

# The `holtxdoc` package

Heiko Oberdiek  
<heiko.oberdiek at googlemail.com>

2010/03/10 v0.15

## 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`.

## Contents

<b>1 No usage</b>	<b>2</b>
<b>2 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 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 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 Index</b>	<b>8</b>

# 1 No usage

Caution: *This package is not intended for public use!*

It contains the macros and settings to generate the documentation of my packages in [CTAN:macros/latex/contrib/oberdiek/](#). Thus the package does not know anything about compatibility. Only my current packages' documentation must compile.

Older versions were more interesting, because they contained code to add `hyperref`'s features to L<sup>A</sup>T<sub>E</sub>X's doc system, e.g. bookmarks and index links. I separated this stuff and made a new package `hypdoc`.

# 2 Implementation

```
1 {*package}
2 \NeedsTeXFormat{LaTeX2e}
3 \ProvidesPackage{holtxdoc}%
4   [2010/03/10 v0.15 Private additional ltxdoc support (HO)]
5 \RequirePackage[numbered]{hypdoc}
6 \RequirePackage{array}
```

## 2.1 Help macros

```
7 \def\hld@info#1{%
8   \PackageInfo{holtxdoc}{#1\@gobble}%
9 }
10 \def\hld@warn#1{%
11   \PackageWarningNoLine{holtxdoc}{#1}%
12 }
```

## 2.2 History

```
13 \newcommand*{\StartHistory}{%
14   \section{History}%
15 }
16 \@ifpackagelater{hyperref}{2009/11/27}{%
17   \newcommand*{\HistVersion}[1]{%
18     \subsection*{[#1]}% hash-ok
19     \addcontentsline{toc}{subsection}{[#1]}% hash-ok
20     \def\HistLabel##1{%
21       \begin{group}%
22         \edef@\currentlabel{[#1]}% hash-ok
23         \label{##1}%
24       \end{group}%
25     }%
26   }%
27 }{%
28   \newcommand*{\HistVersion}[1]{%
29     \subsection*{%
30       \phantomsection
31       \addcontentsline{toc}{subsection}{[#1]}% hash-ok
32       [#1]}% hash-ok
33   }%
34   \def\HistLabel##1{%
35     \begin{group}%
36       \edef@\currentlabel{[#1]}% hash-ok
37       \label{##1}%
38     \end{group}%
39   }%
40 }%
41 }%
42 \newenvironment{History}{%
```

```

43  \StartHistory
44  \def\Version##1{%
45    \HistVersion{##1}%
46    \itemize
47  }%
48  \let\endVersion\enditemize
49 }{}}

2.3 Formatting macros

\UrlFoot
#1: text
#2: url
50 \newcommand{\URL}[2]{%
51   \begingroup
52     \def\link{\href{#2}{%
53       #1}%
54   \endgroup
55   \footnote{Url: \url{#2}}%
56 }

\NameEmail
#1: name
#2: email address
57 \newcommand*\NameEmail[2]{%
58   \expandafter\hld@NameEmail\expandafter{#2}{#1}%
59 }
60 \def\hld@NameEmail#1#2{%
61   \expandafter\hld@@NameEmail\expandafter{#2}{#1}%
62 }
63 \def\hld@@NameEmail#1#2{%
64   \ifx\#1#2\%
65     \hld@warn{%
66       Command \string\NameEmail\space without name and email%
67     }%
68   \else
69     \ifx\#1\%
70       \href{mailto:#2}{\nolinkurl{#2}}%
71     \else
72       \#1%
73       \ifx\#2\%
74         \else
75           \footnote{%
76             #1's email address: %
77             \href{mailto:#2}{\nolinkurl{#2}}%
78           }%
79         \fi
80       \fi
81     \fi
82 }

83 \newcommand*\Package[1]{\texttt{#1}}
84 \newcommand*\File[1]{\texttt{#1}}
85 \newcommand*\Verb[1]{\texttt{#1}}
86 \newcommand*\CS[1]{\texttt{\expandafter\gobble\string\#1} }

87 \newcommand*\CTAN[1]{%
88   \href{ftp://ftp.ctan.org/tex-archive/#1}{\nolinkurl{CTAN:#1}}%
89 }

90 \newcommand*\Newsgroup[1]{%
91   \href{http://groups.google.com/group/#1/topics}{\nolinkurl{news:#1}}%
92 }

93 \newcommand*\xpackage[1]{\textsf{#1}}

