abstract

The package provides methods to represent numbers with a limited set of symbols. Both L<sup>A</sup>T<sub>E</sub>X and plain-T<sub>E</sub>X are supported.

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Introduction . . . . .	2
1.2	Use cases . . . . .	2
1.2.1	Number system based on symbols . . . . .	2
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 . . . . .	4
1.6	Programmer commands . . . . .	5
1.7	Design principles . . . . .	5
1.7.1	Number presentation commands . . . . .	5
1.7.2	General usability . . . . .	6
<b>2</b>	<b>Implementation</b>	<b>6</b>
2.1	Begin of package . . . . .	6
2.2	Catcodes . . . . .	7
2.3	Package loading . . . . .	8
2.4	$\varepsilon$ -T <sub>E</sub> X detection . . . . .	8
2.5	Help macros . . . . .	8
2.6	Symbol provider . . . . .	9
2.6.1	Alphabet . . . . .	9
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’ . . . . .	13
2.9	User interface . . . . .	14
<b>3</b>	<b>Test</b>	<b>15</b>
3.1	Catcode checks for loading . . . . .	15
<b>4</b>	<b>Macro tests</b>	<b>17</b>
<b>5</b>	<b>Installation</b>	<b>21</b>
5.1	Download . . . . .	21
5.2	Bundle installation . . . . .	21
5.3	Package installation . . . . .	21
5.4	Refresh file name databases . . . . .	21
5.5	Some details for the interested . . . . .	22

<b>6 History</b>	<b>22</b>
[1999/03/19 v0.1] . . . . .	22
[1999/04/12 v1.0] . . . . .	22
[1999/04/13 v1.1] . . . . .	22
[1999/06/26 v1.2] . . . . .	23
[2006/02/20 v1.3] . . . . .	23
[2006/05/30 v1.4] . . . . .	23
[2007/04/11 v1.5] . . . . .	23
[2007/09/09 v2.0] . . . . .	23
[2008/08/11 v2.1] . . . . .	23
[2010/03/01 v2.2] . . . . .	23
<b>7 Index</b>	<b>23</b>

# The askinclude package

## Abstract

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

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	User interface . . . . .	2
1.2	Single asking mode . . . . .	4
1.3	Regular expressions . . . . .	4
1.3.1	Method <code>makematch</code> . . . . .	4
1.3.2	Method <code>pdfmatch</code> . . . . .	5
1.4	History . . . . .	6
1.5	New features of version 2 . . . . .	6
1.6	Compatibility to version 1 . . . . .	6
<b>2</b>	<b>Implementation</b>	<b>6</b>
2.1	Header and catcodes . . . . .	6
2.2	Delay action after preamble . . . . .	7
2.3	Write entry in <code>.aux</code> file . . . . .	7
2.4	Remember <code>\include</code> files . . . . .	8
2.5	Redefine <code>\include</code> . . . . .	9
2.6	Store answer and match method in <code>.aux</code> file . . . . .	9
2.7	Support for <code>\@includeonly</code> . . . . .	9
2.8	Stop if <code>\includeonly</code> is active . . . . .	10
2.9	<code>\includeonly</code> . . . . .	10
2.10	Options . . . . .	10
2.11	Strings . . . . .	11
2.12	Set defaults . . . . .	12
2.13	Questions . . . . .	12
2.13.1	Generic question header . . . . .	12
2.13.2	Display files . . . . .	13
2.13.3	Previous answer . . . . .	13
2.13.4	Current regular expression support . . . . .	14
2.13.5	Main question text . . . . .	14
2.13.6	Main question . . . . .	14
2.14	Evaluate answer of main question . . . . .	15
2.15	Ask for each file . . . . .	18
<b>3</b>	<b>Test</b>	<b>20</b>
3.1	Included files . . . . .	20
3.2	Special test setup . . . . .	20
3.3	Common start . . . . .	20
3.4	First run tests . . . . .	23
3.5	Second run tests . . . . .	28
3.6	Compatibility for changing from old to new . . . . .	32
3.7	Regular expressions . . . . .	33
3.8	Common end . . . . .	34

<b>4</b>	<b>Installation</b>	<b>34</b>
4.1	Download . . . . .	34
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
<b>5</b>	<b>Acknowledgement</b>	<b>36</b>
<b>6</b>	<b>References</b>	<b>36</b>
<b>7</b>	<b>History</b>	<b>37</b>
	[1991/11/05 v0.95] . . . . .	37
	[1991/11/05 v0.99] . . . . .	37
	[1991/11/07 v1.0] . . . . .	37
	[1991/12/13 v1.1] . . . . .	37
	[1994/11/02 v1.2e] . . . . .	37
	[2007/10/15 v1.0 (askinc)] . . . . .	37
	[2007/10/23 v2.0] . . . . .	37
	[2008/08/11 v2.1] . . . . .	38
<b>8</b>	<b>Index</b>	<b>38</b>

# The atbegshi package

## Abstract

This package is a modern reimplementaion of package `everyshi` without the burden of compatibility. It makes use of  $\varepsilon$ -TeX's if available. Both L<sup>A</sup>T<sub>E</sub>X and plain-T<sub>E</sub>X are supported.

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Examples . . . . .	4
1.1.1	Example: circle in background . . . . .	4
1.1.2	Example: adding TrimBox for dvipdfmx . . . . .	4
<b>2</b>	<b>Method of <code>\shipout</code> overloading</b>	<b>5</b>
2.1	<code>\shipout</code> . . . . .	5
2.2	<code>\afterassignment</code> . . . . .	5
2.3	Test for direct or indirect boxes . . . . .	6
2.3.1	With $\varepsilon$ -T <sub>E</sub> X . . . . .	6
2.3.2	Without $\varepsilon$ -T <sub>E</sub> X . . . . .	6
2.3.3	<code>\lastkern</code> method . . . . .	7
2.4	Output . . . . .	8
2.5	Separate box register . . . . .	8
2.6	Summary . . . . .	8
2.6.1	With $\varepsilon$ -T <sub>E</sub> X . . . . .	8
2.6.2	Without $\varepsilon$ -T <sub>E</sub> X, traditional way . . . . .	9
2.6.3	<code>\lastkern</code> method . . . . .	9
<b>3</b>	<b>Implementation</b>	<b>10</b>
3.1	Reload check and package identification . . . . .	10
3.2	Catcodes . . . . .	11
3.3	Preparations . . . . .	12
3.4	Positioning . . . . .	15
3.5	Patches . . . . .	17
3.5.1	Package <code>crop</code> . . . . .	17
3.5.2	Package <code>everyshi</code> . . . . .	19
3.5.3	Class <code>memoir</code> . . . . .	20
<b>4</b>	<b>Test</b>	<b>21</b>
4.1	Catcode checks for loading . . . . .	21
<b>5</b>	<b>Installation</b>	<b>25</b>
5.1	Download . . . . .	25
5.2	Bundle installation . . . . .	25
5.3	Package installation . . . . .	26
5.4	Refresh file name databases . . . . .	26
5.5	Some details for the interested . . . . .	26

<b>6 History</b>	<b>27</b>
[2007/04/17 v1.0] . . . . .	27
[2007/04/18 v1.1] . . . . .	27
[2007/04/19 v1.2] . . . . .	27
[2007/04/26 v1.3] . . . . .	27
[2007/04/27 v1.4] . . . . .	27
[2007/06/06 v1.5] . . . . .	27
[2007/09/09 v1.6] . . . . .	27
[2008/07/18 v1.7] . . . . .	27
[2008/07/19 v1.8] . . . . .	28
[2008/07/31 v1.9] . . . . .	28
[2009/12/02 v1.10] . . . . .	28
[2010/03/01 v1.11] . . . . .	28
[2010/03/25 v1.12] . . . . .	28
<b>7 Index</b>	<b>28</b>

# The atenddvi package

## Abstract

L<sup>A</sup>T<sub>E</sub>X 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`.

<b>1</b>	<b>Documentation</b>	<b>1</b>
<b>2</b>	<b>Implementation</b>	<b>2</b>
<b>3</b>	<b>Installation</b>	<b>3</b>
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
<b>4</b>	<b>History</b>	<b>5</b>
	[2007/03/20 v1.0] . . . . .	5
	[2007/04/17 v1.1] . . . . .	5
<b>5</b>	<b>Index</b>	<b>5</b>

# 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.

<b>1</b>	<b>Documentation</b>	<b>2</b>
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 <code>color</code> . . . . .	3
1.2.3	Perl script <code>pdfatfi.pl</code> . . . . .	4
1.3	Changes to <code>attachfile</code> . . . . .	4
<b>2</b>	<b>Implementation</b>	<b>4</b>
2.1	Package . . . . .	4
2.2	Drivers . . . . .	17
2.2.1	pdfTeX . . . . .	17
2.2.2	dvips . . . . .	19
2.3	Perl script <code>pdfatfi.pl</code> . . . . .	27
<b>3</b>	<b>Installation</b>	<b>30</b>
3.1	Download . . . . .	30
3.2	Bundle installation . . . . .	31
3.3	Package installation . . . . .	31
3.4	Refresh file name databases . . . . .	31
3.5	Script installation . . . . .	31
3.6	Some details for the interested . . . . .	31
<b>4</b>	<b>References</b>	<b>32</b>
<b>5</b>	<b>History</b>	<b>32</b>
	[2005/02/23 v2.0] . . . . .	32
	[2005/10/07 v2.1] . . . . .	33
	[2006/08/17 v2.2] . . . . .	33
	[2007/04/11 v2.3] . . . . .	33
	[2008/07/29 v2.4] . . . . .	33
	[2009/09/25 v2.5] . . . . .	33
<b>6</b>	<b>Index</b>	<b>33</b>



# The atveryend package

## Abstract

This L<sup>A</sup>T<sub>E</sub>X 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.

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Related work . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	Hooks . . . . .	3
2.2	Redefining <code>\enddocument</code> . . . . .	4
2.2.1	L <sup>A</sup> T <sub>E</sub> X kernel . . . . .	5
2.2.2	Package <code>booklet</code> , file <code>2up.tex</code> . . . . .	6
2.2.3	Class <code>dinbrief</code> . . . . .	6
2.2.4	Class <code>combine</code> . . . . .	7
2.2.5	Class <code>jpsj2</code> . . . . .	8
2.2.6	Testing and redefining . . . . .	9
2.3	Using hooks of other packages . . . . .	9
2.3.1	Package <code>scrfile</code> . . . . .	9
2.3.2	Package <code>etoolbox</code> . . . . .	10
2.4	Hack into <code>\enddocument</code> . . . . .	10
2.5	Class <code>letter</code> . . . . .	10
<b>3</b>	<b>Test</b>	<b>12</b>
3.1	Catcode checks for loading . . . . .	12
<b>4</b>	<b>Installation</b>	<b>13</b>
4.1	Download . . . . .	13
4.2	Bundle installation . . . . .	14
4.3	Package installation . . . . .	14
4.4	Refresh file name databases . . . . .	14
4.5	Some details for the interested . . . . .	14
<b>5</b>	<b>Acknowledgement</b>	<b>15</b>
<b>6</b>	<b>References</b>	<b>15</b>
<b>7</b>	<b>History</b>	<b>15</b>
	[2009/12/06 v1.0] . . . . .	15
	[2009/12/07 v1.1] . . . . .	16
	[2009/12/09 v1.2] . . . . .	16
	[2009/12/11 v1.3] . . . . .	16
	[2010/01/25 v1.4] . . . . .	16
	[2010/03/24 v1.5] . . . . .	16



# The auxhook package

## Abstract

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

<b>1</b>	<b>User interface</b>	<b>1</b>
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Identification . . . . .	2
2.2	Hook setup . . . . .	2
2.3	User macros . . . . .	2
2.4	Patches . . . . .	3
2.4.1	\document . . . . .	3
2.4.2	\@include . . . . .	3
<b>3</b>	<b>Installation</b>	<b>4</b>
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
<b>4</b>	<b>References</b>	<b>6</b>
<b>5</b>	<b>History</b>	<b>6</b>
	[2006/05/31 v1.0] . . . . .	6
	[2007/04/06 v1.1] . . . . .	6
	[2009/12/14 v1.2] . . . . .	6
<b>6</b>	<b>Index</b>	<b>6</b>

# The bigintcalc package

## Abstract

This package provides expandable arithmetic operations with big integers that can exceed  $\text{\TeX}$ 's number limits.

