

# The holtxdoc package

Heiko Oberdiek  
<heiko.oberdiek at gmail.com>

2012/03/21 v0.24

## 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</b>	<b>No usage</b>	<b>2</b>
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Help macros	2
2.2	Font setup for Lua <sup>A</sup> T <sub>E</sub> X	2
2.3	Date	3
2.4	History	3
2.5	Formatting macros	4
2.6	Names	6
2.7	Setup	6
2.7.1	Package doc	6
2.7.2	Page layout	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>Catalogue</b>	<b>8</b>
<b>5</b>	<b>History</b>	<b>9</b>
[1999/06/26 v0.3]		9
[2000/08/14 v0.4]		9
[2001/08/27 v0.5]		9
[2001/09/02 v0.6]		9
[2006/06/02 v0.7]		9
[2007/10/21 v0.8]		9
[2007/11/11 v0.9]		9
[2007/12/12 v0.10]		9
[2008/08/11 v0.11]		9
[2009/08/07 v0.12]		10

[2009/12/02 v0.13]	10
[2010/02/03 v0.14]	10
[2010/03/10 v0.15]	10
[2010/04/03 v0.16]	10
[2010/04/08 v0.17]	10
[2010/04/18 v0.18]	10
[2010/04/24 v0.19]	10
[2010/12/03 v0.20]	10
[2011/02/04 v0.21]	10
[2011/11/22 v0.22]	10
[2012/03/07 v0.23]	10
[2012/03/21 v0.24]	10
<b>6 Index</b>	<b>11</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/](http://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 `LATEX`'s `doc` system, e.g. bookmarks and index links. I separated this stuff and made a new package `hypdoc`.

## 2 Implementation

```
1 \*package)
```

Package identification.

```
2 \NeedsTeXFormat{LaTeX2e}
3 \ProvidesPackage{holtxdoc}%
4   [2012/03/21 v0.24 Private additional ltxdoc support (H0)]
5 \PassOptionsToPackage{pdfencoding=auto}{hyperref}
6 \RequirePackage[numbered]{hypdoc}[2010/03/26]
7 \RequirePackage{hyperref}[2010/03/30]
8 \RequirePackage{pdftexcmds}[2010/04/01]
9 \RequirePackage{ltxcmds}[2010/03/09]
10 \RequirePackage{hologo}[2011/11/22]
11 \RequirePackage{ifluatex}[2010/03/01]
12 \RequirePackage{array}
```

### 2.1 Help macros

```
13 \def\hld@info#1{%
14   \PackageInfo{holtxdoc}{#1\@gobble}%
15 }
16 \def\hld@warn#1{%
17   \PackageWarningNoLine{holtxdoc}{#1}%
18 }
```

### 2.2 Font setup for Lua<sup>L</sup>A<sub>T</sub>E<sub>X</sub>

```
19 \ifluatex
20   \RequirePackage{fontspec}[2011/09/18]%
```

```

21 \RequirePackage{unicode-math}[2011/09/19]%
22 \setmathfont{lmmath-regular.otf}%
23 \fi

```

## 2.3 Date

```

24 \ltx@ifundefined{pdf@filemoddate}{%
25 }{%
26 \edef\hld@temp{\pdf@filemoddate{\jobname.dtx}}%
27 \ifx\hld@temp\ltx@empty
28 \else
29 \begingroup
30 \def\x#1:#2#3#4#5#6#7#8#9{%
31 \year=#2#3#4#5\relax
32 \month=#6#7\relax
33 \day=#8#9\relax
34 \y
35 }%
36 \def\y#1#2#3#4#5@nil{%
37 \time=#1#2\relax
38 \multiply\time by 60\relax
39 \advance\time#3#4\relax
40 }%
41 \expandafter\x\hld@temp@nil
42 \edef\x{\endgroup
43 \year=\the\year\relax
44 \month=\the\month\relax
45 \day=\the\day\relax
46 \time=\the\time\relax
47 }%
48 \x
49 \edef\hld@temp{%
50 \noexpand\hypersetup{%
51 pdfcreationdate=\hld@temp,%
52 pdfmoddate=\hld@temp
53 }%
54 }%
55 \hld@temp
56 \fi
57 }