```

```

94 \newcommand*{\xmodule}[1]{\textsf{#1}}
95 \newcommand*{\xclass}[1]{\textsf{#1}}
96 \newcommand*{\xoption}[1]{\textsf{#1}}
97 \newcommand*{\xfile}[1]{\texttt{#1}}
98 \newcommand*{\xext}[1]{\texttt{.#1}}
99 \newcommand*{\xemail}[1]{%
100   \textless\texttt{#1}\textgreater%
101 }
102 \newcommand*{\xnewsgroup}[1]{%
103   \href{news:#1}{\nolinkurl{#1}}%
104 }

```

The following environment `decls` is derived from environment `decl` of `ltxguide.cls`:

```

105 \newenvironment{decls}[1]{%
106   \par
107   \addvspace{4.5ex plus 1ex}%
108   \vskip -\parskip
109   \noindent
110   \hspace{-\leftmargini}%
111   \def\#1{\texttt{\{ \} \meta{##1}\texttt{\}}\%}
112   \def*{\unskip ,\texttt{*}\%}%
113   \begin{tabular}{|l|}%
114     \hline
115     \expandafter\SpecialUsageIndex\csname #1\endcsname
116     \cs{#1}%
117   }{%
118     \%
119     \hline
120   \end{tabular}%
121   \nobreak
122   \par
123   \nobreak
124   \vspace{2.3ex}%
125   \vskip -\parskip
126   \noindent
127   \ignorespacesafterend
128 }

```

## 2.4 Names

```

129 \providecommand*{\eTeX}{\mbox{$\varepsilon$-\TeX}}
130 \providecommand*{\pdfTeX}{pdf\TeX}
131 \providecommand*{\pdfLaTeX}{pdf\LaTeX}

```

\LuaTeX Hans Hagen has suggested to improve the ‘aT’ kerning in the mailing list ‘luatex at tug.org’ at 2010-03-09 19:59:

Actually we can make a nice definition using the RL typesetting ... as not that many fonts have a proper ‘aT’ kerning we can do the following:

```

\def\LuaTeX
{\begingroup
  Lua%
  \setbox0\hbox{oT}%
  \setbox2\hbox{o\kern0ptT}%
  \ifdim\wd0=\wd2
    \setbox0\hbox dir TRT{To}%
    \setbox2\hbox{T\kern0pto}%
    \hskip\dimexpr\wd0-\wd2\relax
  \fi
  \TeX
\endgroup}

