## The holtxdoc package

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#### 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.

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## 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 LATEX's doc system, e.g. bookmarks and index links. I separated this stuff and made a new package hypdoc.

#### $\mathbf{2}$ Implementation

```
1 (*package)
Package identification.
 2 \NeedsTeXFormat{LaTeX2e}
 3 \ProvidesPackage{holtxdoc}%
     [2012/03/21 v0.24 Private additional ltxdoc support (HO)]
 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{%
     \PackageInfo{holtxdoc}{#1\@gobble}%
14
15 }
16 \def\hld@warn#1{%
     \PackageWarningNoLine{holtxdoc}{#1}%
18 }
      Font setup for LuaIATEX
2.2
```

```
19 \ifluatex
    \RequirePackage{fontspec}[2011/09/18]%
    \RequirePackage{unicode-math}[2011/09/19]%
   \setmathfont{lmmath-regular.otf}%
22
23 \fi
```

#### 2.3 Date

```
24 \ltx@IfUndefined{pdf@filemoddate}{%
25 }{%
    \edef\hld@temp{\pdf@filemoddate{\jobname.dtx}}%
26
    \ifx\hld@temp\ltx@empty
```

```
\else
28
29
      \begingroup
        \def\x#1:#2#3#4#5#6#7#8#9{%
30
          31
32
          \mathbb{7}^{month=\#6\#7}
33
          \dy=#8#9\relax
34
          \у
        }%
35
        \def\y#1#2#3#4#5\@ni1{%}
36
          \time=#1#2\relax
37
          <text>
38
          \advance\times3#4\relax
39
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
          \time=\the\time\relax
46
47
        }%
48
      \x
      \edef\hld@temp{%
49
50
        \noexpand\hypersetup{%
          pdfcreationdate=\hld@temp,%
51
          pdfmoddate=\hld@temp
52
53
        }%
      }%
54
      \hld@temp
55
56
    \fi
57 }
     History
58 \providecommand*{\historyname}{History}
```

#### 2.4

\historyname

```
59 \newcommand*{\StartHistory}{%
60
    \section{\historyname}%
61 }
62 \ensuremath{\texttt{@ifpackagelater\{hyperref\}\{2009/11/27\}\{\%\}\}}
    \newcommand*{\HistVersion}[1]{%
63
      \subsection*{[#1]}% hash-ok
64
       \addcontentsline{toc}{subsection}{[#1]}% hash-ok
65
66
      \def\HistLabel##1{%
67
         \begingroup
           \protected@edef\@currentlabel{[#1]}% hash-ok
68
69
           \label{##1}%
70
         \endgroup
      }%
71
    }%
72
73 }{%
    \newcommand*{\HistVersion}[1]{%
74
      \subsection*{%
75
76
         \phantomsection
         \addcontentsline{toc}{subsection}{[#1]}% hash-ok
77
         [#1]% hash-ok
78
79
      }%
80
      \def\HistLabel##1{%
81
         \begingroup
           \protected@edef\@currentlabel{[#1]}% hash-ok
82
           \label{##1}%
83
         \endgroup
84
      }%
85
```

```
}%
86
87 }
88 \newenvironment{History}{%
     \StartHistory
     \def\Version\#1\{\%
91
       \HistVersion{##1}%
92
       \@ifnextchar\end{%
93
         \let\endVersion\relax
       }{%
94
         \let\endVersion\enditemize
95
         \itemize
96
       }%
97
     }%
98
     \raggedright
100 }{}
```

#### 2.5 Formatting macros

```
\UrlFoot
#1: text
#2: url
101 \newcommand{\URL}[2]{%
102
     \begingroup
103
       \left( \frac{\pi}{\pi}\right) 
       #1%
104
105
    \endgroup
     \footnote{Url: \url{#2}}%
106
107 }
\NameEmail
#1: name
#2: email address
108 \newcommand*{\NameEmail}[2]{%
     \expandafter\hld@NameEmail\expandafter{#2}{#1}%
111 \def\hld@NameEmail#1#2{%
112
     \expandafter\hld@@NameEmail\expandafter{#2}{#1}%
113 }
114 \def\hld@@NameEmail#1#2{%
    \ifx\\#1#2\\%
115
       \hld@warn{%
116
117
         Command \string\NameEmail\space without name and email%
       }%
118
     \else
119
120
       \ifx\\#1\\%
121
         \href{mailto:#2}{\nolinkurl{#2}}%
122
       \else
123
         #1%
         \ifx\\#2\\%
124
         \else
125
           \footnote{%
126
             #1's email address: %
127
             \href{mailto:#2}{\nolinkurl{#2}}%
128
           }%
129
         \fi
130
131
       \fi
132
     \fi
133 }
134 \mbox{\package}[1]{\text{#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]{%
     \href{ftp://ftp.ctan.org/tex-archive/#1}{\nolinkurl{CTAN:#1}}%
140 }
141 \newcommand*{\Newsgroup}[1]{%
     \href{http://groups.google.com/group/#1/topics}{\nolinkurl{news:#1}}%
142
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]{%
     \textless\texttt{#1}\textgreater%
152 }
153 \newcommand*{\xnewsgroup}[1]{%
     \href{news:#1}{\nolinkurl{#1}}%
154
155 }
   The following environment declcs is derived from environment decl of
ltxguide.cls:
156 \newenvironment{declcs}[1]{%
     \par
157
     \addvspace{4.5ex plus 1ex}%
158
     \vskip -\parskip
159
160
     \noindent
     \hspace{-\leftmargini}%
     \def\*{\unskip\,\texttt{*}}%
163
164
     \begin{tabular}{|1|}%
165
       \hline
       \expandafter\SpecialUsageIndex\csname #1\endcsname
166
       \cs{#1}%
167
168 }{%
       \\%
169
170
       \hline
171
     \end{tabular}%
172
     \nobreak
173
     \par
174
     \nobreak
175
     \vspace{2.3ex}%
     \vskip -\parskip
176
     \noindent
177
     \ignorespacesafterend
178
179 }
     Names
2.6
180 \def\eTeX{\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}{te\TeX}
189 \providecommand*{\mikTeX}{mik\TeX}
190 \providecommand*{\MakeIndex}{\texts1{MakeIndex}}
191 \providecommand*{\docstrip}{\textsf{docstrip}}
192 \providecommand*{\iniTeX}{\mbox{ini-\TeX}}
193 \providecommand*{\VTeX}{V\TeX}
```