```

## 2.4 History

\historyname

```

58 \providecommand*\historyname{History}

59 \newcommand*\StartHistory{%
60 \section{\historyname}%
61 }
62 \@ifpackagelater{hyperref}{2009/11/27}{%
63 \newcommand*\HistVersion[1]{%
64 \subsection*{[#1]} hash-ok
65 \addcontentsline{toc}{subsection}{[#1]} hash-ok
66 \def\HistLabel##1{%
67 \begingroup
68 \protected@edef\@currentlabel{[#1]} hash-ok
69 \label{##1}%
70 \endgroup
71 }%
72 }%

```

```

73 }{%
74   \newcommand*{\HistVersion}[1]{%
75     \subsection*{%
76       \phantomsection
77       \addcontentsline{toc}{subsection}{[#1]}% hash-ok
78       [#1]}% hash-ok
79     }%
80     \def\HistLabel##1{%
81       \begingroup
82       \protected@edef\@currentlabel{[#1]}% hash-ok
83       \label{##1}%
84     \endgroup
85   }%
86 }%
87 }
88 \newenvironment{History}{%
89   \StartHistory
90   \def\Version##1{%
91     \HistVersion{##1}%
92     \@ifnextchar\end{%
93       \let\endVersion\relax
94     }{%
95       \let\endVersion\enditemize
96       \itemize
97     }%
98   }%
99   \raggedright
100 }{}

```

## 2.5 Formatting macros

```

\UrlFoot
#1: text
#2: url

101 \newcommand{\URL}[2]{%
102   \begingroup
103   \def\link{\href{#2}}%
104   #1%
105 \endgroup
106 \footnote{Url: \url{#2}}%
107 }

\NameEmail
#1: name
#2: email address

108 \newcommand*{\NameEmail}[2]{%
109   \expandafter\hld@NameEmail\expandafter{#2}{#1}%
110 }
111 \def\hld@NameEmail#1#2{%
112   \expandafter\hld@@NameEmail\expandafter{#2}{#1}%
113 }
114 \def\hld@@NameEmail#1#2{%
115   \ifx\\#1#2\\%
116     \hld@warn{%
117       Command \string\NameEmail\space without name and email%
118     }%
119   \else
120     \ifx\\#1\\%

```

```

121     \href{mailto:#2}{\nolinkurl{#2}}%
122   \else
123     #1%
124     \ifx\\#2\\%
125   \else
126     \footnote{%
127       #1's email address: %
128       \href{mailto:#2}{\nolinkurl{#2}}%
129     }%
130   \fi
131 \fi
132 \fi
133 }

134 \newcommand*\Package[1]{\texttt{#1}}
135 \newcommand*\File[1]{\texttt{#1}}
136 \newcommand*\Verb[1]{\texttt{#1}}
137 \newcommand*\CS[1]{\texttt{\expandafter\@gobble\string\#1}}

138 \newcommand*\CTAN[1]{%
139   \href{ftp://ftp.ctan.org/tex-archive/#1}{\nolinkurl{CTAN:#1}}%
140 }

141 \newcommand*\Newsgroup[1]{%
142   \href{http://groups.google.com/group/#1/topics}{\nolinkurl{news:#1}}%
143 }

144 \newcommand*\xpackage[1]{\textsf{#1}}
145 \newcommand*\xmodule[1]{\textsf{#1}}
146 \newcommand*\xclass[1]{\textsf{#1}}
147 \newcommand*\xoption[1]{\textsf{#1}}
148 \newcommand*\xfile[1]{\texttt{#1}}
149 \newcommand*\xext[1]{\texttt{.#1}}
150 \newcommand*\xemail[1]{%
151   \textless\texttt{#1}\textgreater%
152 }
153 \newcommand*\xnewsgroup[1]{%
154   \href{news:#1}{\nolinkurl{#1}}%
155 }

