# The holtxdoc package

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## 2019/12/09 v0.30

#### 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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 $<sup>{\</sup>rm *Please\ report\ any\ issues\ at\ https://github.com/ho-tex/oberdiek/issues}$ 

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## 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:pkg/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 IATEX'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}%
     [2019/12/09 v0.30 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{array}
2.1
      Help macros
12 \def\hld@info#1{%
    \PackageInfo{holtxdoc}{#1\@gobble}%
14 }
15 \def\hld@warn#1{%
     \PackageWarningNoLine{holtxdoc}{#1}%
16
17 }
      Font setup for LuaLATEX
2.2
     \RequirePackage{fontspec}[2011/09/18]%
     \RequirePackage{unicode-math}[2011/09/19]%
```

\setmathfont{latinmodern-math.otf}%

#### 2.3 Date

21

22 \fi

```
23 \ltx@IfUndefined{pdf@filemoddate}{%
   24 }{%
                   \edef\hld@temp{\pdf@filemoddate{\jobname.dtx}}%
   25
   26
                   \ifx\hld@temp\ltx@empty
   27
                   \else
   28
                          \begingroup
                                 \label{eq:def_x#1:#2#3#4#5#6#7#8#9{%}} $$ \end{array} $$ \end{ar
   29
   30
                                         \year=#2#3#4#5\relax
                                         \mbox{month=#6#7}
   31
                                         \dy=#8#9\relax
   32
   33
                                         \у
                                 }%
   34
                                  \def\y#1#2#3#4#5\@ni1{%
   35
                                         	=#1#2\relax
   36
   37
                                         \multiply\time by 60\relax
   38
                                         \advance\time#3#4\relax
   39
                                  \expandafter\x\hld@temp\@nil
   40
                                  \edef\x{\endgroup
   41
   42
                                         \year=\the\year\relax
                                         \month=\the\month\relax
   43
                                         \day=\the\day\relax
   44
                                         \time=\the\time\relax
   45
                                }%
   46
   47
                           \x
                           \edef\hld@temp{%
   48
                                  \verb|\noexpand\hypersetup{%|}
   49
                                         pdfcreationdate=\hld@temp,%
   50
   51
                                         pdfmoddate=\hld@temp
                                 }%
   52
                         }%
   53
   54
                          \hld@temp
  55
                   \fi
  56 }
2.4
                       History
   57 \providecommand*{\historyname}{History}
   58 \newcommand*{\StartHistory}{%
                  \section{\historyname}%
   59
   60 }
   61 \@ifpackagelater{hyperref}{2009/11/27}{%
```

\historyname

```
\newcommand*{\HistVersion}[1]{%
62
      \subsection*{[#1]}% hash-ok
63
64
      \addcontentsline{toc}{subsection}{[#1]}% hash-ok
65
      \def\HistLabel##1{%
66
         \begingroup
           \protected@edef\@currentlabel{[#1]}% hash-ok
67
          \label{##1}%
68
        \endgroup
69
      }%
70
    }%
71
72 }{%
    \newcommand*{\HistVersion}[1]{%
73
74
      \subsection*{%
75
         \phantomsection
         \addcontentsline{toc}{subsection}{[#1]}% hash-ok
76
         [#1]% hash-ok
77
      }%
78
      \def\HistLabel##1{%
79
        \begingroup
80
```

```
\protected@edef\@currentlabel{[#1]}% hash-ok
81
           \label{##1}%
82
         \endgroup
83
      }%
84
85
    }%
86 }
87 \newenvironment{History}{%
88
    \StartHistory
    \def\Version\#1\{\%
89
       \HistVersion{##1}%
90
       \@ifnextchar\end{%
91
         \let\endVersion\relax
92
      }{%
93
94
         \let\endVersion\enditemize
95
         \itemize
96
      }%
97
    }%
    \raggedright
98
99 }{}
```

### 2.5 Formatting macros

```
\UrlFoot
#1: text
#2: url
100 \newcommand{\URL}[2]{%
101
    \begingroup
102
       \left( \frac{\#2}{\%} \right)
103
       #1%
104
     \endgroup
105
     \footnote{Url: \url{#2}}%
106 }
\NameEmail
#1: name
#2: email address
107 \newcommand*{\NameEmail}[2]{%
    \verb|\expandafter\hld@NameEmail\expandafter{#2}{#1}||
109 }
110 \def\hld@NameEmail#1#2{%}
     \expandafter\hld@@NameEmail\expandafter{#2}{#1}%
111
112 }
113 \def\hld@@NameEmail#1#2{%}
     \ifx\\#1#2\\%
114
115
         Command \string\NameEmail\space without name and email%
116
117
118
     \else
       \ifx\\#1\\%
119
         120
       \else
121
         #1%
122
         \ifx\\#2\\%
123
         \else
124
           \footnote{%
125
126
             #1's email address: %
127
             \href{mailto:#2}{\nolinkurl{#2}}%
           }%
128
         \fi
129
       \fi
130
    \fi
131
132 }
```