<b>1</b>	<b>Documentation</b>	<b>2</b>
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 . . . . .	3
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
<b>2</b>	<b>Implementation</b>	<b>8</b>
2.1	Reload check and package identification . . . . .	8
2.2	Catcodes . . . . .	9
2.3	$\varepsilon$ - $\text{\TeX}$ detection . . . . .	9
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 . . . . .	15
2.12	Add, Sub . . . . .	19
2.13	Shl, Shr . . . . .	24
2.14	$\backslash\text{BIC@Tim}$ . . . . .	27
2.15	Mul . . . . .	29
2.16	Sqr . . . . .	30
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

<b>3</b>	<b>Test</b>	<b>44</b>
3.1	Catcode checks for loading . . . . .	44
3.2	Macro tests . . . . .	46
3.2.1	Preamble with test macro definitions . . . . .	46
3.2.2	Time . . . . .	49
3.2.3	Test sets . . . . .	50
<b>4</b>	<b>Installation</b>	<b>59</b>
4.1	Download . . . . .	59
4.2	Bundle installation . . . . .	59
4.3	Package installation . . . . .	59
4.4	Refresh file name databases . . . . .	59
4.5	Some details for the interested . . . . .	60
<b>5</b>	<b>History</b>	<b>60</b>
	[2007/09/27 v1.0] . . . . .	60
	[2007/11/11 v1.1] . . . . .	60
<b>6</b>	<b>Index</b>	<b>60</b>

# 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.

<b>1</b>	<b>Documentation</b>	<b>3</b>
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
<b>2</b>	<b>Implementation</b>	<b>9</b>
2.1	Reload check and package identification . . . . .	9
2.2	Catcodes . . . . .	10
2.3	Package loading . . . . .	11
2.4	Help macros . . . . .	11
2.4.1	Number constant . . . . .	11
2.4.2	General basic macros . . . . .	11
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 . . . . .	22
2.8.1	\bitsetAnd . . . . .	22
2.8.2	\bitsetAndNot . . . . .	23
2.8.3	\bitsetOr . . . . .	24
2.8.4	\bitsetXor . . . . .	25

2.8.5	Shifting . . . . .	26
2.8.6	<code>\bitsetShiftLeft</code> . . . . .	26
2.8.7	<code>\bitsetShiftRight</code> . . . . .	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	<code>\bitsetGet</code> . . . . .	32
2.10.2	<code>\bitsetNextClearBit</code> , <code>\bitsetNextSetBit</code> . . . . .	32
2.10.3	<code>\bitsetGetSetBitList</code> . . . . .	35
2.11	Bit set properties . . . . .	35
2.12	Queries . . . . .	36
<b>3</b>	<b>Test</b> . . . . .	<b>38</b>
3.1	Catcode checks for loading . . . . .	38
3.2	Macro tests . . . . .	39
3.2.1	Preamble . . . . .	39
3.2.2	Time . . . . .	40
3.2.3	Detection of unwanted space . . . . .	40
3.2.4	Test macros . . . . .	40
3.2.5	Test sets . . . . .	42
<b>4</b>	<b>Installation</b> . . . . .	<b>57</b>
4.1	Download . . . . .	57
4.2	Bundle installation . . . . .	57
4.3	Package installation . . . . .	57
4.4	Refresh file name databases . . . . .	58
4.5	Some details for the interested . . . . .	58
<b>5</b>	<b>History</b> . . . . .	<b>58</b>
	[2007/09/28 v1.0] . . . . .	58
<b>6</b>	<b>Index</b> . . . . .	<b>58</b>

# 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**.

<b>1 Documentation</b>	<b>2</b>
1.1 Introduction	2
1.2 Bitmap image parsers	2
1.2.1 User interface	3
1.2.2 Hints	3
1.2.3 Test program	3
1.2.4 Interface for programmers	4
1.3 Improved bitmap inclusion	4
<b>2 Implementation</b>	<b>4</b>
2.1 Basic package <b>bmpsize-base</b>	4
2.2 Bitmap formats	11
2.2.1 png	11
2.2.2 jpg	12
2.2.3 bmp	20
2.2.4 gif	22
2.2.5 tiff	23
2.2.6 pnm	26
2.2.7 pam	30
2.2.8 xpm	36
2.2.9 tga	41
2.2.10 pcx	42
2.2.11 msp	44
2.2.12 sgi	45
2.3 Package <b>bmpsize</b>	45
2.4 Drivers	48
2.4.1 dvips	48
2.4.2 dvipdfm and dvipdfmx	50
2.5 Test program <b>bmpsize-test.tex</b>	53
<b>3 Installation</b>	<b>55</b>
3.1 Download	55
3.2 Bundle installation	55
3.3 Package installation	56
3.4 Refresh file name databases	56
3.5 Some details for the interested	56



<b>4</b>	<b>References</b>	<b>57</b>
4.1	URLs for bitmap format descriptions . . . . .	57
4.1.1	JPEG . . . . .	57
4.1.2	PNG . . . . .	57
4.1.3	GIF . . . . .	57
4.1.4	BMP . . . . .	57
4.1.5	PCX . . . . .	57
4.1.6	MSP . . . . .	57
4.1.7	TIFF . . . . .	57
4.1.8	TGA . . . . .	57
4.1.9	SGI . . . . .	58
4.1.10	WMF . . . . .	58
4.1.11	XPM . . . . .	58
<b>5</b>	<b>History</b>	<b>58</b>
	[2006/08/24 v1.0] . . . . .	58
	[2007/02/18 v1.1] . . . . .	58
	[2007/04/11 v1.2] . . . . .	58
	[2007/05/01 v1.3] . . . . .	58
	[2007/11/11 v1.4] . . . . .	58
	[2008/08/11 v1.5] . . . . .	58
	[2009/09/04 v1.6] . . . . .	58
<b>6</b>	<b>Index</b>	<b>59</b>

# 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.

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Introduction	2
1.2	Options	3
1.2.1	Driver options	3
1.2.2	Style options	3
1.2.3	Action options	4
1.2.4	Level options	4
1.3	Compatibility with <code>hyperref</code>	5
1.4	Adding bookmarks at the end	5
1.5	Limitations/Todos	6
<b>2</b>	<b>Example</b>	<b>6</b>
<b>3</b>	<b>Implementation</b>	<b>7</b>
3.1	Package	7
3.1.1	Requirements	8
3.1.2	Package options	8
3.1.3	Action options	11
3.1.4	Option <code>atend</code>	14
3.1.5	Driver setup and loading	14
3.1.6	Compatibility for <code>hyperref</code>	16
3.2	Driver for <code>dvipdfm</code>	16
3.3	Driver for <code>VT<sub>E</sub>X</code>	19
3.4	Driver for <code>pdfT<sub>E</sub>X</code>	23
3.5	Drivers with <code>pdfmark</code> specials	25
3.5.1	Driver <code>dvips</code>	25
3.5.2	Driver <code>dvipsone</code>	25
3.5.3	Driver <code>textures</code>	25
3.5.4	Common part	25
3.6	Common part for <code>pdftex</code> and <code>pdfmark</code>	28
3.6.1	Write auxiliary file	28
3.6.2	Read auxiliary data	29
3.7	Option <code>atend</code>	29
3.7.1	Hook	29
3.7.2	Drivers using hooks at end of document	30
3.7.3	Drivers using <code>\AtEndDvi</code>	30

<b>4</b>	<b>Installation</b>	<b>30</b>
4.1	Download . . . . .	30
4.2	Bundle installation . . . . .	31
4.3	Package installation . . . . .	31
4.4	Refresh file name databases . . . . .	31
4.5	Some details for the interested . . . . .	31
<b>5</b>	<b>History</b>	<b>32</b>
[2007/02/19 v0.1]	. . . . .	32
[2007/02/20 v0.2]	. . . . .	32
[2007/02/21 v0.3]	. . . . .	32
[2007/02/22 v0.4]	. . . . .	32
[2007/03/02 v0.5]	. . . . .	32
[2007/03/03 v0.6]	. . . . .	32
[2007/03/07 v0.7]	. . . . .	33
[2007/04/09 v0.8]	. . . . .	33
[2007/04/25 v0.9]	. . . . .	33
[2007/05/29 v1.0]	. . . . .	33
[2007/07/13 v1.1]	. . . . .	33
[2007/09/25 v1.2]	. . . . .	33
[2008/08/08 v1.3]	. . . . .	33
[2008/09/13 v1.4]	. . . . .	33
[2009/08/13 v1.5]	. . . . .	33
[2009/12/06 v1.6]	. . . . .	33
[2009/12/07 v1.7]	. . . . .	33
[2009/12/17 v1.8]	. . . . .	33
<b>6</b>	<b>Index</b>	<b>34</b>

# The catchfile package

## Abstract

This package catches the contents of a file and puts it in a macro. It requires  $\epsilon$ -TeX. Both L<sup>A</sup>T<sub>E</sub>X and plain-T<sub>E</sub>X are supported.

<b>1</b>	<b>Documentation</b>	<b>1</b>
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Reload check and package identification . . . . .	2
2.2	Catcodes . . . . .	3
2.3	Preparations . . . . .	3
2.4	Looking for primitive <code>\input</code> . . . . .	4
2.5	Input file check . . . . .	4
2.6	Catch file contents . . . . .	5
<b>3</b>	<b>Test</b>	<b>6</b>
3.1	Catcode checks for loading . . . . .	6
3.2	L <sup>A</sup> T <sub>E</sub> X . . . . .	7
3.3	plain-T <sub>E</sub> X . . . . .	8
<b>4</b>	<b>Installation</b>	<b>8</b>
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
<b>5</b>	<b>History</b>	<b>10</b>
	[2007/05/30 v1.0] . . . . .	10
	[2007/09/09 v1.1] . . . . .	10
	[2007/11/11 v1.2] . . . . .	10
	[2010/03/01 v1.3] . . . . .	10
<b>6</b>	<b>Index</b>	<b>10</b>

# The centernot package

## Abstract

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

<b>1</b>	<b>User interface</b>	<b>1</b>
<b>2</b>	<b>Implementation</b>	<b>2</b>
<b>3</b>	<b>Installation</b>	<b>2</b>
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
<b>4</b>	<b>History</b>	<b>4</b>
[2006/12/02 v1.0]	. . . . .	4
[2007/05/31 v1.1]	. . . . .	4
<b>5</b>	<b>Index</b>	<b>4</b>

# 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`.

<b>1</b>	<b>Usage</b>	<b>1</b>
1.1	Example . . . . .	1
<b>2</b>	<b>Implementation</b>	<b>2</b>
<b>3</b>	<b>Installation</b>	<b>3</b>
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
<b>4</b>	<b>History</b>	<b>4</b>
	[2001/06/21 v1.0] . . . . .	4
	[2001/06/22 v1.1] . . . . .	4
	[2006/02/20 v1.2] . . . . .	4
<b>5</b>	<b>Index</b>	<b>5</b>

# The classlist package

## Abstract

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

<b>1</b>	<b>Documentation</b>	<b>1</b>
1.1	Background . . . . .	1
1.2	Usage . . . . .	1
<b>2</b>	<b>Implementation</b>	<b>2</b>
<b>3</b>	<b>Installation</b>	<b>4</b>
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
<b>4</b>	<b>History</b>	<b>5</b>
	[2005/06/19 v1.0] . . . . .	5
	[2005/06/19 v1.1] . . . . .	6
	[2006/02/20 v1.2] . . . . .	6
	[2008/08/11 v1.3] . . . . .	6
<b>5</b>	<b>Index</b>	<b>6</b>

# 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.

<b>1</b>	<b>User interface</b>	<b>1</b>
1.1	Introduction . . . . .	1
1.2	Symbols . . . . .	2
1.3	Fine tuning . . . . .	2
1.3.1	Example . . . . .	3
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	Identification . . . . .	3
2.2	Distance control . . . . .	3
2.3	Centered colons . . . . .	3
2.4	Combined symbols . . . . .	4
<b>3</b>	<b>Installation</b>	<b>5</b>
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
<b>4</b>	<b>References</b>	<b>6</b>
<b>5</b>	<b>History</b>	<b>6</b>
	[2006/08/01 v1.0] . . . . .	6
<b>6</b>	<b>Index</b>	<b>6</b>



# 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 color stack space”.

<b>1</b>	<b>Documentation</b>	<b>1</b>
1.1	Introduction . . . . .	1
1.2	Usage . . . . .	2
1.2.1	With $\varepsilon$ -TeX . . . . .	2
1.2.2	Without $\varepsilon$ -TeX . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>2</b>
<b>3</b>	<b>Installation</b>	<b>3</b>
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
<b>4</b>	<b>History</b>	<b>4</b>
[2000/08/31 v1.0]	. . . . .	4
[2006/02/20 v1.1]	. . . . .	4
[2008/08/11 v1.2]	. . . . .	4
<b>5</b>	<b>Index</b>	<b>5</b>

# The embedfile package

## Abstract

This package embeds files to a PDF document. Currently the only supported driver is pdfTeX  $\geq 1.30$  in PDF mode.

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Introduction . . . . .	2
1.1.1	Future development . . . . .	2
1.2	User interface . . . . .	2
1.3	Collection support (PDF 1.7) . . . . .	4
1.4	Export of object references . . . . .	5
1.4.1	Example . . . . .	5
1.5	Examples . . . . .	6
1.5.1	plain-T <sub>E</sub> X . . . . .	6
1.5.2	Collection example . . . . .	6
1.6	Package dtx-attach . . . . .	7
<b>2</b>	<b>Implementation</b>	<b>8</b>
2.1	Reload check and package identification . . . . .	8
2.2	Catcodes . . . . .	9
2.3	Tools . . . . .	9
2.4	Check for recent pdfTeX in PDF mode . . . . .	10
2.5	Strings . . . . .	10
2.6	Switches . . . . .	11
2.7	Key value definitions . . . . .	12
2.8	Embed the file . . . . .	17
<b>3</b>	<b>Test</b>	<b>21</b>
3.1	Catcode checks for loading . . . . .	21
3.2	Simple test . . . . .	23
3.3	Test for ini-T <sub>E</sub> X . . . . .	23
<b>4</b>	<b>Installation</b>	<b>24</b>
4.1	Download . . . . .	24
4.2	Bundle installation . . . . .	24
4.3	Package installation . . . . .	24
4.4	Refresh file name databases . . . . .	25
4.5	Some details for the interested . . . . .	25
<b>5</b>	<b>References</b>	<b>25</b>
<b>6</b>	<b>History</b>	<b>26</b>
	[2006/08/16 v1.0] . . . . .	26
	[2007/04/11 v1.1] . . . . .	26
	[2007/09/09 v1.2] . . . . .	26
	[2007/10/28 v2.0] . . . . .	26
	[2007/10/29 v2.1] . . . . .	26

[2007/11/11 v2.2]	26
[2007/11/25 v2.3]	26
[2009/09/25 v2.4]	26
[2010/03/01 v2.5]	27
<b>7 Index</b>	<b>28</b>

# The engord package

## Abstract

The package generates the suffix of English ordinal numbers. It can be used with plain and L<sup>A</sup>T<sub>E</sub>X formats.