#### 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}%
    Numbers written in italic refer to the page %
205
    where the corresponding entry is described; %
206
    numbers underlined refer to the %
207
    \ifcodeline@index
208
       code line of the %
209
210
     definition; plain numbers refer to the \%
211
     \ifcodeline@index
212
213
       code lines %
214
     \else
215
       pages %
216
     \fi
     where the entry is used.%
217
218 }
2.7.2 Page layout
219 \addtolength{\textheight}{\headheight}
220 \add to length {\texttt \textheight} {\texttt \headsep}
221 \setlength{\headheight}{0pt}
222 \setlength{\headsep}{0pt}
223 \addtolength{\topmargin}{-10mm}
224 \addtolength{\textheight}{20mm}
225 \langle /package \rangle
```

#### 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 TEX Files" (CTAN:tds/tds.pdf). Directories with texmf in their name are usually organized this way.

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

#### 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 TFX:

```
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):

```
\label{eq:holtxdoc.sty} $\operatorname{holtxdoc.sty} \to \operatorname{doc/latex/oberdiek/holtxdoc.pdf}$ $\operatorname{holtxdoc.dtx} \to \operatorname{source/latex/oberdiek/holtxdoc.dtx}$ $
```

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 IATEX. The .dtx chooses its action depending on the format:

plain T<sub>E</sub>X: Run docstrip and extract the files.

LATEX: Generate the documentation.

If you insist on using  $\LaTeX$  for docstrip (really, docstrip does not need  $\LaTeX$ ), 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 pdfIAT<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 Catalogue

The following XML file can be used as source for the TeX 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>
    <caption>Documentation macros for oberdiek bundle, etc.</caption>
231
232
    <authorref id='auth:oberdiek'/>
    <copyright owner='Heiko Oberdiek' year='1999-2012'/>
233
    cense type='lppl1.3'/>
234
    <version number='0.24'/>
235
    <description>
236
      These are personal macros, which are not necessarily useful to
237
      other authors (they are provided as part off the source of others
238
239
       of the author's packages). Macros that may be of use to other
       authors are available separately, in package
241
       <xref refid='hypdoc'>hypdoc</xref>.
242
       >
243
      The package is part of the  refid='oberdiek'>oberdiek bundle.
244
     </description>
     <documentation details='Package documentation'</pre>
245
         href='ctan:/macros/latex/contrib/oberdiek/holtxdoc.pdf'/>
246
     <ctan file='true' path='/macros/latex/contrib/oberdiek/holtxdoc.dtx'/>
247
    <miktex location='oberdiek'/>
248
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]

 $\bullet$  \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]

-  $\operatorname{GL}$  needs \protected@edef instead of \edef in \HistLabel.

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

• Font stuff added for LuaLATEX.

## [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          163         \@currentlabel       68, 82         \@gobble       14, 137         \@ifnextchar       92	\end       92, 171         \endcsname       166         \enditemize       95         \endVersion       93, 95         \eTeX       180
\@ifpackagelater 62 \@nil	<b>F</b>
\\	\footnote 106, 126
\{	,
\} 162	H
	\headheight 219, 221
A	\headsep
\addcontentsline 65, 77	\HistLabel 66, 80 \historyname 58, 60
\addtolength 219, 220, 223, 224	\HistVersion
\addvspace	\hld@NameEmail
\advance	\hld@info 13
В	\hld@NameEmail 109, 111
\begin 164	\hld@temp 26, 27, 41, 49, 51, 52, 55
	\hld@warn 16, 116
$\mathbf{C}$	\hline 165, 170
\CodelineIndex 194	\hologo 180,
\CS 137	181, 182, 183, 184, 185, 186, 187
\cs 167	\href 103, 121, 128, 139, 142, 154
\csname	\hspace
(CIAN	\hypersetup 50
D	I
\day 33, 45	\ifcodeline@index 208, 212
\docstrip 191	\ifluatex 19
\DoNotIndex 197, 198, 199, 200, 201	\ifx 27, 115, 120, 124
	\ignorespacesafterend 178
E	\IndexPrologue 202
\EnableCrossrefs 195	\iniTeX 192

ePackage
$\ldots$ 6, 7, 8, 9, 10, 11, 12, 2
_
${f S}$
n 60
nter
gth $\dots$ $221$
hfont
lUsageIndex
istory 5
tion $\overset{\circ}{\ldots}$
${f T}$
eater
ight 219, 220
ss
36, 137, 148, 149, 151, 162,
43, 44, 4
37, 38, 3
gin
3111
$\mathbf{U}$
$\mathbf{v}$
·
n
X
30, 41, 4
X
_
e
roup
n
ge
***
Y
$\begin{array}{cccccccccccccccccccccccccccccccccccc$