```
133 \newcommand*{\Package}[1]{\texttt{#1}}
134 \newcommand*{\File}[1]{\texttt{#1}}
135 \newcommand*{\Verb}[1]{\texttt{#1}}
136 \newcommand*{\CS}[1]{\texttt{\expandafter\@gobble\string\\#1}}
137 \newcommand*{\bibpackage}[4]{%
    \bibitem{#1}
    Package \xpackage{#1}, #2, #3.%
139
    \fint $$ \left( \frac{4}{\epsilon \right) } 
140
141 }
142 \mbox{newcommand}*{\CTAN}[1]{%}
143 \href{https://ctan.org/tex-archive/#1}{\nolinkurl{CTAN:#1}}%
144 }
145 \newcommand*{\CTANinstall}[1]{%
    \href{http://mirrors.ctan.org/#1}{\nolinkurl{CTAN:#1}}%
146
147 }
148 \newcommand*{\CTANpkg}[1]{%
    149
150 }
151 \newcommand*{\Newsgroup}[1]{%
152
    \href{https://groups.google.com/group/#1/topics}{\nolinkurl{news:#1}}%
153 }
154 \newcommand*{\xpackage}[1]{\textsf{#1}}
155 \newcommand*{\xmodule}[1]{\textsf{#1}}
156 \newcommand*{\xclass}[1]{\textsf{#1}}
157 \newcommand*{\xoption}[1]{\textsf{#1}}
158 \newcommand*{\xfile}[1]{\texttt{#1}}
159 \newcommand*{\xext}[1]{\texttt{.#1}}
160 \newcommand*{\xemail}[1]{%
    \textless\texttt{#1}\textgreater%
162 }
163 \newcommand*{\xnewsgroup}[1]{\%
164 \href{news:#1}{\nolinkurl{#1}}%
165 }
   The following environment declcs is derived from environment decl of
ltxguide.cls:
166 \newenvironment{declcs}[1]{%
    \par
167
     \verb|\addvspace{4.5ex plus 1ex}||
168
    \vskip -\parskip
169
170 \noindent
     \hspace{-\leftmargini}%
171
    172
    \def\*{\unskip\,\texttt{*}}%
173
174
     \begin{tabular}{|1|}%
175
       \hline
176
       \expandafter\SpecialUsageIndex\csname #1\endcsname
177
       \cs{#1}%
178 }{%
179
       11%
       \hline
180
     \end{tabular}%
181
182
     \nobreak
183
     \par
     \nobreak
184
     \vspace{2.3ex}%
185
186
     \vskip -\parskip
187
     \noindent
     \ignorespacesafterend
188
189 }
```

#### 2.6 Names

```
190 \def\eTeX{\hologo{eTeX}}
191 \def\pdfTeX{\hologo{pdfTeX}}
192 \def\pdfLaTeX{\hologo{pdfLaTeX}}
193 \def\LuaTeX{\hologo{LuaTeX}}
194 \def\LuaLaTeX{\hologo{LuaLaTeX}}
195 \def\XeTeX{\hologo{XeTeX}}
196 \def\XeLaTeX{\hologo{XeLaTeX}}
197 \def\plainTeX{\hologo{XeLaTeX}}
198 \providecommand*{\teTeX}{\hologo{teTeX}}
199 \providecommand*{\makeIndex}{\hologo{MiKTeX}}
200 \providecommand*{\makeIndex}{\texts1{MakeIndex}}
201 \providecommand*{\docstrip}{\textsf{docstrip}}
202 \providecommand*{\\iniTeX}{\hologo{iniTeX}}
203 \providecommand*{\VTeX}{\hologo{VTeX}}
```

### 2.7 Setup

#### 2.7.1 Package doc