```

Of course this ignores the fact that the a is not symmetrical which is why we use the o instead but it looks impressive (as the ‘T’ normally is symmetrical we don’t really need the need the dir).

```

132 \providetcommand*\Luatex{%
133   \begingroup
134   Lua%
135   \setbox0\hbox{aT}%
136   \setbox2\hbox{a\kern0ptT}%
137   \ifdim\wd0<\wd2 %
138   \else
139     \setbox0\hbox{oT}%
140     \setbox2\hbox{o\kern0ptT}%
141     \ifdim\wd0<\wd2 %
142     \else
143       \setbox0\hbox{To}%
144       \setbox2\hbox{T\kern0pto}%
145     \fi
146     \ifdim\wd0<\wd2 %
147       \dimen0=\wd0 %
148       \advance\dimen0-\wd2 %
149       \kern\dimen0 %
150     \fi
151   \fi
152   \TeX
153 \endgroup
154 }

155 \def\@temp#1#2{%
156   \@ifundefined{\expandafter\gobble\string#1}{%
157     \ DeclareRobustCommand*{#1}{%
158       \texorpdfstring{%
159         \begingroup
160         X%
161         \kern-.1em\relax
162         \ifundefined{rotatebox}{e}{%
163           \lower0.5ex\hbox{%
164             \setbox0=\hbox{E}%
165             \dimen0=\ht0 %
166             \advance\dimen0 by \dp0 %
167             \raise\dimen0\hbox{\rotatebox{180}{\box0}}%
168           }%
169         }%
170       }{Xe}%
171       \ifx\TeX#2\relax
172         \kern-.15em\relax
173       \fi
174     #2%
175   \endgroup
176 }%
177 }{}%
178 }

179 \@temp\XeTeX\TeX
180 \@temp\XeLaTeX\LaTeX
181 \providetcommand*\teTeX{te\TeX}
182 \providetcommand*\mikTeX{mik\TeX}
183 \providetcommand*\MakeIndex{\textsf{MakeIndex}}
184 \providetcommand*\docstrip{\textsf{docstrip}}
185 \providetcommand*\plainTeX{\mbox{plain-\TeX}}
186 \providetcommand*\iniTeX{\mbox{ini-\TeX}}
187 \providetcommand*\VTeX{V\TeX}

```

## 2.5 Setup

### 2.5.1 Package doc

```
188 \CodelineIndex
189 \EnableCrossrefs
190 \setcounter{IndexColumns}{2}
191 \DoNotIndex{\begingroup,\endgroup,\bgroup,\egroup}
192 \DoNotIndex{\def,\edef,\xdef,\global,\long,\let}
193 \DoNotIndex{\expandafter,\noexpand,\string}
194 \DoNotIndex{\else,\fi,\or}
195 \DoNotIndex{\relax}
```

### 2.5.2 Page layout

```
196 \addtolength{\textheight}{\headheight}
197 \addtolength{\textheight}{\headsep}
198 \setlength{\headheight}{0pt}
199 \setlength{\headsep}{0pt}
200 \addtolength{\topmargin}{-10mm}
201 \addtolength{\textheight}{20mm}
202 
```

## 3 Installation

### 3.1 Download

**Package.** This package is available on CTAN<sup>1</sup>:

[CTAN:macros/latex/contrib/oberdiek/holtxdoc.dtx](http://CTAN:macros/latex/contrib/oberdiek/holtxdoc.dtx) The source file.

[CTAN:macros/latex/contrib/oberdiek/holtxdoc.pdf](http://CTAN:macros/latex/contrib/oberdiek/holtxdoc.pdf) Documentation.

**Bundle.** All the packages of the bundle ‘oberdiek’ are also available in a TDS compliant ZIP archive. There the packages are already unpacked and the documentation files are generated. The files and directories obey the TDS standard.

[CTAN:install/macros/latex/contrib/oberdiek.tds.zip](http://CTAN:install/macros/latex/contrib/oberdiek.tds.zip)

TDS refers to the standard “A Directory Structure for T<sub>E</sub>X Files” ([CTAN:tds/tds.pdf](http://CTAN:tds/tds.pdf)). Directories with `texmf` in their name are usually organized this way.

### 3.2 Bundle installation

**Unpacking.** Unpack the `oberdiek.tds.zip` in the TDS tree (also known as `texmf` tree) of your choice. Example (linux):

```
unzip oberdiek.tds.zip -d ~/texmf
```

**Script installation.** Check the directory `TDSScripts/oberdiek/` for scripts that need further installation steps. Package `attachfile2` comes with the Perl script `pdfatfi.pl` that should be installed in such a way that it can be called as `pdfatfi`. Example (linux):

```
chmod +x scripts/oberdiek/pdfatfi.pl
cp scripts/oberdiek/pdfatfi.pl /usr/local/bin/
```

### 3.3 Package installation

**Unpacking.** The `.dtx` file is a self-extracting `docstrip` archive. The files are extracted by running the `.dtx` through plain-T<sub>E</sub>X:

```
tex holtxdoc.dtx
```