<b>1</b>	<b>Usage</b>	<b>2</b>
1.1	Package options . . . . .	2
1.2	Examples . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>3</b>
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
<b>3</b>	<b>Test</b>	<b>7</b>
3.1	Catcode checks for loading . . . . .	7
<b>4</b>	<b>Installation</b>	<b>9</b>
4.1	Download . . . . .	9
4.2	Bundle installation . . . . .	9
4.3	Package installation . . . . .	9
4.4	Refresh file name databases . . . . .	9
4.5	Some details for the interested . . . . .	10
<b>5</b>	<b>History</b>	<b>10</b>
	[2000/05/23 v1.0] . . . . .	10
	[2003/04/28 v1.1] . . . . .	10
	[2006/02/20 v1.2] . . . . .	10
	[2007/04/11 v1.3] . . . . .	10
	[2007/04/26 v1.4] . . . . .	11
	[2007/09/09 v1.5] . . . . .	11
	[2007/09/20 v1.6] . . . . .	11
	[2008/08/11 v1.7] . . . . .	11
	[2010/03/01 v1.8] . . . . .	11
<b>6</b>	<b>Index</b>	<b>11</b>

# 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.

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Introduction . . . . .	2
1.2	Requirements . . . . .	2
1.3	Usage . . . . .	3
1.4	Options . . . . .	3
1.5	Configuration . . . . .	5
1.5.1	System configuration file <code>epstopdf-sys.cfg</code> . . . . .	5
1.5.2	User configuration file <code>epstopdf.cfg</code> . . . . .	5
1.5.3	Conversion program . . . . .	5
1.6	Other image formats . . . . .	5
<b>2</b>	<b>Implementation</b>	<b>6</b>
2.1	Wrapper package . . . . .	6
2.1.1	Option handling . . . . .	7
2.2	Base package . . . . .	7
2.3	Preparations . . . . .	8
2.3.1	Relead check and identification . . . . .	8
2.3.2	Catcodes . . . . .	9
2.3.3	Load packages . . . . .	9
2.4	Checks . . . . .	9
2.5	Package loading . . . . .	10
2.6	Options . . . . .	10
2.6.1	Default setting . . . . .	10
2.7	Make and verbose . . . . .	10
2.8	Adding conversion support . . . . .	12
2.9	Declare graphics rule . . . . .	14
<b>3</b>	<b>Test</b>	<b>15</b>
3.1	Preface for standard catcode check . . . . .	15
3.2	Catcode checks for loading . . . . .	15
<b>4</b>	<b>Installation</b>	<b>16</b>
4.1	Download . . . . .	16
4.2	Bundle installation . . . . .	17
4.3	Package installation . . . . .	17
4.4	Refresh file name databases . . . . .	17
4.5	Some details for the interested . . . . .	17

<b>5 History</b>	<b>18</b>
[2001/01/06 v1.0]	18
[2001/02/04 v1.1]	18
[2006/02/20 v1.2]	18
[2006/08/26 v1.3]	18
[2007/04/26 v1.4]	18
[2007/10/02 v1.5]	19
[2007/11/11 v1.6]	19
[2008/05/06 v1.7]	19
[2009/03/01 v1.8]	19
[2009/07/06 v1.9]	19
[2009/07/07 v1.10]	19
[2009/07/12 v2.0]	19
[2009/07/15 v2.1]	19
[2009/07/16 v2.2]	19
[2009/09/24 v2.3]	20
[2009/10/17 v2.4]	20
[2010/02/09 v2.5]	20
<b>6 Index</b>	<b>20</b>

# The etexcmds package

## Abstract

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

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	<code>\unexpanded</code> . . . . .	2
1.2	<code>\expanded</code> . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Reload check and package identification . . . . .	2
2.2	Catcodes . . . . .	3
2.3	Provide <code>\newif</code> . . . . .	4
2.4	Load package <code>infwarerr</code> . . . . .	4
2.5	<code>\unexpanded</code> . . . . .	4
2.6	<code>\expanded</code> . . . . .	5
<b>3</b>	<b>Test</b>	<b>5</b>
3.1	Catcode checks for loading . . . . .	5
3.2	Macro tests . . . . .	7
<b>4</b>	<b>Installation</b>	<b>8</b>
4.1	Download . . . . .	8
4.2	Bundle installation . . . . .	8
4.3	Package installation . . . . .	8
4.4	Refresh file name databases . . . . .	9
4.5	Some details for the interested . . . . .	9
<b>5</b>	<b>History</b>	<b>9</b>
	[2007/05/06 v1.0] . . . . .	9
	[2007/09/09 v1.1] . . . . .	9
	[2007/12/12 v1.2] . . . . .	9
	[2010/01/28 v1.3] . . . . .	9
<b>6</b>	<b>Index</b>	<b>10</b>

# 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.

<b>1</b>	<b>Documentation</b>	<b>1</b>
1.1	User interface . . . . .	2
1.2	Requirements . . . . .	2
1.3	ToDo . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>2</b>
<b>3</b>	<b>Installation</b>	<b>5</b>
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
<b>4</b>	<b>History</b>	<b>7</b>
[2007/02/18 v0.1]	. . . . .	7
[2007/03/07 v0.2]	. . . . .	7
[2007/03/31 v0.3]	. . . . .	7
[2007/09/30 v0.4]	. . . . .	7
<b>5</b>	<b>Index</b>	<b>7</b>



# The `getttitlestring` 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.

<b>1</b>	<b>Documentation</b>	<b>1</b>
1.1	Macros . . . . .	1
1.2	Options . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Options . . . . .	4
2.2	<code>\GetTitleString</code> . . . . .	4
2.2.1	Expand method . . . . .	5
2.2.2	Non-expand method . . . . .	5
<b>3</b>	<b>Test</b>	<b>7</b>
3.1	Catcode checks for loading . . . . .	7
3.2	Test of non-expand method . . . . .	8
<b>4</b>	<b>Installation</b>	<b>9</b>
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
<b>5</b>	<b>References</b>	<b>10</b>
<b>6</b>	<b>History</b>	<b>11</b>
	[2009/12/08 v1.0] . . . . .	11
	[2009/12/12 v1.1] . . . . .	11
	[2009/12/13 v1.2] . . . . .	11
	[2009/12/18 v1.3] . . . . .	11
<b>7</b>	<b>Index</b>	<b>11</b>

# The grfext package

## Abstract

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

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Introduction . . . . .	2
1.2	User interface . . . . .	2
1.3	Package loading . . . . .	2
1.4	plain- <code>T<sub>E</sub>X</code> . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	Relead check and identification . . . . .	3
2.2	Catcodes . . . . .	4
2.3	plain- <code>T<sub>E</sub>X</code> . . . . .	4
2.4	Add . . . . .	4
2.5	Check . . . . .	5
2.6	Remove . . . . .	6
2.7	Print . . . . .	6
<b>3</b>	<b>Test</b>	<b>7</b>
3.1	Catcode checks for loading . . . . .	7
3.2	Macro tests . . . . .	8
3.2.1	Preamble . . . . .	8
3.2.2	Detection of unwanted space . . . . .	8
3.2.3	Generic test macros . . . . .	8
3.2.4	Test for <code>\AppendGraphicsExtensions</code> . . . . .	9
3.2.5	Test for <code>\PrependGraphicsExtensions</code> . . . . .	9
3.2.6	Test for <code>\RemoveGraphicsExtensions</code> . . . . .	10
<b>4</b>	<b>Installation</b>	<b>11</b>
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
<b>5</b>	<b>References</b>	<b>12</b>
<b>6</b>	<b>History</b>	<b>12</b>
	[2007/09/30 v1.0] . . . . .	12
<b>7</b>	<b>Index</b>	<b>12</b>

# 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 pdf<sub>TEX</sub> in PDF mode the file name may contain spaces.

<b>1 Usage</b>	<b>2</b>
1.1 Option <code>multidot</code>	2
1.2 Option <code>babel</code>	2
1.3 Option <code>extendedchars</code>	2
1.4 Option <code>encoding</code>	3
1.4.1 Option <code>inputencoding</code>	3
1.4.2 Option <code>filenameencoding</code>	3
1.4.3 Example	3
1.5 Option <code>space</code>	3
1.6 General use	4
1.7 Default settings	4
<b>2 Implementation</b>	<b>4</b>
2.1 Identification	4
2.2 Catcode stuff	4
2.3 Options	5
<b>3 Test</b>	<b>9</b>
3.1 Multidot with default rule	9
<b>4 Installation</b>	<b>10</b>
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
<b>5 References</b>	<b>12</b>
<b>6 History</b>	<b>12</b>
[2004/07/18 v0.5]	12
[2006/08/15 v1.0]	12
[2006/08/17 v1.1]	12
[2006/11/30 v1.2]	12
[2007/04/11 v1.3]	12
[2007/06/13 v1.4]	12
[2007/08/16 v1.5]	12
[2007/11/11 v1.6]	12
[2007/11/24 v1.7]	12
[2008/08/11 v1.8]	13
[2008/10/13 v1.9]	13

[2009/09/25 v1.10]	13
[2010/01/28 v1.11]	13
<b>7 Index</b>	<b>13</b>

# 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.

<b>1</b>	<b>No usage</b>	<b>2</b>
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Help macros . . . . .	2
2.2	History . . . . .	2
2.3	Formatting macros . . . . .	3
2.4	Names . . . . .	4
2.5	Setup . . . . .	6
2.5.1	Package doc . . . . .	6
2.5.2	Page layout . . . . .	6
<b>3</b>	<b>Installation</b>	<b>6</b>
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
<b>4</b>	<b>History</b>	<b>7</b>
[1999/06/26 v0.3]	. . . . .	7
[2000/08/14 v0.4]	. . . . .	7
[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]	. . . . .	8
[2007/12/12 v0.10]	. . . . .	8
[2008/08/11 v0.11]	. . . . .	8
[2009/08/07 v0.12]	. . . . .	8
[2009/12/02 v0.13]	. . . . .	8
[2010/02/03 v0.14]	. . . . .	8
[2010/03/10 v0.15]	. . . . .	8
<b>5</b>	<b>Index</b>	<b>8</b>

# 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.

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Summary . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>3</b>
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
<b>3</b>	<b>Test</b>	<b>20</b>
3.1	Test for package attachfile2 . . . . .	25
3.2	Test for package xcolor . . . . .	27
3.2.1	Test for \@frameb@x/\fbox . . . . .	28
<b>4</b>	<b>Installation</b>	<b>28</b>
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
<b>5</b>	<b>History</b>	<b>29</b>
	[2007/04/09 v1.0] . . . . .	29
	[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
<b>6</b>	<b>Index</b>	<b>30</b>

# 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.

<b>1</b>	<b>Usage</b>	<b>2</b>
1.1	Bookmarks restrictions . . . . .	2
1.2	<code>\texorpdfstring</code> . . . . .	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 <code>hyperref</code> . . . . .	3
1.8	Protecting parentheses . . . . .	4
<b>2</b>	<b>Implementation</b>	<b>4</b>
<b>3</b>	<b>Installation</b>	<b>7</b>
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
<b>4</b>	<b>History</b>	<b>8</b>
	[1998/11/20 v1.0] . . . . .	8
	[1999/04/12 v2.0] . . . . .	8
	[2000/03/22 v2.1] . . . . .	8
	[2006/02/20 v2.2] . . . . .	9
	[2007/03/05 v2.3] . . . . .	9
	[2007/04/11 v2.4] . . . . .	9
<b>5</b>	<b>Index</b>	<b>9</b>

# 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.

<b>1</b>	<b>Usage</b>	<b>2</b>
1.1	Package options . . . . .	2
1.2	User commands . . . . .	2
1.3	Limitations . . . . .	3
<b>2</b>	<b>Implementation</b>	<b>3</b>
<b>3</b>	<b>Installation</b>	<b>5</b>
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
<b>4</b>	<b>History</b>	<b>7</b>
[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]	. . . . .	7
[2006/02/20 v1.5]	. . . . .	7
[2007/02/19 v1.6]	. . . . .	7
[2007/04/09 v1.7]	. . . . .	7
[2008/04/14 v1.8]	. . . . .	7
[2008/08/11 v1.9]	. . . . .	7
[2008/09/08 v1.10]	. . . . .	7
<b>5</b>	<b>Index</b>	<b>8</b>



# 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.

<b>1</b>	<b>User interface</b>	<b>2</b>
1.1	Introduction . . . . .	2
1.2	Requirements . . . . .	2
1.3	Use . . . . .	2
1.4	Limitations . . . . .	2
1.5	Future . . . . .	3
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	Identification . . . . .	3
2.2	Options . . . . .	3
2.2.1	Option <code>verbose</code> . . . . .	3
2.2.2	Options <code>num</code> and <code>name</code> . . . . .	3
2.3	Check requirements . . . . .	4
2.4	Preamble for auxiliary file . . . . .	4
2.5	Generation of destination names . . . . .	4
2.6	Assign destination names . . . . .	6
2.7	Redefinition of <code>hyperref</code> 's hooks . . . . .	6
2.7.1	Destination setting . . . . .	7
2.7.2	Links . . . . .	7
2.7.3	Outlines of package <code>hyperref</code> . . . . .	8
2.7.4	Outlines of package <code>bookmark</code> . . . . .	8
<b>3</b>	<b>Installation</b>	<b>9</b>
3.1	Download . . . . .	9
3.2	Bundle installation . . . . .	9
3.3	Package installation . . . . .	9
3.4	Refresh file name databases . . . . .	9
3.5	Some details for the interested . . . . .	10
<b>4</b>	<b>References</b>	<b>10</b>
<b>5</b>	<b>History</b>	<b>10</b>
	[2006/06/01 v1.0] . . . . .	10
	[2006/06/01 v2.0] . . . . .	10
	[2007/11/11 v2.1] . . . . .	10
	[2008/08/08 v2.2] . . . . .	11
<b>6</b>	<b>Index</b>	<b>11</b>

# The hypdoc package

## Abstract

This package adds hyper features to the package `doc` that is used in the documentation system of  $\text{\LaTeX} 2_{\epsilon}$ . Bookmarks are added and references are linked as far as possible.

<b>1</b>	<b>Features</b>	<b>2</b>
<b>2</b>	<b>Usage</b>	<b>2</b>
2.1	Options	3
2.2	Simple example	3
2.3	Example <code>source2e.tex</code>	3
<b>3</b>	<b>Implementation</b>	<b>4</b>
3.1	Options	4
3.2	Package loading	4
3.2.1	Patch for bug latex/4096	5
3.3	Bookmarks	5
3.4	<code>\tableofcontents</code>	6
3.5	<code>\listoffigures</code>	6
3.6	<code>\listoftables</code>	7
3.7	<code>\thebibliography</code>	7
3.8	<code>\theindex</code>	7
3.9	<code>\theglossary</code>	8
3.10	Index	9
3.11	<code>\PrintDescribeMacro</code>	11
3.12	<code>\PrintMacroName</code>	11
3.13	<code>\theCodelineNo</code>	12
3.14	<code>\SpecialUsageIndex</code>	12
3.15	<code>\autoindex</code>	12
3.16	<code>\SpecialEnvIndex</code>	13
3.17	<code>\SortIndex</code>	13
3.18	<code>\@wrglossary</code>	13
3.19	<code>\MacroIndent</code>	14
<b>4</b>	<b>Installation</b>	<b>14</b>
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
<b>5</b>	<b>History</b>	<b>15</b>
	[2002/05/10 v1.0]	15
	[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]	16
<b>6 Index</b>	<b>16</b>

# The hypgotoe package

## Abstract

Experimental package for links to embedded files.