```

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

```

156 \newenvironment{declcs}[1]{%
157   \par
158   \addvspace{4.5ex plus 1ex}%
159   \vskip -\parskip
160   \noindent
161   \hspace{-\leftmargin}%
162   \def\M##1{\texttt{\{}\meta{##1}\texttt{\}}}%
163   \def\*{\unskip\,\texttt{*}}%
164   \begin{tabular}{|l|}%
165     \hline
166     \expandafter\SpecialUsageIndex\csname #1\endcsname
167     \cs{#1}%
168   }\%
169   \\
170   \hline
171   \end{tabular}%
172   \nobreak
173   \par
174   \nobreak

```

```

175 \vspace{2.3ex}%
176 \vskip -\parskip
177 \noindent
178 \ignorespacesafterend
179 }

```

## 2.6 Names

```

180 \def\TeX{\hologo{eTeX}}
181 \def\pdfTeX{\hologo{pdfTeX}}
182 \def\pdfLaTeX{\hologo{pdfLaTeX}}
183 \def\LuaTeX{\hologo{LuaTeX}}
184 \def\LuaLaTeX{\hologo{LuaLaTeX}}
185 \def\XeTeX{\hologo{XeTeX}}
186 \def\XeLaTeX{\hologo{XeLaTeX}}
187 \def\plainTeX{\hologo{plainTeX}}
188 \providecommand*\teTeX{teTeX}
189 \providecommand*\mikTeX{mikTeX}
190 \providecommand*\MakeIndex{\textsl{MakeIndex}}
191 \providecommand*\docstrip{\textsf{docstrip}}
192 \providecommand*\iniTeX{\mbox{ini-TeX}}
193 \providecommand*\VTeX{VTeX}

```

## 2.7 Setup

### 2.7.1 Package doc

```

194 \CodelineIndex
195 \EnableCrossrefs
196 \setcounter{IndexColumns}{2}

197 \DoNotIndex{\begingroup,\endgroup,\bgroup,\egroup}
198 \DoNotIndex{\def,\edef,\xdef,\global,\long,\let}
199 \DoNotIndex{\expandafter,\noexpand,\string}
200 \DoNotIndex{\else,\fi,\or}
201 \DoNotIndex{\relax}

202 \IndexPrologue{%
203   \section*{Index}%
204   \markboth{Index}{Index}%
205   Numbers written in italic refer to the page %
206   where the corresponding entry is described; %
207   numbers underlined refer to the %
208   \ifcodeline@index
209     code line of the %
210   \fi
211   definition; plain numbers refer to the %
212   \ifcodeline@index
213     code lines %
214   \else
215     pages %
216   \fi
217   where the entry is used.%
218 }

```

### 2.7.2 Page layout

```

219 \addtolength{\textheight}{\headheight}
220 \addtolength{\textheight}{\headsep}
221 \setlength{\headheight}{0pt}
222 \setlength{\headsep}{0pt}

```

```

223 \addtolength{\topmargin}{-10mm}
224 \addtolength{\textheight}{20mm}
225 \end{package}

```

## 3 Installation

### 3.1 Download

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

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

[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](#)

*TDS* refers to the standard “A Directory Structure for T<sub>E</sub>X Files” ([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 `TDS:scripts/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
```

**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`.

---

<sup>1</sup><http://ftp.ctan.org/tex-archive/>

### 3.4 Refresh file name databases

If your  $\text{T}_{\text{E}}\text{X}$  distribution ( $\text{t}_{\text{E}}\text{X}$ ,  $\text{m}_{\text{ik}}\text{T}_{\text{E}}\text{X}$ , ...) relies on file name databases, you must refresh these. For example,  $\text{t}_{\text{E}}\text{X}$  users run `texhash` or `mktextlsr`.

### 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  $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ .** The `.dtx` chooses its action depending on the format:

**plain  $\text{T}_{\text{E}}\text{X}$ :** Run `docstrip` and extract the files.

**$\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ :** Generate the documentation.

If you insist on using  $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$  for `docstrip` (really, `docstrip` does not need  $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ ), 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 `pdf $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$` :

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

## 4 Catalogue

The following XML file can be used as source for the  [\$\text{T}\_{\text{E}}\text{X}\$  Catalogue](#). The elements `caption` and `description` are imported from the original XML file from the Catalogue. The name of the XML file in the Catalogue is `holtxdoc.xml`.