---

<sup>1</sup>[ftp://ftp.ctan.org/tex-archive/](http://ftp.ctan.org/tex-archive/)

**TDS.** Now the different files must be moved into the different directories in your installation TDS tree (also known as `texmf` tree):

```
holtxdoc.sty → tex/latex/oberdiek/holtxdoc.sty  
holtxdoc.pdf → doc/latex/oberdiek/holtxdoc.pdf  
holtxdoc.dtx → source/latex/oberdiek/holtxdoc.dtx
```

If you have a `docstrip.cfg` that configures and enables `docstrip`'s TDS installing feature, then some files can already be in the right place, see the documentation of `docstrip`.

### 3.4 Refresh file name databases

If your `TeX` distribution (`teTeX`, `mikTeX`, ...) relies on file name databases, you must refresh these. For example, `teTeX` users run `texhash` or `mktexlsr`.

### 3.5 Some details for the interested

**Attached source.** The PDF documentation on CTAN also includes the `.dtx` source file. It can be extracted by AcrobatReader 6 or higher. Another option is `pdftk`, e.g. unpack the file into the current directory:

```
pdftk holtxdoc.pdf unpack_files output .
```

**Unpacking with L<sup>A</sup>T<sub>E</sub>X.** The `.dtx` chooses its action depending on the format:

**plain-`TeX`:** Run `docstrip` and extract the files.

**L<sup>A</sup>T<sub>E</sub>X:** Generate the documentation.

If you insist on using L<sup>A</sup>T<sub>E</sub>X for `docstrip` (really, `docstrip` does not need L<sup>A</sup>T<sub>E</sub>X), then inform the autodetect routine about your intention:

```
\latex \let\install=y\input{holtxdoc.dtx}
```

Do not forget to quote the argument according to the demands of your shell.

**Generating the documentation.** You can use both the `.dtx` or the `.drv` to generate the documentation. The process can be configured by the configuration file `ltxdoc.cfg`. For instance, put this line into this file, if you want to have A4 as paper format:

```
\PassOptionsToClass{a4paper}{article}
```

An example follows how to generate the documentation with pdfL<sup>A</sup>T<sub>E</sub>X:

```
pdflatex holtxdoc.dtx  
makeindex -s gind.ist holtxdoc.idx  
pdflatex holtxdoc.dtx  
makeindex -s gind.ist holtxdoc.idx  
pdflatex holtxdoc.dtx
```

## 4 History

[1999/06/26 v0.3]

• ...

[2000/08/14 v0.4]

• ...

[2001/08/27 v0.5]

- ...

[2001/09/02 v0.6]

- ...

[2006/06/02 v0.7]

- Major change: most is put into a new package `hypdoc`.

[2007/10/21 v0.8]

- `\XeTeX` and `\XeLaTeX` added.

[2007/11/11 v0.9]

- `\LuaTeX` added.

[2007/12/12 v0.10]

- `\iniTeX` added.

[2008/08/11 v0.11]

- `\Newsgroup`, `\xnewsgroup`, and `\URL` updated.

[2009/08/07 v0.12]

- `\xmodule` added.

[2009/12/02 v0.13]

- Anchor hack for unnumbered subsections is removed for `hyperref`  $\geq 2009/11/27$  6.79k.

[2010/02/03 v0.14]

- `\XeTeX` and `\XeLaTeX` are made robust.

[2010/03/10 v0.15]

- `\LuaTeX` changed according to Hans Hagen's definition in the luatex mailing list.