<b>1</b>	<b>Documentation</b>	<b>1</b>
1.1	Introduction . . . . .	1
1.2	User interface . . . . .	2
1.3	Example . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	Identification . . . . .	3
2.2	Load packages . . . . .	3
2.3	Color support . . . . .	3
2.4	Extend \href . . . . .	3
2.5	Implement gotoe action . . . . .	4
2.6	Keys for gotoe action . . . . .	5
<b>3</b>	<b>Installation</b>	<b>5</b>
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
<b>4</b>	<b>References</b>	<b>7</b>
<b>5</b>	<b>History</b>	<b>7</b>
	[2007/10/30 v0.1] . . . . .	7
<b>6</b>	<b>Index</b>	<b>7</b>

# The hyphsubst package

## Abstract

A T<sub>E</sub>X 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.

<b>1</b>	<b>Documentation</b>	<b>1</b>
1.1	In short . . . . .	1
1.2	Longer version . . . . .	2
1.3	L <sup>A</sup> T <sub>E</sub> X . . . . .	2
1.4	plain-T <sub>E</sub> X . . . . .	3
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	Reload check and package identification . . . . .	3
2.2	Package . . . . .	4
<b>3</b>	<b>Test</b>	<b>6</b>
3.1	Catcode checks for loading . . . . .	6
3.2	Main tests . . . . .	7
<b>4</b>	<b>Installation</b>	<b>8</b>
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
<b>5</b>	<b>History</b>	<b>10</b>
	[2008/06/07 v0.1] . . . . .	10
	[2008/06/09 v0.2] . . . . .	10
<b>6</b>	<b>Index</b>	<b>10</b>

# The ifdraft package

## Abstract

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

<b>1</b>	<b>Usage</b>	<b>1</b>
1.1	Package loading . . . . .	1
1.2	User macros . . . . .	1
<b>2</b>	<b>Implementation</b>	<b>2</b>
<b>3</b>	<b>Installation</b>	<b>3</b>
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
<b>4</b>	<b>History</b>	<b>4</b>
	[1999/12/28 v1.0] . . . . .	4
	[2005/10/05 v1.1] . . . . .	5
	[2006/02/20 v1.2] . . . . .	5
	[2008/08/11 v1.3] . . . . .	5
<b>5</b>	<b>Index</b>	<b>5</b>

# The iflang package

## Abstract

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

<b>1</b>	<b>Documentation</b>	<b>2</b>
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Reload check and package identification . . . . .	3
2.2	Tools . . . . .	4
2.2.1	Provide some basic macros of L <sup>A</sup> T <sub>E</sub> X . . . . .	4
2.2.2	Expandible existence check for macros . . . . .	4
2.2.3	Macros for messages . . . . .	5
2.2.4	Support for <code>etex.src</code> . . . . .	5
2.3	<code>\IfLanguagePatterns</code> . . . . .	6
2.4	<code>\IfLanguageName</code> . . . . .	6
2.5	Check plausibility of <code>\language</code> . . . . .	7
<b>3</b>	<b>Test</b>	<b>8</b>
3.1	Catcode checks for loading . . . . .	8
3.2	Test with L <sup>A</sup> T <sub>E</sub> X . . . . .	9
3.3	Test with plain-T <sub>E</sub> X and $\varepsilon$ -T <sub>E</sub> X . . . . .	10
3.4	Test with plain-T <sub>E</sub> X and without $\varepsilon$ -T <sub>E</sub> X/pdfT <sub>E</sub> X . . . . .	11
<b>4</b>	<b>Installation</b>	<b>12</b>
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
<b>5</b>	<b>Acknowledgement</b>	<b>14</b>
<b>6</b>	<b>History</b>	<b>14</b>
	[2007/04/10 v1.0] . . . . .	14
	[2007/04/11 v1.1] . . . . .	14
	[2007/04/12 v1.2] . . . . .	14
	[2007/04/26 v1.3] . . . . .	14
	[2007/09/09 v1.4] . . . . .	14
	[2007/11/11 v1.5] . . . . .	14
<b>7</b>	<b>Index</b>	<b>14</b>

# The ifluatex package

## Abstract

This package looks for L<sup>A</sup>T<sub>E</sub>X regardless of its mode and provides the switch `\ifluatex`. Also it makes `\luatexversion` available if it is not present. It works with plain-T<sub>E</sub>X or L<sup>A</sup>T<sub>E</sub>X.

<b>1</b>	<b>Documentation</b>	<b>1</b>
<b>2</b>	<b>Implementation</b>	<b>2</b>
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 <code>\ifluatex</code> . . . . .	4
2.5	<code>\ifluatex</code> . . . . .	4
2.6	LuaT <sub>E</sub> X v0.39 . . . . .	4
2.7	Protocol entry . . . . .	6
<b>3</b>	<b>Test</b>	<b>6</b>
3.1	Catcode checks for loading . . . . .	6
<b>4</b>	<b>Reload check for plain</b>	<b>7</b>
<b>5</b>	<b>Installation</b>	<b>7</b>
5.1	Download . . . . .	7
5.2	Bundle installation . . . . .	8
5.3	Package installation . . . . .	8
5.4	Refresh file name databases . . . . .	8
5.5	Some details for the interested . . . . .	8
<b>6</b>	<b>History</b>	<b>9</b>
	[2007/12/12 v1.0] . . . . .	9
	[2009/04/10 v1.1] . . . . .	9
	[2009/04/17 v1.2] . . . . .	9
	[2010/03/01 v1.3] . . . . .	9
<b>7</b>	<b>Index</b>	<b>9</b>



# 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 L<sup>A</sup>T<sub>E</sub>X formats.

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Introduction . . . . .	2
1.2	Usage . . . . .	2
1.3	Specification . . . . .	3
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	Reload check and package identification . . . . .	3
2.2	Catcodes . . . . .	4
2.3	Check for previously defined <code>\ifpdf</code> . . . . .	5
2.4	<code>\pdfoutput</code> and LuaTeX . . . . .	5
2.5	<code>\ifpdf</code> . . . . .	6
2.6	Test for fool attempts . . . . .	7
2.7	Protocol entry . . . . .	7
<b>3</b>	<b>Test</b>	<b>7</b>
3.1	Catcode checks for loading . . . . .	7
<b>4</b>	<b>Installation</b>	<b>9</b>
4.1	Download . . . . .	9
4.2	Bundle installation . . . . .	9
4.3	Package installation . . . . .	9
4.4	Refresh file name databases . . . . .	9
4.5	Some details for the interested . . . . .	10
<b>5</b>	<b>History</b>	<b>10</b>
	[2001/06/14 v1.0] . . . . .	10
	[2001/07/14 v1.1] . . . . .	10
	[2001/09/26 v1.2] . . . . .	10
	[2005/07/22 v1.3] . . . . .	10
	[2006/02/20 v1.4] . . . . .	11
	[2007/09/09 v1.5] . . . . .	11
	[2007/12/12 v1.6] . . . . .	11
	[2008/12/12 v1.7] . . . . .	11
	[2009/04/10 v2.0] . . . . .	11
	[2010/01/28 v2.1] . . . . .	11
<b>6</b>	<b>Index</b>	<b>11</b>

# The ifvtex package

## Abstract

This package looks for VT<sub>E</sub>X, implements and sets the switches `\ifvtex`, `\ifvtex<mode>`, `\ifvtexgex`. It works with plain or L<sup>A</sup>T<sub>E</sub>X formats.

<b>1</b>	<b>Usage</b>	<b>1</b>
<b>2</b>	<b>Implemenation</b>	<b>2</b>
2.1	Reload check and package identification . . . . .	2
2.2	Catcodes . . . . .	3
2.3	Check for previously defined <code>\ifvtex</code> . . . . .	4
2.4	Provide <code>\newif</code> . . . . .	4
2.5	<code>\ifvtex</code> . . . . .	5
2.6	Mode and GeX switches . . . . .	5
2.7	Protocol entry . . . . .	5
<b>3</b>	<b>Test</b>	<b>6</b>
3.1	Catcode checks for loading . . . . .	6
<b>4</b>	<b>Installation</b>	<b>7</b>
4.1	Download . . . . .	7
4.2	Bundle installation . . . . .	8
4.3	Package installation . . . . .	8
4.4	Refresh file name databases . . . . .	8
4.5	Some details for the interested . . . . .	8
<b>5</b>	<b>History</b>	<b>9</b>
	[2001/09/26 v1.0] . . . . .	9
	[2006/02/20 v1.1] . . . . .	9
	[2007/01/10 v1.2] . . . . .	9
	[2007/09/09 v1.3] . . . . .	9
	[2008/11/04 v1.4] . . . . .	9
	[2010/03/01 v1.5] . . . . .	9
<b>6</b>	<b>Index</b>	<b>9</b>

# The infwarerr package

## Abstract

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

<b>1</b>	<b>Documentation</b>	<b>1</b>
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Reload check and package identification . . . . .	2
2.2	Catcodes . . . . .	3
2.3	$\text{\LaTeX}$ detection . . . . .	3
2.4	Version for $\text{\LaTeX}$ . . . . .	4
2.5	Version for plain- $\text{\TeX}$ . . . . .	5
<b>3</b>	<b>Test</b>	<b>7</b>
3.1	Catcode checks for loading . . . . .	7
3.2	Macro tests . . . . .	9
<b>4</b>	<b>Installation</b>	<b>12</b>
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
<b>5</b>	<b>History</b>	<b>14</b>
	[2007/04/26 v1.0] . . . . .	14
	[2007/06/14 v1.1] . . . . .	14
	[2007/09/09 v1.2] . . . . .	14
<b>6</b>	<b>Index</b>	<b>14</b>

# 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.

<b>1 Documentation</b>	<b>2</b>
1.1 Definition files	3
1.2 Unicode	4
1.3 Math	4
1.4 Setting the input encoding	4
1.4.1 Encoding as package option	4
1.4.2 <code>\InputEncoding</code>	5
1.4.3 Hooks	5
<b>2 Implementation</b>	<b>5</b>
2.1 Identification	5
2.2 Encoding names	5
2.2.1 Record current encoding names	5
2.2.2 Aliases for encoding names	6
2.3 Package options	7
2.3.1 Declare and process options	7
2.3.2 Load inputenc with encoding options	7
2.3.3 <code>\InputEncoding</code>	7
2.3.4 Option <code>math</code>	8
2.4 Alias encoding file	8
2.5 Encoding files	9
2.5.1 Encoding <code>ascii</code>	9
2.5.2 Encoding <code>atarist</code>	9
2.5.3 Encoding <code>iso-8859-1</code>	14
2.5.4 Encoding <code>iso-8859-2</code>	16
2.5.5 Encoding <code>iso-8859-3</code>	18
2.5.6 Encoding <code>iso-8859-4</code>	21
2.5.7 Encoding <code>iso-8859-5</code>	23
2.5.8 Encoding <code>iso-8859-8</code>	25
2.5.9 Encoding <code>iso-8859-9</code>	27
2.5.10 Encoding <code>iso-8859-10</code>	29
2.5.11 Encoding <code>iso-8859-13</code>	31
2.5.12 Encoding <code>iso-8859-14</code>	34
2.5.13 Encoding <code>iso-8859-15</code>	35
2.5.14 Encoding <code>iso-8859-16</code>	38
2.5.15 Encoding <code>cp437</code>	40
2.5.16 Encoding <code>cp850</code>	44
2.5.17 Encoding <code>cp852</code>	47
2.5.18 Encoding <code>cp855</code>	50
2.5.19 Encoding <code>cp858</code>	52

2.5.20	Encoding cp865 . . . . .	56
2.5.21	Encoding cp866 . . . . .	60
2.5.22	Encoding cp1250 . . . . .	62
2.5.23	Encoding cp1251 . . . . .	65
2.5.24	Encoding cp1252 . . . . .	68
2.5.25	Encoding cp1257 . . . . .	71
2.5.26	Encoding dec-mcs . . . . .	74
2.5.27	Encoding koi8-r . . . . .	76
2.5.28	Encoding mac-centeuro . . . . .	79
2.5.29	Encoding mac-cyrillic . . . . .	81
2.5.30	Encoding mac-roman . . . . .	84
2.5.31	Encoding nextstep . . . . .	88
2.5.32	Non-Unicode additions . . . . .	91
2.6	Additions for <code>utf8enc.dfu</code> . . . . .	92
2.7	Name list . . . . .	95
2.8	Mapping Slot, UC to Encodings . . . . .	95
2.9	Mapping UC to LICR . . . . .	95
2.10	Math meaning declarations . . . . .	95
2.11	Documentation files . . . . .	97
2.11.1	List of known LICR commands . . . . .	97
2.11.2	Commented additions for <code>utf8enc.dfu</code> . . . . .	98
<b>3</b>	<b>Installation</b>	<b>99</b>
3.1	Download . . . . .	99
3.2	Bundle installation . . . . .	99
3.3	Package installation . . . . .	99
3.4	Refresh file name databases . . . . .	100
3.5	Some details for the interested . . . . .	100
<b>4</b>	<b>References</b>	<b>101</b>
4.1	Mappings to Unicode . . . . .	101
<b>5</b>	<b>History</b>	<b>102</b>
[2006/03/05 v1.0]	. . . . .	102
[2007/04/11 v1.1]	. . . . .	102
[2007/06/16 v1.2]	. . . . .	102
[2007/08/16 v1.3]	. . . . .	102
[2009/08/13 v1.4]	. . . . .	102
[2009/12/15 v1.5]	. . . . .	103
[2010/01/11 v1.6]	. . . . .	103
<b>6</b>	<b>Index</b>	<b>103</b>

# The intcalc package

## Abstract

This package provides expandable arithmetic operations with integers.