```
226 (*catalogue)
227 <?xml version='1.0' encoding='us-ascii'?>
228 <!DOCTYPE entry SYSTEM 'catalogue.dtd'>
229 <entry datestamp='$Date$' modifier='$Author$' id='holtxdoc'>
230   <name>holtxdoc</name>
231   <caption>Documentation macros for oberdiek bundle, etc.</caption>
232   <authorref id='auth:oberdiek'/>
233   <copyright owner='Heiko Oberdiek' year='1999-2012'/>
234   <license type='lppl1.3'/>
235   <version number='0.24'/>
236   <description>
237     These are personal macros, which are not necessarily useful to
```



```

238   other authors (they are provided as part off the source of others
239   of the author's packages).  Macros that may be of use to other
240   authors are available separately, in package
241   <xref refid='hypdoc'>hypdoc</xref>.
242   <p/>
243   The package is part of the <xref refid='oberdiek'>oberdiek</xref> bundle.
244 </description>
245 <documentation details='Package documentation'
246     href='ctan:/macros/latex/contrib/oberdiek/holtxdoc.pdf'/>
247 <ctan file='true' path='/macros/latex/contrib/oberdiek/holtxdoc.dtx'/>
248 <miktex location='oberdiek'/>
249 <texlive location='oberdiek'/>
250 <install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip'/>
251 </entry>
252 </catalogue>

```

## 5 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.

**[2010/04/03 v0.16]**

- Use date and time of `.dtx` file.

**[2010/04/08 v0.17]**

- Option `pdfencoding=auto` added for package `hyperref`.
- Package `hologo` added.

**[2010/04/18 v0.18]**

- Standard index prologue replaced by corrected prologue.

**[2010/04/24 v0.19]**

- Requested date of package `hologo` updated.

**[2010/12/03 v0.20]**

- History is now set using `\raggedright`.

**[2011/02/04 v0.21]**

- GL needs `\protected@edef` instead of `\edef` in `\HistLabel`.

**[2011/11/22 v0.22]**

- Font stuff added for `LuaATEX`.

**[2012/03/07 v0.23]**

- Accept empty history version.

**[2012/03/21 v0.24]**

- Section title for history uses `\historyname`.

## 6 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; plain numbers refer to the code lines where the entry is used.

Symbols			
\*	163	\hld@NameEmail	109, 111
\,	163	\hld@temp	26, 27, 41, 49, 51, 52, 55
\@currentlabel	68, 82	\hld@warn	16, 116
\@gobble	14, 137	\hline	165, 170
\@ifnextchar	92	\hologo	180,
\@ifpackagelater	62		181, 182, 183, 184, 185, 186, 187
\@nil	36, 41	\href	103, 121, 128, 139, 142, 154
\\	115, 120, 124, 137, 169	\hspace	161
\{	162	\hypersetup	50
\}	162		
A		I	
\addcontentsline	65, 77	\ifcodeline@index	208, 212
\addtolength	219, 220, 223, 224	\ifluatex	19
\addvspace	158	\ifx	27, 115, 120, 124
\advance	39	\ignorespacesafterend	178
B		\IndexPrologue	202
\begin	164	\iniTeX	192
C		\itemize	96
\CodelineIndex	194		
\CS	137	J	
\cs	167	\jobname	26
\csname	166	L	
\CTAN	138	\label	69, 83
D		\leftmargin	161
\day	33, 45	\link	103
\docstrip	191	\ltx@empty	27
\DoNotIndex	197, 198, 199, 200, 201	\ltx@ifUndefined	24
E		\LuaLaTeX	184
\EnableCrossrefs	195	\LuaTeX	183