## 5 Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

Symbols		A	
<code>\*</code> .....	112	<code>\\\</code> .....	64, 69, 73, 86, 118
<code>\,</code> .....	112	<code>\{</code> .....	111
<code>\@currentlabel</code> .....	22, 36	<code>\}</code> .....	111
<code>\@gobble</code> .....	8, 86, 156		
<code>\@ifpackagelater</code> .....	16		
<code>\@ifundefined</code> .....	156, 162	<code>\addcontentsline</code> .....	19, 31

\addtolength	196, 197, 200, 201	\link	52
\addvspace	107	\lower	163
\advance	148, 166	\LuaTeX	<u>132</u>
<b>B</b>		<b>M</b>	
\begin	113	\M	111
\box	167	\MakeIndex	183
<b>C</b>		\mbox	129, 185, 186
\CodelineIndex	188	\meta	111
\CS	86	\mikTeX	182
\cs	116	<b>N</b>	
\csname	115	\NameEmail	57, 66
\CTAN	87	\NeedsTeXFormat	2
<b>D</b>		\newcommand	13, 17,
\DeclareRobustCommand	157	28, 50, 57, 83, 84, 85, 86, 87,	
\dimen	147, 148, 149, 165, 166, 167	90, 93, 94, 95, 96, 97, 98, 99, 102	
\docstrip	184	\newenvironment	42, 105
\DoNotIndex	191, 192, 193, 194, 195	\Newsgroup	90
\dp	166	\nobreak	121, 123
<b>E</b>		\noindent	109, 126
\EnableCrossrefs	189	\nolinkurl	70, 77, 88, 91, 103
\end	120	<b>P</b>	
\endcsname	115	\Package	83
\enditemize	48	\PackageInfo	8
\endVersion	48	\PackageWarningNoLine	11
\eTeX	129	\par	106, 122
<b>F</b>		\parskip	108, 125
\File	84	\pdfLaTeX	131
\footnote	55, 75	\pdfTeX	130
<b>H</b>		\phantomsection	30
\hbox	135, 136, 139, 140, 143, 144, 163, 164, 167	\plainTeX	185
\headheight	196, 198	\providecommand	129, 130, 131, 132, 181, 182, 183, 184, 185, 186, 187
\headsep	197, 199	\ProvidesPackage	3
\HistLabel	20, 34	<b>R</b>	
\HistVersion	17, 28, 45	\raise	167
\hld@@NameEmail	61, 63	\RequirePackage	5, 6
\hld@info	7	\rotatebox	167
\hld@NameEmail	58, 60	<b>S</b>	
\hld@warn	10, 65	\section	14
\hline	114, 119	\setbox	135, 136, 139, 140, 143, 144, 164
\href	52, 70, 77, 88, 91, 103	\setcounter	190
\hspace	110	\setlength	198, 199
\ht	165	\space	66
<b>I</b>		\SpecialUsageIndex	115
\ifdim	137, 141, 146	\StartHistory	13, 43
\ifx	64, 69, 73, 171	\subsection	18, 29
\ignorespacesafterend	127	<b>T</b>	
\iniTeX	186	\texTeX	181
\itemize	46	\TeX	129, 130, 152, 171, 179, 181, 182, 185, 186, 187
<b>K</b>		\texorpdfstring	158
\kern	136, 140, 144, 149, 161, 172	\textgreater	100
<b>L</b>		\textheight	196, 197, 201
\label	23, 37	\textless	100
\LaTeX	131, 180	\textsf	93, 94, 95, 96, 184
\leftmargini	110	\textsl	183
		\texttt	83, 84, 85, 86, 97, 98, 100, 111, 112
		\topmargin	200

U	W		
\unskip . . . . .	112	\wd . . . . .	137, 141, 146, 147, 148
\URL . . . . .	50		
\url . . . . .	55		
V	X		
\varepsilon . . . . .	129	\xclass . . . . .	95
\Verb . . . . .	85	\XeLaTeX . . . . .	180
\Version . . . . .	44	\xemail . . . . .	99
\vskip . . . . .	108, 125	\XeTeX . . . . .	179
\vspace . . . . .	124	\xext . . . . .	98
\VTeX . . . . .	187	\xfile . . . . .	97
		\xmodule . . . . .	94
		\xnewsgroup . . . . .	102
		\xoption . . . . .	96
		\xpackage . . . . .	93