<b>1</b>	<b>Documentation</b>	<b>2</b>
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
<b>2</b>	<b>Implementation</b>	<b>7</b>
2.1	Reload check and package identification	7
2.2	Catcodes	8
2.3	Macros independent of $\varepsilon$ -TEX	9
2.3.1	Abs, Sgn	9
2.3.2	Min, Max, Cmp	9
2.3.3	Fac	10
2.4	Implementation based on $\varepsilon$ -TEX	10
2.4.1	Num	11
2.4.2	Inv, Abs, Sgn	11
2.4.3	Min, Max, Cmp	11
2.4.4	Inc, Dec	11
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 $\varepsilon$ -TEX	17
2.5.1	Num	17
2.5.2	Inv, Abs, Sgn	17
2.5.3	Min, Max, Cmp	17
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
<b>3</b>	<b>Test</b>	<b>41</b>
3.1	Catcode checks for loading	41
3.2	Macro tests	42
3.2.1	Preamble with test macro definitions	42
3.2.2	Time	46
3.2.3	Test 4: additional mod/div operations	46
3.2.4	Test sets	47
<b>4</b>	<b>Installation</b>	<b>56</b>
4.1	Download	56
4.2	Bundle installation	56
4.3	Package installation	56
4.4	Refresh file name databases	57
4.5	Some details for the interested	57
<b>5</b>	<b>History</b>	<b>57</b>
[2007/09/09 v1.0]		57
[2007/09/27 v1.1]		57
<b>6</b>	<b>Index</b>	<b>58</b>

# 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.

<b>1</b>	<b>Documentation</b>	<b>1</b>
1.1	Motivation . . . . .	1
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Identification . . . . .	2
2.2	Package loading . . . . .	3
2.3	Provide key defining macro . . . . .	3
<b>3</b>	<b>Test</b>	<b>4</b>
3.1	Catcode checks for loading . . . . .	4
<b>4</b>	<b>Installation</b>	<b>5</b>
4.1	Download . . . . .	5
4.2	Bundle installation . . . . .	5
4.3	Package installation . . . . .	5
4.4	Refresh file name databases . . . . .	6
4.5	Some details for the interested . . . . .	6
<b>5</b>	<b>References</b>	<b>6</b>
<b>6</b>	<b>History</b>	<b>6</b>
	[2010/03/01 v1.0] . . . . .	6
<b>7</b>	<b>Index</b>	<b>7</b>



# The kvoptions package

## Abstract

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

<b>1</b>	<b>Introduction</b>	<b>3</b>
1.1	The beginning . . . . .	3
1.2	Overview . . . . .	3
<b>2</b>	<b>Usage</b>	<b>3</b>
2.1	Process options . . . . .	3
2.1.1	<code>\ProcessKeyvalOptions</code> . . . . .	3
2.1.2	<code>\ProcessLocalKeyvalOptions</code> . . . . .	4
2.1.3	<code>\SetupKeyvalOptions</code> . . . . .	4
2.2	Option declarations . . . . .	4
2.2.1	<code>\DeclareStringOption</code> . . . . .	4
2.2.2	<code>\DeclareBoolOption</code> . . . . .	5
2.2.3	<code>\DeclareComplementaryOption</code> . . . . .	6
2.2.4	<code>\DeclareVoidOption</code> . . . . .	6
2.2.5	<code>\DeclareDefaultOption</code> . . . . .	6
2.2.6	Local options . . . . .	7
2.2.7	Dynamic options . . . . .	7
2.2.8	<code>\DisableKeyvalOption</code> . . . . .	7
2.2.9	<code>\AddToKeyvalOption</code> . . . . .	8
2.3	Global vs. local options . . . . .	8
2.4	Summary of internal macros . . . . .	9
2.5	plain-TeX . . . . .	9
<b>3</b>	<b>Example</b>	<b>9</b>
<b>4</b>	<b>Package options</b>	<b>11</b>
4.1	Package kvoptions-patch . . . . .	11
4.2	Option debugshow . . . . .	12
<b>5</b>	<b>Limitations</b>	<b>12</b>
5.1	Compatibility . . . . .	12
5.1.1	Package kvoptions-patch vs. package xkvltxp . . . . .	12
5.2	Limitations . . . . .	13
5.2.1	Option comparisons . . . . .	13
5.2.2	Option list parsing with package kvoptions-patch . . . . .	13
<b>6</b>	<b>Implementation</b>	<b>13</b>
6.1	Preamble . . . . .	13
6.2	Option declaration macros . . . . .	16
6.2.1	<code>\SetupKeyvalOptions</code> . . . . .	16
6.2.2	<code>\DeclareBoolOption</code> . . . . .	17
6.2.3	<code>\DeclareStringOption</code> . . . . .	19

6.2.4	<code>\DeclareVoidOption</code>	20
6.2.5	<code>\DeclareDefaultOption</code>	21
6.2.6	<code>\DeclareLocalOptions</code>	21
6.3	Dynamic options	21
6.3.1	<code>\DisableKeyvalOption</code>	21
6.4	Change option code	23
6.4.1	<code>\AddToKeyvalOption</code>	23
6.5	Process options	24
6.5.1	<code>\ProcessKeyvalOptions</code>	24
6.5.2	<code>\ProcessLocalKeyvalOptions</code>	26
6.5.3	Helper macros	27
6.6	plain-TeX	28
6.7	Package <code>kvoptions-patch</code>	28
<b>7</b>	<b>Test</b>	<b>36</b>
7.1	Preface for standard catcode check	36
7.2	Catcode checks for loading	36
<b>8</b>	<b>Installation</b>	<b>39</b>
8.1	Download	39
8.2	Bundle installation	39
8.3	Package installation	39
8.4	Refresh file name databases	40
8.5	Some details for the interested	40
<b>9</b>	<b>References</b>	<b>40</b>
<b>10</b>	<b>History</b>	<b>41</b>
	[0000/00/00 v0.0]	41
	[2004/02/22 v1.0]	41
	[2006/02/16 v2.0]	41
	[2006/02/20 v2.1]	41
	[2006/06/01 v2.2]	41
	[2006/08/17 v2.3]	41
	[2006/08/22 v2.4]	42
	[2007/04/11 v2.5]	42
	[2007/05/06 v2.6]	42
	[2007/06/11 v2.7]	42
	[2007/10/02 v2.8]	42
	[2007/10/11 v2.9]	42
	[2007/10/18 v3.0]	42
	[2009/04/10 v3.1]	42
	[2009/07/17 v3.2]	42
	[2009/07/21 v3.3]	42
	[2009/08/13 v3.4]	42
	[2009/12/04 v3.5]	42
	[2009/12/08 v3.6]	42

[2010/02/22 v3.7] . . . . .	43
<b>11 Index</b>	<b>43</b>

# 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.

<b>1</b>	<b>Documentation</b>	<b>2</b>
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
1.5	Default family handler . . . . .	4
1.6	Put it all together . . . . .	4
1.7	Comma separated lists . . . . .	5
<b>2</b>	<b>Example</b>	<b>5</b>
<b>3</b>	<b>Implementation</b>	<b>6</b>
3.1	Identification . . . . .	6
3.2	Package loading . . . . .	7
3.3	Check for $\varepsilon$ -TeX . . . . .	8
3.4	Generic help macros . . . . .	8
3.5	Normalizing . . . . .	8
3.6	Parsing key value lists . . . . .	11
3.7	Parsing comma lists . . . . .	12
3.8	Processing key value pairs . . . . .	12
3.9	Error handling . . . . .	13
3.10	Do it all . . . . .	13
<b>4</b>	<b>Test</b>	<b>14</b>
4.1	Catcode checks for loading . . . . .	14
4.2	Macro tests . . . . .	15
4.2.1	Preamble . . . . .	15
4.2.2	Time . . . . .	15
4.2.3	Test sets . . . . .	16
<b>5</b>	<b>Installation</b>	<b>19</b>
5.1	Download . . . . .	19
5.2	Bundle installation . . . . .	19
5.3	Package installation . . . . .	19
5.4	Refresh file name databases . . . . .	20
5.5	Some details for the interested . . . . .	20
<b>6</b>	<b>References</b>	<b>20</b>

<b>7 History</b>	<b>21</b>
[2006/03/06 v1.0] . . . . .	21
[2006/10/19 v1.1] . . . . .	21
[2007/09/09 v1.2] . . . . .	21
[2007/09/29 v1.3] . . . . .	21
[2009/07/19 v1.4] . . . . .	21
[2009/07/30 v1.5] . . . . .	21
[2009/12/12 v1.6] . . . . .	21
[2009/12/22 v1.7] . . . . .	21
[2010/01/28 v1.8] . . . . .	21
[2010/03/01 v1.9] . . . . .	21
<b>8 Index</b>	<b>22</b>

# The letltxmacro package

## Abstract

T<sub>E</sub>X's `\let` assignment does not work for L<sup>A</sup>T<sub>E</sub>X 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.

<b>1</b>	<b>Documentation</b>	<b>1</b>
1.1	Supported macro definition commands . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Show cases . . . . .	2
2.1.1	letltxmacro-showcases.tex . . . . .	2
2.1.2	Result . . . . .	3
2.2	Package . . . . .	4
2.2.1	Catcodes and identification . . . . .	4
2.2.2	Main macros . . . . .	5
<b>3</b>	<b>Test</b>	<b>7</b>
3.1	Catcode checks for loading . . . . .	7
3.2	Package tests . . . . .	8
<b>4</b>	<b>Installation</b>	<b>11</b>
4.1	Download . . . . .	11
4.2	Bundle installation . . . . .	11
4.3	Package installation . . . . .	11
4.4	Refresh file name databases . . . . .	12
4.5	Some details for the interested . . . . .	12
<b>5</b>	<b>History</b>	<b>12</b>
	[2008/06/09 v1.0] . . . . .	12
	[2008/06/12 v1.1] . . . . .	13
	[2008/06/13 v1.2] . . . . .	13
	[2008/06/24 v1.3] . . . . .	13
<b>6</b>	<b>Index</b>	<b>13</b>

# 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  $\varepsilon$ -TeX and pdfTeX regardless of its mode are required.

<b>1</b>	<b>Documentation</b>	<b>1</b>
1.1	User interface . . . . .	1
1.2	Future . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Catcodes and identification . . . . .	2
2.2	Package options . . . . .	3
2.3	Check prerequisites . . . . .	3
2.4	Add support for UTF-8 . . . . .	3
2.4.1	Conversion . . . . .	4
2.4.2	Patch <code>\lst@InputListing</code> . . . . .	4
<b>3</b>	<b>Test</b>	<b>4</b>
3.1	Catcode checks for loading . . . . .	4
3.2	Test example for latin1 . . . . .	5
<b>4</b>	<b>Installation</b>	<b>6</b>
4.1	Download . . . . .	6
4.2	Bundle installation . . . . .	6
4.3	Package installation . . . . .	6
4.4	Refresh file name databases . . . . .	7
4.5	Some details for the interested . . . . .	7
<b>5</b>	<b>References</b>	<b>7</b>
<b>6</b>	<b>History</b>	<b>7</b>
	[2007/10/22 v1.0] . . . . .	7
	[2007/11/11 v1.1] . . . . .	8
<b>7</b>	<b>Index</b>	<b>8</b>

# The ltxcmds package

## Abstract

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

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Introduction . . . . .	2
1.2	Numbers . . . . .	2
1.3	Argument killers . . . . .	2
1.4	Argument grabbers . . . . .	2
1.5	List helpers . . . . .	3
1.6	Tail recursion . . . . .	3
1.7	Empty macro . . . . .	3
1.8	Characters . . . . .	3
1.9	Boolean switch . . . . .	3
1.10	Command definitions . . . . .	3
1.11	Stripping . . . . .	4
1.12	File management . . . . .	4
1.12.1	File extensions . . . . .	4
1.12.2	Load check . . . . .	4
1.12.3	Version date check . . . . .	4
1.13	Macro additions . . . . .	5
1.14	Macro <code>\ltx@ifnextchar</code> . . . . .	5
<b>2</b>	<b>Implementation</b>	<b>5</b>
2.1	Identification . . . . .	5
2.2	Numbers . . . . .	7
2.3	Argument killers . . . . .	7
2.4	Argument grabbers . . . . .	7
2.5	List helpers . . . . .	7
2.6	Tail recursion . . . . .	8
2.7	Empty macro . . . . .	8
2.8	Characters . . . . .	8
2.9	Boolean switch . . . . .	8
2.10	Command definitions . . . . .	9
2.11	Stripping . . . . .	9
2.12	File management . . . . .	10
2.12.1	File extensions . . . . .	10
2.12.2	Load check . . . . .	10
2.12.3	Version date check . . . . .	10
2.13	Macro additions . . . . .	11
2.14	Macro <code>\ltx@ifnextchar</code> . . . . .	12
<b>3</b>	<b>Test</b>	<b>13</b>
3.1	Catcode checks for loading . . . . .	13



<b>4</b>	<b>Installation</b>	<b>14</b>
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
<b>5</b>	<b>History</b>	<b>16</b>
	[2009/08/05 v1.0] . . . . .	16
	[2009/12/12 v1.1] . . . . .	16
	[2010/01/28 v1.2] . . . . .	16
	[2010/03/01 v1.3] . . . . .	16
	[2010/03/09 v1.4] . . . . .	16
<b>6</b>	<b>Index</b>	<b>16</b>

# The luacolor package

## Abstract

Package luacolor implements color support based on L<sup>A</sup>T<sub>E</sub>X's node attributes.

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Introduction . . . . .	2
1.2	Usage . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Catcodes and identification . . . . .	2
2.2	Check for LuaT <sub>E</sub> X . . . . .	3
2.3	Check for disabled colors . . . . .	3
2.4	Find driver . . . . .	3
2.5	Attribute setting . . . . .	4
2.6	Whatsit insertion . . . . .	4
2.7	Lua module . . . . .	5
2.7.1	Driver detection . . . . .	5
2.7.2	Color strings . . . . .	6
2.7.3	Attribute register . . . . .	6
2.7.4	Whatsit insertion . . . . .	6
<b>3</b>	<b>Test</b>	<b>7</b>
3.1	Catcode checks for loading . . . . .	7
3.2	Driver detection . . . . .	9
3.3	Short test for plain-T <sub>E</sub> X . . . . .	9
<b>4</b>	<b>Installation</b>	<b>9</b>
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
<b>5</b>	<b>History</b>	<b>11</b>
	[2007/12/12 v1.0] . . . . .	11
	[2009/04/10 v1.1] . . . . .	11
	[2010/03/09 v1.2] . . . . .	11
<b>6</b>	<b>Index</b>	<b>11</b>

# The luatex package

## Abstract

This package manages the new and extended features and resources that L<sup>A</sup>T<sub>E</sub>X provides. Examples are attributes and catcode tables.