\end	92, 171	M	
\endcsname	166	\M	162
\enditemize	95	\MakeIndex	190
\endVersion	93, 95	\markboth	204
\eTeX	180	\mbox	192
F		\meta	162
\File	135	\mikTeX	189
\footnote	106, 126	\month	32, 44
H		\multiply	38
\headheight	219, 221	N	
\headsep	220, 222	\NameEmail	108, 117
\HistLabel	66, 80	\NeedsTeXFormat	2
\historyname	58, 60	\newcommand	59, 63, 74, 101, 108, 134,
\HistVersion	63, 74, 91		135, 136, 137, 138, 141, 144,
\hld@NameEmail	112, 114		145, 146, 147, 148, 149, 150, 153
\hld@info	13	\newenvironment	88, 156
		\Newsgroup	141
		\nobreak	172, 174
		\noindent	160, 177
		\nolinkurl	121, 128, 139, 142, 154

<b>P</b>		<code>\textless</code> . . . . .	151
<code>\Package</code> . . . . .	134	<code>\textsf</code> . . . . .	144, 145, 146, 147, 191
<code>\PackageInfo</code> . . . . .	14	<code>\textsl</code> . . . . .	190
<code>\PackageWarningNoLine</code> . . . . .	17	<code>\texttt</code> . . . . .	134, 135,
<code>\par</code> . . . . .	157, 173		136, 137, 148, 149, 151, 162, 163
<code>\parskip</code> . . . . .	159, 176	<code>\the</code> . . . . .	43, 44, 45, 46
<code>\PassOptionsToPackage</code> . . . . .	5	<code>\time</code> . . . . .	37, 38, 39, 46
<code>\pdf@filemoddate</code> . . . . .	26	<code>\topmargin</code> . . . . .	223
<code>\pdfLaTeX</code> . . . . .	182	<b>U</b>	
<code>\pdfTeX</code> . . . . .	181	<code>\unskip</code> . . . . .	163
<code>\phantomsection</code> . . . . .	76	<code>\URL</code> . . . . .	101
<code>\plainTeX</code> . . . . .	187	<code>\url</code> . . . . .	106
<code>\protected@edef</code> . . . . .	68, 82	<b>V</b>	
<code>\providecommand</code> . . . . .		<code>\Verb</code> . . . . .	136
.. 58, 188, 189, 190, 191, 192, 193		<code>\Version</code> . . . . .	90
<code>\ProvidesPackage</code> . . . . .	3	<code>\vskip</code> . . . . .	159, 176
<b>R</b>		<code>\vspace</code> . . . . .	175
<code>\raggedright</code> . . . . .	99	<code>\VTeX</code> . . . . .	193
<code>\RequirePackage</code> . . . . .		<b>X</b>	
..... 6, 7, 8, 9, 10, 11, 12, 20, 21		<code>\x</code> . . . . .	30, 41, 42, 48
<b>S</b>		<code>\xclass</code> . . . . .	146
<code>\section</code> . . . . .	60, 203	<code>\XeLaTeX</code> . . . . .	186
<code>\setcounter</code> . . . . .	196	<code>\xemail</code> . . . . .	150
<code>\setlength</code> . . . . .	221, 222	<code>\XeTeX</code> . . . . .	185
<code>\setmathfont</code> . . . . .	22	<code>\xext</code> . . . . .	149
<code>\space</code> . . . . .	117	<code>\xfile</code> . . . . .	148
<code>\SpecialUsageIndex</code> . . . . .	166	<code>\xmodule</code> . . . . .	145
<code>\StartHistory</code> . . . . .	59, 89	<code>\xnewsgroup</code> . . . . .	153
<code>\subsection</code> . . . . .	64, 75	<code>\xoption</code> . . . . .	147
<b>T</b>		<code>\xpackage</code> . . . . .	144
<code>\teTeX</code> . . . . .	188	<b>Y</b>	
<code>\TeX</code> . . . . .	188, 189, 192, 193	<code>\y</code> . . . . .	34, 36
<code>\textgreater</code> . . . . .	151	<code>\year</code> . . . . .	31, 43
<code>\textheight</code> . . . . .	219, 220, 224		