```
204 \CodelineIndex
205 \EnableCrossrefs
206 \setcounter{IndexColumns}{2}
207 \DoNotIndex{\begingroup,\endgroup,\bgroup,\egroup}
208 \DoNotIndex{\def,\edef,\xdef,\global,\long,\let}
209 \DoNotIndex{\expandafter,\noexpand,\string}
210 \DoNotIndex{\else,\fi,\or}
211 \DoNotIndex{\relax}
212 \IndexPrologue{%
    \section*{Index}%
213
    \markboth{Index}{Index}%
214
Numbers written in italic refer to the page %
216 where the corresponding entry is described; %
217 numbers underlined refer to the %
218
    \ifcodeline@index
219
       code line of the %
220
     definition; plain numbers refer to the \mbox{\ensuremath{\mbox{\%}}}
221
     \ifcodeline@index
222
       code lines %
223
224
     \else
225
       pages %
226
227
     where the entry is used.%
228 }
2.7.2 Page layout
229 \addtolength{\textheight}{\headheight}
230 \addtolength{\textheight}{\headsep}
231 \setlength{\headheight}{Opt}
232 \setlength{\headsep}{0pt}
233 \dtolength{\topmargin}{-10mm}
234 \addtolength{\text{textheight}}{20mm}
235 (/package)
```

#### 3 Installation

#### 3.1 Download

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

<sup>1</sup>CTAN:pkg/holtxdoc

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:pkg/tds). 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

#### 3.3 Package installation

**Unpacking.** The .dtx file is a self-extracting docstrip archive. The files are extracted by running the .dtx through plain  $T_FX$ :

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 T<sub>E</sub>X distribution (T<sub>E</sub>X Live, MiKT<sub>E</sub>X, ...) relies on file name databases, you must refresh these. For example, T<sub>E</sub>X Live users run texhash or mktexlsr.

#### 3.5 Some details for the interested

Unpacking with LaTeX. The .dtx chooses its action depending on the format:

plain TEX: 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 pdfIATEX:

```
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.

### [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 LuaLATEX.

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

• Accept empty history version.

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

• Section title for history uses \historyname.

#### [2016/05/16 v0.25]

• Documentation updates.

### [2016/05/16 v0.26]

• Documentation updates.

### [2016/05/17 v0.27]

• New name for lm math font

## [2019/07/27 v0.28]

• Use CTAN's preferred URL form for packages Documentation updates.

### [2019/11/12 v0.29]

• Add \bibpackage (previously defined inline in some of the packages). Adjust CTAN links.

## [2019/12/09 v0.30]

- Documentation updates.
- Don't use ifluatex legacy package.
- use 'hologo definitions in more cases.

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

Symbols       \*	\end 91, 181 \endcsname 176 \enditemize 94 \endVersion 92, 94 \eTeX 190  F \File 134 \footnote 105, 125
\{	H \headheight
A \addcontentsline	\headsep       230, 232         \HistLabel       65, 79         \historyname       57, 59         \HistVersion       62, 73, 90         \hld@@NameEmail       111, 113         \hld@info       12
B \begin	\hld@NameEmail
C \CodelineIndex	195, 196, 197, 198, 199, 202, 203 \href
\CTAN	I \ifcodeline@index 218, 222 \ifluatex 18
D \day	\ifx 26, 114, 119, 123, 140 \ignorespacesafterend 188 \IndexPrologue 212 \iniTeX 202 \itemize
E \EnableCrossrefs	${\color{red}J} \\ \texttt{\column{1}{c}} \\ \texttt{\column{1}{c}} \\ \texttt{\column{2}{c}} \\$

${f L}$	${f s}$
\label 68, 82	\section 59, 213
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\link 102	\setlength 231, 232
\ltx@empty 26	\setmathfont 21
\ltx@IfUndefined 23	\space 116, 140
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137, 142, 145, 148, 151, 154,	
155, 156, 157, 158, 159, 160, 163	U
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\Newsgroup	\URL
\nobreak 182, 184	\url 105
\noindent 170, 187	V
\nolinkurl	•
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	\\Version
P	\vskip
\Package 133	\VTeX
\PackageInfo 13	\v1ex 205
\PackageWarningNoLine 16	X
\par 140, 167, 183	\x 29, 40, 41, 47
\parskip 169, 186	\xclass
\PassOptionsToPackage 5	\XeLaTeX
\pdf@filemoddate	\xemail 160
\pdfLaTeX	\XeTeX
\phantomsection 75	\xext
\plainTeX 197	\xfile 158
\protected@edef	\xmodule 155
\providecommand	\xnewsgroup
57, 198, 199, 200, 201, 202, 203	\xoption
\ProvidesPackage 3	\xpackage 139, 154
(12012dob1 do11db0	1 10
R	$\mathbf{Y}$
\raggedright 98	\y 33, 35
\RequirePackage 6, 7, 8, 9, 10, 11, 19, 20	\year 30, 42