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Introduction	2
1.1.1	L <sup>A</sup> T <sub>E</sub> X	2
1.1.2	plain-T <sub>E</sub> X	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 <code>luatex-loader</code>	6
<b>2</b>	<b>Implementation</b>	<b>6</b>
2.1	Reload check and package identification	6
2.2	Catcodes	7
2.3	Check for LuaT <sub>E</sub> X	8
2.4	Provide LuaT <sub>E</sub> X primitives	8
2.5	Inherit support for $\varepsilon$ -T <sub>E</sub> X	9
2.6	Adaption of $\varepsilon$ -T <sub>E</sub> X's register allocation	9
2.7	plain-T <sub>E</sub> X compatibility	10
2.8	Attributes	12
2.8.1	Allocation	12
2.8.2	Interface	12
2.9	Catcode tables	12
2.9.1	Allocation	12
2.9.2	<code>\SetCatcodeRange</code>	13
2.9.3	Predefined catcode tables	14
2.9.4	Number stack	14
2.9.5	Catcode regime macros	15
2.10	Lua module loader	15
2.11	Lua script	17
<b>3</b>	<b>Test</b>	<b>17</b>
3.1	Catcode checks for loading	17
3.2	Catcode tables	19
3.2.1	Predefined catcode tables	19
3.2.2	Catcode table number stack	20
3.2.3	Catcode table stack	20
3.2.4	Catcode regime macros	21
3.3	Attribute allocation	21
3.4	Short test for plain-T <sub>E</sub> X	21

<b>4</b>	<b>Installation</b>	<b>22</b>
4.1	Download . . . . .	22
4.2	Bundle installation . . . . .	22
4.3	Package installation . . . . .	22
4.4	Refresh file name databases . . . . .	23
4.5	Some details for the interested . . . . .	23
<b>5</b>	<b>History</b>	<b>23</b>
	[2007/12/12 v0.1] . . . . .	23
	[2009/04/10 v0.2] . . . . .	23
	[2009/12/02 v0.3] . . . . .	23
	[2010/03/09 v0.4] . . . . .	23
<b>6</b>	<b>Index</b>	<b>24</b>

# The magicnum package

## Abstract

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

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Introduction . . . . .	2
1.2	User interface . . . . .	2
1.2.1	<code>\magicnum</code> . . . . .	2
1.2.2	Properties . . . . .	2
1.3	Data . . . . .	3
1.3.1	Category <code>tex.catcode</code> . . . . .	3
1.3.2	Category <code>etex.grouptype</code> . . . . .	3
1.3.3	Category <code>etex.ifttype</code> . . . . .	4
1.3.4	Category <code>etex.nodetype</code> . . . . .	4
1.3.5	Category <code>etex.interactionmode</code> . . . . .	4
1.3.6	Category <code>luatex.pdfliteral.mode</code> . . . . .	4
<b>2</b>	<b>Implementation</b>	<b>4</b>
2.1	Reload check and package identification . . . . .	5
2.2	Catcodes . . . . .	6
2.3	Check for previous definition . . . . .	6
2.4	Without LuaTeX . . . . .	6
2.5	With LuaTeX . . . . .	7
2.6	Data . . . . .	7
2.6.1	Plain data . . . . .	7
2.6.2	Data for TeX . . . . .	9
2.6.3	Lua module . . . . .	11
<b>3</b>	<b>Test</b>	<b>14</b>
3.1	Catcode checks for loading . . . . .	14
3.2	Test data . . . . .	15
<b>4</b>	<b>Installation</b>	<b>16</b>
4.1	Download . . . . .	16
4.2	Bundle installation . . . . .	17
4.3	Package installation . . . . .	17
4.4	Refresh file name databases . . . . .	17
4.5	Some details for the interested . . . . .	17
<b>5</b>	<b>History</b>	<b>18</b>
	[2007/12/12 v1.0] . . . . .	18
	[2009/04/10 v1.1] . . . . .	18
	[2010/03/09 v1.2] . . . . .	18
<b>6</b>	<b>Index</b>	<b>18</b>

# The makerobust package

## Abstract

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

<b>1</b>	<b>User interface</b>	<b>1</b>
1.1	Example . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>2</b>
<b>3</b>	<b>Installation</b>	<b>3</b>
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
<b>4</b>	<b>History</b>	<b>4</b>
	[2006/03/18 v1.0] . . . . .	4
<b>5</b>	<b>Index</b>	<b>5</b>

# The pagegrid package

## Abstract

The L<sup>A</sup>T<sub>E</sub>X package prints a page grid in the background.

<b>1</b>	<b>Documentation</b>	<b>1</b>
1.1	Options	2
1.1.1	Options <code>enable</code> , <code>disable</code>	2
1.1.2	Grid origins	2
1.1.3	Grid unit	2
1.1.4	Color options	2
1.1.5	Arrow options	3
1.1.6	Miscellaneous options	3
<b>2</b>	<b>Implementation</b>	<b>3</b>
<b>3</b>	<b>Test</b>	<b>9</b>
3.1	Catcode checks for loading	9
<b>4</b>	<b>Installation</b>	<b>10</b>
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
<b>5</b>	<b>Acknowledgement</b>	<b>12</b>
<b>6</b>	<b>History</b>	<b>12</b>
[2009/11/06 v1.0]		12
[2009/11/06 v1.1]		12
[2009/12/02 v1.2]		12
[2009/12/03 v1.3]		12
[2009/12/04 v1.4]		12
<b>7</b>	<b>Index</b>	<b>13</b>

# The pagesel package

## Abstract

Single pages or page areas can be selected for output.

<b>1</b>	<b>Usage</b>	<b>1</b>
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 . . . . .	2
1.2.2	Package <code>hyperref</code> . . . . .	3
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	Package . . . . .	3
2.2	AtBeginDvi hook support . . . . .	6
<b>3</b>	<b>Installation</b>	<b>7</b>
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
<b>4</b>	<b>History</b>	<b>9</b>
	[1999/03/01 v0.9] . . . . .	9
	[1999/04/05 v1.0] . . . . .	9
	[1999/04/13 v1.1] . . . . .	9
	[2003/06/05 v1.2] . . . . .	9
	[2006/02/20 v1.3] . . . . .	9
	[2006/03/02 v1.4] . . . . .	9
	[2006/03/07 v1.5] . . . . .	9
	[2007/04/11 v1.6] . . . . .	9
	[2007/04/12 v1.7] . . . . .	9
	[2008/08/11 v1.8] . . . . .	9
<b>5</b>	<b>Index</b>	<b>10</b>



# 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.

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Requirements . . . . .	2
1.2	Interface . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	Reload check and package identification . . . . .	3
2.2	Catcodes . . . . .	4
2.3	Check requirements . . . . .	4
2.3.1	Check package <code>luacolor</code> . . . . .	5
2.3.2	Check PDF mode . . . . .	5
2.3.3	Check version of pdfTeX . . . . .	5
2.3.4	Check <code>pdf<sub>tex</sub>.def</code> . . . . .	6
2.4	Enabled interface macros . . . . .	6
2.5	Disabled interface macros . . . . .	8
<b>3</b>	<b>Test</b>	<b>9</b>
3.1	Catcode checks for loading . . . . .	9
3.2	Very simple test . . . . .	10
3.3	Detection of package <code>luacolor</code> . . . . .	11
<b>4</b>	<b>Installation</b>	<b>11</b>
4.1	Download . . . . .	11
4.2	Bundle installation . . . . .	11
4.3	Package installation . . . . .	11
4.4	Refresh file name databases . . . . .	12
4.5	Some details for the interested . . . . .	12
<b>5</b>	<b>History</b>	<b>12</b>
	[2007/09/09 v1.0] . . . . .	12
	[2007/12/09 v1.1] . . . . .	13
	[2007/12/12 v1.2] . . . . .	13
<b>6</b>	<b>Index</b>	<b>13</b>

# The pdfcolfoot package

## Abstract

Since version 1.40 pdf<sub>T</sub>E<sub>X</sub> supports several color stacks. This package uses a separate color stack for footnotes that can break across pages.

<b>1</b>	<b>User interface</b>	<b>1</b>
1.1	Other packages or classes . . . . .	2
<b>2</b>	<b>Interface for package or class writers</b>	<b>2</b>
2.1	Macro <code>\pdfcolfoot@switch</code> . . . . .	2
2.2	Macro <code>\pdfcolfoot@current</code> . . . . .	2
<b>3</b>	<b>Implementation</b>	<b>2</b>
3.1	Identification . . . . .	2
3.2	Load package pdfcol . . . . .	3
3.3	Color stack for footnotes . . . . .	3
3.4	Patch <code>\@makefntext</code> . . . . .	3
3.5	Patch <code>\@makecol</code> . . . . .	3
<b>4</b>	<b>Test</b>	<b>5</b>
<b>5</b>	<b>Installation</b>	<b>6</b>
5.1	Download . . . . .	6
5.2	Bundle installation . . . . .	6
5.3	Package installation . . . . .	6
5.4	Refresh file name databases . . . . .	7
5.5	Some details for the interested . . . . .	7
<b>6</b>	<b>References</b>	<b>7</b>
<b>7</b>	<b>History</b>	<b>7</b>
	[2007/01/08 v1.0] . . . . .	7
	[2007/09/09 v1.1] . . . . .	8
<b>8</b>	<b>Index</b>	<b>8</b>

# The pdfcolmk package

## Abstract

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

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Introduction . . . . .	2
1.2	Background . . . . .	2
1.3	Limitations . . . . .	2
1.4	Recommendation . . . . .	2
1.5	Usage . . . . .	2
1.6	Compatibility . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>3</b>
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
<b>3</b>	<b>Installation</b>	<b>10</b>
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
<b>4</b>	<b>History</b>	<b>12</b>
	[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] . . . . .	12
	[2005/06/15 v0.6] . . . . .	12
	[2005/07/09 v0.7] . . . . .	12
	[2006/02/20 v0.8] . . . . .	12
	[2007/01/01 v1.0] . . . . .	12
	[2007/04/11 v1.1] . . . . .	12
	[2008/08/11 v1.2] . . . . .	12
<b>5</b>	<b>Index</b>	<b>13</b>

# 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.

<b>1</b>	<b>Usage</b>	<b>1</b>
1.1	Option <code>rulebetweencolor</code> . . . . .	2
1.2	Future . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Identification . . . . .	2
2.2	Load and fix package <code>parallel</code> . . . . .	2
2.3	Color stack support . . . . .	7
2.4	Redefinitions . . . . .	7
<b>3</b>	<b>Test</b>	<b>10</b>
<b>4</b>	<b>Installation</b>	<b>12</b>
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
<b>5</b>	<b>References</b>	<b>13</b>
<b>6</b>	<b>History</b>	<b>13</b>
	[2007/09/09 v1.0] . . . . .	13
	[2007/12/12 v1.1] . . . . .	13
	[2008/08/11 v1.2] . . . . .	14
	[2010/01/11 v1.3] . . . . .	14
<b>7</b>	<b>Index</b>	<b>14</b>

# The pdfcolparcolumns package

## Abstract

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

<b>1</b>	<b>Usage</b>	<b>2</b>
1.1	Option <code>rulebetweencolor</code>	2
1.2	Future	2
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Identification	2
2.2	Load packages	2
2.2.1	Package <code>parcolumns</code>	2
2.2.2	Package <code>pdfcol</code>	3
2.2.3	Package <code>infwarerr</code>	3
2.3	Color stack macros	3
2.4	Patches	3
2.4.1	Init stacks	3
2.4.2	Switch stack	4
2.4.3	Set current stack color	4
<b>3</b>	<b>Test</b>	<b>6</b>
<b>4</b>	<b>Installation</b>	<b>7</b>
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
<b>5</b>	<b>References</b>	<b>8</b>
<b>6</b>	<b>History</b>	<b>8</b>
	[2007/07/26 v1.0]	8
	[2007/09/09 v1.1]	8
	[2008/08/11 v1.2]	9
	[2010/01/11 v1.3]	9
<b>7</b>	<b>Index</b>	<b>9</b>

# The pdfcrypt package

## Abstract

This package supports the setting of pdf encryption options for V<sub>T</sub>E<sub>X</sub> and some older versions of pdfT<sub>E</sub>X.

<b>1</b>	<b>Documentation</b>	<b>2</b>
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-T <sub>E</sub> X . . . . .	3
1.3	Hints for pdfT <sub>E</sub> X . . . . .	3
<b>2</b>	<b>Implementation</b>	<b>4</b>
2.1	Help macros for plain-T <sub>E</sub> X . . . . .	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
<b>3</b>	<b>Installation</b>	<b>12</b>
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
<b>4</b>	<b>History</b>	<b>13</b>
	[2001/04/02 v0.1] . . . . .	13
	[2001/07/19 v0.2] . . . . .	13
	[2001/07/19 v0.3] . . . . .	13
	[2001/07/19 v0.4] . . . . .	13
	[2001/08/05 v0.5] . . . . .	13
	[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] . . . . .	14
<b>5</b>	<b>Index</b>	<b>14</b>

# The pdfescape package

## Abstract

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

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Additional unescape macros	2
1.2	Sanitizing macro	3
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	Reload check and package identification	3
2.2	Catcodes	4
2.3	Sanitizing	4
2.3.1	Space characters	5
2.3.2	Space normalization	5
2.4	<code>\EdefUnescapeName</code>	6
2.5	<code>\EdefUnescapeString</code>	7
2.6	User macros (pdfTeXanalogues)	10
2.7	Help macros	11
2.7.1	Characters	11
2.7.2	Switch for $\epsilon$ -TeX	12
2.8	Conversions	12
2.8.1	Conversion to hex string	12
2.8.2	Character code to octal number	13
2.8.3	Unpack hex string	13
2.8.4	Conversion to PDF name	14
2.8.5	Conversion to PDF string	15
<b>3</b>	<b>Test</b>	<b>16</b>
3.1	Catcode checks for loading	16
3.2	Macro tests	17
3.3	Test with <code>\pdfescape...</code> commands	17
3.4	Test without <code>\pdfescape...</code> , with $\epsilon$ -TeX	17
3.5	Test without <code>\pdfescape...</code> and $\epsilon$ -TeX	18
3.6	Test with LuaTeX	18
3.7	Check/ensure test preconditions	18
3.7.1	Check <code>\pdfescape...</code>	18
3.7.2	Check $\epsilon$ -TeX	18
3.7.3	Check LuaTeX	18
3.8	Common part	18
<b>4</b>	<b>Installation</b>	<b>24</b>
4.1	Download	24
4.2	Bundle installation	25
4.3	Package installation	25
4.4	Refresh file name databases	25
4.5	Some details for the interested	25

<b>5 History</b>	<b>26</b>
[2007/02/21 v1.0] . . . . .	26
[2007/02/25 v1.1] . . . . .	26
[2007/03/20 v1.2] . . . . .	26
[2007/04/11 v1.3] . . . . .	26
[2007/04/21 v1.4] . . . . .	26
[2007/08/27 v1.5] . . . . .	27
[2007/09/09 v1.6] . . . . .	27
[2007/10/27 v1.7] . . . . .	27
[2007/11/11 v1.8] . . . . .	27
[2010/03/01 v1.9] . . . . .	27
<b>6 Index</b>	<b>27</b>



# The pdfscape package

## Abstract

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

<b>1 Documentation</b>	<b>2</b>
1.1 Supported drivers . . . . .	2
1.2 Caveat . . . . .	2
1.3 Requirements . . . . .	2
1.4 Usage . . . . .	2
<b>2 Implementation</b>	<b>2</b>
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 . . . . .	4
2.4.2 PostScript driver . . . . .	5
2.4.3 Driver dvipdfm . . . . .	5
2.5 Driver independent stuff . . . . .	6
<b>3 Test</b>	<b>7</b>
3.1 Driver detection tests . . . . .	7
3.2 Test for \PLS@CheckAngle . . . . .	7
3.3 Test for rotate . . . . .	8
<b>4 Installation</b>	<b>10</b>
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
<b>5 History</b>	<b>11</b>
[2001/01/15 v0.1] . . . . .	11
[2001/02/04 v0.2] . . . . .	11
[2004/05/11 v0.3] . . . . .	11
[2004/05/12 v0.4] . . . . .	12
[2006/02/20 v0.5] . . . . .	12
[2006/04/24 v0.6] . . . . .	12
[2007/04/11 v0.7] . . . . .	12
[2007/04/17 v0.8] . . . . .	12

[2007/10/21 v0.9] . . . . .	12
[2008/08/11 v0.10] . . . . .	12
<b>6 Index</b>	<b>12</b>

# 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.

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Usage . . . . .	2
1.2	Macros . . . . .	2
1.3	Parameters . . . . .	2
1.3.1	Details . . . . .	3
1.4	Color stack . . . . .	3
<b>2</b>	<b>Implementation</b>	<b>4</b>
2.1	Look for pdfTeX, its mode and features . . . . .	5
2.2	Enable color support of L <sup>A</sup> T <sub>E</sub> X . . . . .	7
2.3	Hook into \normalcolor . . . . .	7
2.4	Declare and setup parameters . . . . .	12
2.5	Fill and stroke color support . . . . .	13
<b>3</b>	<b>Test</b>	<b>17</b>
3.1	Catcode checks for loading . . . . .	17
3.2	Simple test file . . . . .	19
3.3	Further tests . . . . .	19
3.4	Compatibility with plain-T <sub>E</sub> X . . . . .	21
<b>4</b>	<b>Installation</b>	<b>21</b>
4.1	Download . . . . .	21
4.2	Bundle installation . . . . .	22
4.3	Package installation . . . . .	22
4.4	Refresh file name databases . . . . .	22
4.5	Some details for the interested . . . . .	22
<b>5</b>	<b>Acknowledgement</b>	<b>23</b>
<b>6</b>	<b>References</b>	<b>23</b>
<b>7</b>	<b>History</b>	<b>23</b>
	[2010/01/26 v1.0] . . . . .	23
	[2010/01/27 v1.1] . . . . .	23
	[2010/01/28 v1.2] . . . . .	24
<b>8</b>	<b>Index</b>	<b>25</b>

# The pdfdoccmds package

## Abstract

LUA<sub>T</sub><sub>E</sub>X provides most of the commands of pdf<sub>T</sub><sub>E</sub>X 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.

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	General principles . . . . .	2
1.2	Macros . . . . .	3
1.2.1	Additional macro: <code>\pdf@isprimitive</code> . . . . .	4
1.2.2	Experimental . . . . .	4
<b>2</b>	<b>Implementation</b>	<b>5</b>
2.1	Reload check and package identification . . . . .	5
2.2	Catcodes . . . . .	6
2.3	Load package <code>infwarerr</code> . . . . .	6
2.4	Without Lua <sub>T</sub> <sub>E</sub> X . . . . .	7
2.5	<code>\pdf@primitive</code> , <code>\pdf@ifprimitive</code> . . . . .	8
2.5.1	Using Lua <sub>T</sub> <sub>E</sub> X's <code>tex.enableprimitives</code> . . . . .	8
2.5.2	Trying various names to find the primitives . . . . .	8
2.5.3	Result . . . . .	9
2.6	Xe <sub>T</sub> <sub>E</sub> X . . . . .	9
2.7	<code>\pdf@isprimitive</code> . . . . .	10
2.8	Load Lua module . . . . .	11
2.9	Lua functions . . . . .	11
2.10	Lua module . . . . .	14
<b>3</b>	<b>Test</b>	<b>18</b>
3.1	Catcode checks for loading . . . . .	18
3.2	Test for <code>\pdf@isprimitive</code> . . . . .	19
<b>4</b>	<b>Installation</b>	<b>20</b>
4.1	Download . . . . .	20
4.2	Bundle installation . . . . .	20
4.3	Package installation . . . . .	21
4.4	Refresh file name databases . . . . .	21
4.5	Some details for the interested . . . . .	21
<b>5</b>	<b>History</b>	<b>22</b>
	[2007/11/11 v0.1] . . . . .	22
	[2007/11/12 v0.2] . . . . .	22
	[2007/12/12 v0.3] . . . . .	22
	[2009/04/10 v0.4] . . . . .	22
	[2009/09/22 v0.5] . . . . .	22
	[2009/09/23 v0.6] . . . . .	22
	[2009/12/12 v0.7] . . . . .	22
	[2010/03/01 v0.8] . . . . .	22



# The picture package

## Abstract

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

<b>1</b>	<b>User interface</b>	<b>2</b>
1.1	Introduction . . . . .	2
1.2	Options . . . . .	2
1.3	Example . . . . .	2
1.4	Supported packages . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	Identification . . . . .	3
2.2	Options . . . . .	3
2.3	Calculation method . . . . .	3
2.3.1	Method <code>calc</code> . . . . .	3
2.3.2	Method <code>etex</code> . . . . .	4
2.3.3	Method <code>plain</code> . . . . .	4
2.3.4	Help macros . . . . .	4
2.4	Redefinitions . . . . .	5
2.4.1	$\LaTeX$ base macros . . . . .	6
2.4.2	Package <code>pspicture</code> . . . . .	6
2.5	Check package loading order . . . . .	6
<b>3</b>	<b>Installation</b>	<b>7</b>
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
<b>4</b>	<b>History</b>	<b>8</b>
	[2006/08/26 v1.0] . . . . .	8
	[2007/04/11 v1.1] . . . . .	8
	[2008/11/26 v1.2] . . . . .	8
	[2009/10/11 v1.3] . . . . .	8
<b>5</b>	<b>Index</b>	<b>9</b>

# 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.

<b>1</b>	<b>User interface</b>	<b>1</b>
1.1	Introduction . . . . .	2
1.2	Setup . . . . .	2
1.3	Symbol list . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>5</b>
2.1	Identification . . . . .	5
2.2	Dummy font encoding . . . . .	5
2.3	Setup . . . . .	5
2.4	Block elements . . . . .	5
2.4.1	U+2580 . . . . .	6
2.4.2	U+2584 . . . . .	6
2.4.3	U+2588 . . . . .	6
2.4.4	U+258C . . . . .	6
2.4.5	U+2590 . . . . .	6
2.4.6	U+2591 . . . . .	6
2.4.7	U+2592 . . . . .	7
2.4.8	U+2593 . . . . .	7
2.4.9	Color warning . . . . .	7
2.5	Box drawing, light single lines . . . . .	7
2.5.1	U+2500 . . . . .	8
2.5.2	U+2502 . . . . .	8
2.5.3	U+250C . . . . .	8
2.5.4	U+2510 . . . . .	8
2.5.5	U+2514 . . . . .	9
2.5.6	U+2518 . . . . .	9
2.5.7	U+251C . . . . .	9
2.5.8	U+2524 . . . . .	10
2.5.9	U+252C . . . . .	10
2.5.10	U+2534 . . . . .	10
2.5.11	U+253C . . . . .	11
2.6	Box drawing, double lines . . . . .	11
2.6.1	U+2550 . . . . .	11
2.6.2	U+2551 . . . . .	12
2.6.3	U+2552 . . . . .	12
2.6.4	U+2553 . . . . .	12
2.6.5	U+2554 . . . . .	13
2.6.6	U+2555 . . . . .	14
2.6.7	U+2556 . . . . .	14
2.6.8	U+2557 . . . . .	14
2.6.9	U+2558 . . . . .	15

2.6.10	U+2559	15
2.6.11	U+255A	16
2.6.12	U+255B	17
2.6.13	U+255C	17
2.6.14	U+255D	17
2.6.15	U+255E	18
2.6.16	U+255F	19
2.6.17	U+2560	19
2.6.18	U+2561	20
2.6.19	U+2562	20
2.6.20	U+2563	21
2.6.21	U+2564	21
2.6.22	U+2565	22
2.6.23	U+2566	22
2.6.24	U+2567	23
2.6.25	U+2568	23
2.6.26	U+2569	23
2.6.27	U+256A	24
2.6.28	U+256B	24
2.6.29	U+256C	25
2.7	Unicode support file	25
<b>3</b>	<b>Installation</b>	<b>26</b>
3.1	Download	26
3.2	Bundle installation	27
3.3	Package installation	27
3.4	Refresh file name databases	27
3.5	Some details for the interested	27
<b>4</b>	<b>References</b>	<b>28</b>
<b>5</b>	<b>History</b>	<b>28</b>
	[2006/05/03 v1.0]	28
<b>6</b>	<b>Index</b>	<b>28</b>



# 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.

<b>1</b>	<b>Usage</b>	<b>1</b>
1.1	Setting counters . . . . .	1
1.2	Expandable commands . . . . .	2
1.3	Undefined references . . . . .	2
1.4	Notes . . . . .	3
<b>2</b>	<b>Implementation</b>	<b>3</b>
<b>3</b>	<b>Installation</b>	<b>5</b>
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
<b>4</b>	<b>History</b>	<b>6</b>
[1998/04/08 v1.0]	. . . . .	6
[2000/09/07 v2.0]	. . . . .	7
[2006/02/20 v3.0]	. . . . .	7
[2008/08/11 v3.1]	. . . . .	7
<b>5</b>	<b>Index</b>	<b>7</b>

# 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.

<b>1</b>	<b>Documentation</b>	<b>1</b>
1.1	Options . . . . .	2
1.2	Interface for class/package authors . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	Options . . . . .	3
2.2	Check for checksum feature . . . . .	4
2.3	Standard . .aux files . . . . .	4
2.4	Rerun check . . . . .	7
<b>3</b>	<b>Test</b>	<b>8</b>
3.1	Catcode checks for loading . . . . .	8
<b>4</b>	<b>Installation</b>	<b>10</b>
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
<b>5</b>	<b>History</b>	<b>11</b>
	[2009/12/10 v1.0] . . . . .	11
	[2009/12/12 v1.1] . . . . .	11
	[2009/12/18 v1.2] . . . . .	12
	[2010/01/25 v1.3] . . . . .	12
	[2010/02/22 v1.4] . . . . .	12
	[2010/03/15 v1.5] . . . . .	12
	[2010/03/16 v1.6] . . . . .	12
<b>6</b>	<b>Index</b>	<b>12</b>

# 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.

<b>1</b>	<b>Documentation</b>	<b>1</b>
1.1	Options . . . . .	2
1.2	Options for packages <code>amsmath</code> or <code>graphics</code> . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>3</b>
<b>3</b>	<b>Test</b>	<b>7</b>
3.1	Catcode checks for loading . . . . .	7
<b>4</b>	<b>Installation</b>	<b>9</b>
4.1	Download . . . . .	9
4.2	Bundle installation . . . . .	9
4.3	Package installation . . . . .	9
4.4	Refresh file name databases . . . . .	9
4.5	Some details for the interested . . . . .	10
<b>5</b>	<b>Acknowledgement</b>	<b>10</b>
<b>6</b>	<b>History</b>	<b>10</b>
	[2009/12/04 v1.0] . . . . .	10
	[2009/12/05 v1.1] . . . . .	10
	[2010/03/01 v1.2] . . . . .	10
<b>7</b>	<b>Index</b>	<b>11</b>

## The **scrindex** package

### Abstract

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

<b>1</b>	<b>Documentation</b>	<b>1</b>
1.1	Usage . . . . .	2
1.2	Preambles . . . . .	2
1.2.1	Class <code>scrartcl</code> . . . . .	2
1.2.2	Classes <code>scrreprt</code> and <code>scrbook</code> . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>3</b>
<b>3</b>	<b>Installation</b>	<b>6</b>
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
<b>4</b>	<b>History</b>	<b>7</b>
	[2008/07/07 v1.0] . . . . .	7
	[2008/08/11 v1.1] . . . . .	8
<b>5</b>	<b>Index</b>	<b>8</b>

# The selinput package

## Abstract

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

<b>1</b>	<b>Documentation</b>	<b>1</b>
1.1	Introduction . . . . .	1
1.2	User interface . . . . .	2
1.3	Options . . . . .	3
1.4	Encodings . . . . .	3
<b>2</b>	<b>Implementation</b>	<b>3</b>
<b>3</b>	<b>Test</b>	<b>7</b>
<b>4</b>	<b>Installation</b>	<b>9</b>
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
<b>5</b>	<b>References</b>	<b>11</b>
<b>6</b>	<b>History</b>	<b>11</b>
	[2007/06/16 v1.0] . . . . .	11
	[2007/06/20 v1.1] . . . . .	11
	[2007/09/09 v1.2] . . . . .	11
<b>7</b>	<b>Index</b>	<b>11</b>

# The `setouterhbox` package

## Abstract

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

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Introduction . . . . .	2
1.2	Acknowledgement . . . . .	2
1.3	Usage . . . . .	2
1.4	Option <code>hyperref</code> . . . . .	3
1.5	Example . . . . .	3
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	Package start stuff . . . . .	3
2.2	Interface macros . . . . .	5
2.3	Main part . . . . .	5
2.4	Environment support . . . . .	8
2.5	Option <code>hyperref</code> . . . . .	8
<b>3</b>	<b>Test</b>	<b>9</b>
3.1	Catcode checks for loading . . . . .	9
3.2	Test with package <code>url</code> . . . . .	10
<b>4</b>	<b>Installation</b>	<b>11</b>
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
<b>5</b>	<b>References</b>	<b>12</b>
<b>6</b>	<b>History</b>	<b>12</b>
	[2005/10/05 v1.0] . . . . .	12
	[2005/10/07 v1.1] . . . . .	12
	[2005/10/18 v1.2] . . . . .	13
	[2006/02/12 v1.3] . . . . .	13
	[2006/08/26 v1.4] . . . . .	13
	[2007/04/26 v1.5] . . . . .	13
	[2007/05/17 v1.6] . . . . .	13
	[2007/09/09 v1.7] . . . . .	13
<b>7</b>	<b>Index</b>	<b>13</b>

# The settobox package

## Abstract

Commands are defined for getting box sizes similar to L<sup>A</sup>T<sub>E</sub>X's `\settowidth` commands.

<b>1</b>	<b>Usage</b>	<b>1</b>
1.1	Get box dimensions . . . . .	1
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
<b>2</b>	<b>Implementation</b>	<b>4</b>
<b>3</b>	<b>Installation</b>	<b>6</b>
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
<b>4</b>	<b>History</b>	<b>7</b>
[2000/02/11 v1.0]	. . . . .	7
[2000/09/07 v1.1]	. . . . .	7
[2006/02/20 v1.2]	. . . . .	7
[2007/04/11 v1.3]	. . . . .	8
[2008/08/11 v1.4]	. . . . .	8
<b>5</b>	<b>Index</b>	<b>8</b>

# 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.

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Patch . . . . .	2
1.2	Future . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Reload check and package identification . . . . .	2
2.2	Catcodes . . . . .	3
2.3	Loading packages . . . . .	4
2.3.1	plain- $\text{\TeX}$ . . . . .	4
2.3.2	$\text{\LaTeX}$ . . . . .	5
2.3.3	$\epsilon$ - $\text{\TeX}$ . . . . .	5
2.4	Macro for redefinitions . . . . .	5
2.5	Redefinition of <code>\SOUL@eval</code> . . . . .	6
2.6	UTF-8 analysis . . . . .	9
2.6.1	Help strings . . . . .	9
2.6.2	Support for <code>utf8.def</code> . . . . .	9
2.6.3	Support for <code>utf8x.def</code> . . . . .	10
2.7	Actions for UTF-8 sequences . . . . .	10
2.7.1	Redefinition of <code>\SOUL@splittoken</code> . . . . .	11
2.8	Patches . . . . .	12
<b>3</b>	<b>Test</b>	<b>14</b>
3.1	Catcode checks for loading . . . . .	14
3.2	$\text{\LaTeX}$ tests . . . . .	16
3.2.1	Driver definitions . . . . .	17
3.2.2	Test macros . . . . .	18
3.2.3	Testing . . . . .	21
<b>4</b>	<b>Installation</b>	<b>22</b>
4.1	Download . . . . .	22
4.2	Bundle installation . . . . .	22
4.3	Package installation . . . . .	22
4.4	Refresh file name databases . . . . .	23
4.5	Some details for the interested . . . . .	23
<b>5</b>	<b>References</b>	<b>24</b>
<b>6</b>	<b>History</b>	<b>24</b>
	[2007/09/09 v1.0] . . . . .	24
<b>7</b>	<b>Index</b>	<b>24</b>



# 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.

<b>1</b>	<b>User interface</b>	<b>1</b>
<b>2</b>	<b>Implementation</b>	<b>2</b>
<b>3</b>	<b>Installation</b>	<b>3</b>
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
<b>4</b>	<b>History</b>	<b>4</b>
[2006/12/02 v1.0]	. . . . .	4
[2007/05/06 v1.1]	. . . . .	4
[2007/11/11 v1.2]	. . . . .	4
<b>5</b>	<b>Index</b>	<b>4</b>

# 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.

<b>1</b>	<b>Documentation</b>	<b>1</b>
1.1	Introduction . . . . .	1
1.2	Usage . . . . .	2
1.3	Limitations . . . . .	2
1.3.1	Other file dependencies . . . . .	2
1.3.2	<code>\include</code> dependencies . . . . .	2
1.3.3	Summary . . . . .	3
1.4	Requirements . . . . .	3
<b>2</b>	<b>Implementation</b>	<b>3</b>
<b>3</b>	<b>Installation</b>	<b>4</b>
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
<b>4</b>	<b>References</b>	<b>6</b>
<b>5</b>	<b>History</b>	<b>6</b>
	[2008/07/14 v1.0] . . . . .	6
<b>6</b>	<b>Index</b>	<b>6</b>

# The stringenc package

## Abstract

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

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	User interface . . . . .	2
1.2	Supported encodings . . . . .	3
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	Reload check and package identification . . . . .	4
2.2	Catcodes . . . . .	5
2.3	Tools . . . . .	5
2.4	Encoding aliases . . . . .	16
2.5	Encoding files . . . . .	18
2.5.1	UTF-32BE, UTF-32LE . . . . .	18
2.5.2	UTF-8 . . . . .	20
2.5.3	UTF-16LE . . . . .	25
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 <code>ascii-print</code> . . . . .	30
2.5.9	Clean7Bit . . . . .	31
2.5.10	Other encodings (8 bit) . . . . .	32
<b>3</b>	<b>Test</b>	<b>75</b>
3.1	Catcode checks for loading . . . . .	75
3.2	Conversion tests . . . . .	76
3.2.1	UTF8/16/32 encodings . . . . .	77
3.2.2	ASCII . . . . .	79
3.2.3	PDFDocEncoding . . . . .	79
3.2.4	ISO-8859-1 . . . . .	80
3.2.5	CP1252 . . . . .	80
3.2.6	KOI8-R . . . . .	80
3.2.7	DEC-MCS . . . . .	81
3.3	Removal of byte order marks . . . . .	81
<b>4</b>	<b>Installation</b>	<b>81</b>
4.1	Download . . . . .	81
4.2	Bundle installation . . . . .	82
4.3	Package installation . . . . .	82
4.4	Refresh file name databases . . . . .	83
4.5	Some details for the interested . . . . .	83

<b>5 History</b>	<b>84</b>
[2007/06/14 v1.0] . . . . .	84
[2007/06/16 v1.1] . . . . .	84
[2007/09/09 v1.2] . . . . .	84
[2007/10/22 v1.3] . . . . .	84
[2007/11/11 v1.4] . . . . .	84
[2007/11/25 v1.5] . . . . .	84
[2008/10/27 v1.6] . . . . .	84
[2009/12/15 v1.7] . . . . .	85
[2010/03/01 v1.8] . . . . .	85
<b>6 Index</b>	<b>85</b>

# The tabularht package

## Abstract

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

<b>1</b>	<b>Usage</b>	<b>1</b>
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
<b>2</b>	<b>Implementation</b>	<b>4</b>
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
<b>3</b>	<b>Installation</b>	<b>13</b>
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
<b>4</b>	<b>History</b>	<b>15</b>
	[2005/09/22 v1.0] . . . . .	15
	[2005/10/16 v2.0] . . . . .	15
	[2005/10/18 v2.1] . . . . .	15
	[2006/02/20 v2.2] . . . . .	15
	[2006/12/22 v2.3] . . . . .	15
	[2007/03/21 v2.4] . . . . .	15
	[2007/04/11 v2.5] . . . . .	15
<b>5</b>	<b>Index</b>	<b>15</b>

# The tabularkv package

## Abstract

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

<b>1</b>	<b>Usage</b>	<b>1</b>
1.1	Example . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>2</b>
<b>3</b>	<b>Installation</b>	<b>3</b>
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
<b>4</b>	<b>History</b>	<b>4</b>
[2005/09/22 v1.0]	. . . . .	4
[2006/02/20 v1.1]	. . . . .	4
<b>5</b>	<b>Index</b>	<b>4</b>

# The telprint package

## Abstract

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

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Introduction . . . . .	2
1.2	Short overview in English . . . . .	2
1.2.1	Configuration . . . . .	2
1.3	Documentation in German . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	Reload check and package identification . . . . .	3
2.2	Catcodes . . . . .	4
2.3	Package macros . . . . .	5
<b>3</b>	<b>Test</b>	<b>7</b>
3.1	Catcode checks for loading . . . . .	7
<b>4</b>	<b>Installation</b>	<b>8</b>
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
<b>5</b>	<b>History</b>	<b>10</b>
	[1996/11/28 v1.0] . . . . .	10
	[1997/09/16 v1.1] . . . . .	10
	[1997/10/16 v1.2] . . . . .	10
	[1997/12/09 v1.3] . . . . .	10
	[2004/11/02 v1.4] . . . . .	10
	[2005/09/30 v1.5] . . . . .	10
	[2006/02/12 v1.6] . . . . .	10
	[2006/08/26 v1.7] . . . . .	11
	[2007/04/11 v1.8] . . . . .	11
	[2007/09/09 v1.9] . . . . .	11
	[2008/08/11 v1.10] . . . . .	11
<b>6</b>	<b>Index</b>	<b>11</b>

# 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.

<b>1</b>	<b>User interface</b>	<b>1</b>
<b>2</b>	<b>Implementation</b>	<b>2</b>
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
<b>3</b>	<b>Installation</b>	<b>4</b>
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
<b>4</b>	<b>History</b>	<b>5</b>
	[2007/01/08 v1.0] . . . . .	5
<b>5</b>	<b>Index</b>	<b>6</b>



# The twoopt package

## Abstract

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

<b>1</b>	<b>Usage</b>	<b>1</b>
<b>2</b>	<b>Implementation</b>	<b>2</b>
<b>3</b>	<b>Installation</b>	<b>3</b>
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
<b>4</b>	<b>History</b>	<b>5</b>
[1998/10/30 v1.0]	. . . . .	5
[1998/10/30 v1.1]	. . . . .	5
[1998/11/04 v1.2]	. . . . .	5
[1999/04/12 v1.3]	. . . . .	5
[2006/02/20 v1.4]	. . . . .	5
[2008/08/11 v1.5]	. . . . .	5
<b>5</b>	<b>Index</b>	<b>6</b>

# The uniquecounter package

## Abstract

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

<b>1</b>	<b>Documentation</b>	<b>1</b>
1.1	Example . . . . .	2
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Reload check and package identification . . . . .	2
2.2	Catcodes . . . . .	3
<b>3</b>	<b>Test</b>	<b>5</b>
3.1	Catcode checks for loading . . . . .	5
3.2	Macro tests . . . . .	7
3.2.1	Test with L <sup>A</sup> T <sub>E</sub> X . . . . .	7
3.2.2	Test with plain-T <sub>E</sub> X . . . . .	8
<b>4</b>	<b>Installation</b>	<b>9</b>
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
<b>5</b>	<b>History</b>	<b>11</b>
	[2009/09/11 v1.0] . . . . .	11
	[2009/12/18 v1.1] . . . . .	11
<b>6</b>	<b>Index</b>	<b>11</b>

# The zref package

## Abstract

Package `zref` tries to get rid of the restriction in  $\text{\LaTeX}$ '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.

<b>1</b>	<b>Introduction</b>	<b>3</b>
1.1	Standard $\text{\LaTeX}$ behaviour	3
1.2	Basic idea	3
1.3	Interfaces	4
<b>2</b>	<b>Interface for programmers</b>	<b>4</b>
2.1	Entities	4
2.2	Property list	5
2.3	Property	5
2.4	Reference generation	6
2.5	Data extraction	6
2.6	Setup	7
2.7	Declared properties	7
2.8	Wrapper for advanced situations	7
2.9	Counter for unique names	8
<b>3</b>	<b>User interface</b>	<b>8</b>
3.1	Module <code>user</code>	8
3.2	Module <code>abspage</code>	9
3.3	Module <code>lastpage</code>	9
3.3.1	Example	9
3.4	Module <code>totpages</code>	10
3.5	Module <code>runs</code>	10
3.6	Module <code>perpage</code>	11
3.7	Module <code>counter</code>	11
3.8	Module <code>titleref</code>	11
3.9	Module <code>savepos</code>	12
3.10	Module <code>dotfill</code>	12
3.11	Module <code>xr</code>	13
<b>4</b>	<b>ToDo</b>	<b>13</b>
<b>5</b>	<b>Example</b>	<b>14</b>
<b>6</b>	<b>Implementation</b>	<b>16</b>
6.1	Package <code>zref</code>	16
6.1.1	Identification	16
6.1.2	Load basic module	16
6.1.3	Process options	16

6.2	Module <b>base</b>	17
6.2.1	Prefixes	17
6.2.2	Identification	17
6.2.3	Utilities	17
6.2.4	Check for $\epsilon$ -TeX	18
6.2.5	Auxiliary file stuff	18
6.2.6	Property lists	19
6.2.7	Properties	20
6.2.8	Reference generation	22
6.2.9	Reference querying and extracting	23
6.2.10	Compatibility with <b>babel</b>	25
6.2.11	Unique counter support	25
6.2.12	Setup	26
6.3	Module <b>user</b>	26
6.4	Module <b>abspage</b>	27
6.5	Module <b>counter</b>	28
6.6	Module <b>lastpage</b>	28
6.7	Module <b>totpages</b>	28
6.8	Module <b>runs</b>	29
6.9	Module <b>perpage</b>	29
6.10	Module <b>titleref</b>	31
6.10.1	Implementation	31
6.10.2	User interface	33
6.10.3	Patches for section and caption commands	33
6.11	Module <b>xr</b>	35
6.12	Module <b>hyperref</b>	39
6.13	Module <b>savepos</b>	40
6.13.1	Identification	40
6.13.2	Availability	40
6.13.3	Setup	40
6.13.4	User macros	40
6.14	Module <b>dotfill</b>	41
<b>7</b>	<b>Test</b>	<b>42</b>
7.1	<code>\zref@localaddprop</code>	42
7.2	Module <b>runs</b>	43
<b>8</b>	<b>Installation</b>	<b>43</b>
8.1	Download	43
8.2	Bundle installation	43
8.3	Package installation	44
8.4	Refresh file name databases	44
8.5	Some details for the interested	44
<b>9</b>	<b>References</b>	<b>45</b>

<b>10 History</b>	<b>45</b>
[2006/02/20 v1.0]	45
[2006/05/03 v1.1]	45
[2006/05/25 v1.2]	45
[2006/09/08 v1.3]	46
[2007/01/23 v1.4]	46
[2007/02/18 v1.5]	46
[2007/04/06 v1.6]	46
[2007/04/17 v1.7]	46
[2007/04/22 v1.8]	46
[2007/05/02 v1.9]	46
[2007/05/06 v2.0]	46
[2007/05/28 v2.1]	46
[2008/09/21 v2.2]	46
[2008/10/01 v2.3]	46
[2009/08/07 v2.4]	47
[2009/12/06 v2.5]	47
[2009/12/07 v2.6]	47
[2009/12/08 v2.7]	47
<b>11 Index</b>	<b>47</b>