# 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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<sup>\*</sup>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{%
13
    \PackageInfo{holtxdoc}{#1\@gobble}%
14 }
15 \def\hld@warn#1{%
    \PackageWarningNoLine{holtxdoc}{#1}%
17 }
```

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

```
18 \ifluatex
19 \RequirePackage{fontspec}[2011/09/18]%
20 \RequirePackage{unicode-math}[2011/09/19]%
21 \setmathfont{latinmodern-math.otf}%
22 \fi
```

#### 2.3 Date

```
23 \ltx@IfUndefined{pdf@filemoddate}{%
24 }{%
    \verb|\def \hld@temp{\pdf@filemoddate{\jobname.dtx}}||
25
    \ifx\hld@temp\ltx@empty
26
27
    \else
       \begingroup
28
         \def\x#1:#2#3#4#5#6#7#8#9{%
29
           \year=#2#3#4#5\relax
30
           \mathbb{7}^{month=\#6\#7}
31
           \dy=#8#9\relax
32
33
           \у
         }%
34
35
         \def \y#1#2#3#4#5\@ni1{%}
           \tau=#1#2\relax
36
37
           \multiply\time by 60\relax
           \advance\time#3#4\relax
38
         }%
39
40
         \expandafter\x\hld@temp\@nil
         \edef\x{\endgroup
41
42
           \year=\the\year\relax
43
           \month=\the\month\relax
           \displaystyle \dy=\theta \dy\relax
44
           \time=\the\time\relax
45
46
         }%
47
       /x
48
       \edef\hld@temp{%
49
         \noexpand\hypersetup{%
           pdfcreationdate=\hld@temp,%
50
           pdfmoddate=\hld@temp
51
52
         }%
53
       }%
54
       \hld@temp
55
    \fi
56 }
```

#### 2.4 History

\historyname

```
57 \providecommand*{\historyname}{History}
58 \newcommand*{\StartHistory}{%
    \section{\historyname}%
59
60 }
61 \@ifpackagelater{hyperref}{2009/11/27}{%
62
    \newcommand*{\HistVersion}[1]{%
      \subsection*{[#1]}% hash-ok
63
64
      \addcontentsline{toc}{subsection}{[#1]}% hash-ok
      \def\HistLabel##1{%
65
66
        \begingroup
          \protected@edef\@currentlabel{[#1]}% hash-ok
67
```

```
\label{##1}%
68
69
        \endgroup
      }%
70
    }%
71
72 }{%
    \newcommand*{\HistVersion}[1]{%
73
      \subsection*{%
74
        \phantomsection
75
        \addcontentsline{toc}{subsection}{[#1]}% hash-ok
76
         [#1]% hash-ok
77
78
      }%
79
      \def\HistLabel##1{%
80
        \begingroup
           \protected@edef\@currentlabel{[#1]}% hash-ok
81
           \left\{ \#1\right\} 
82
83
        \endgroup
      }%
84
85
    }%
86 }
87 \newenvironment{History}{%
    \StartHistory
    \def\Version##1{%
89
      \HistVersion{##1}%
90
91
      \@ifnextchar\end{%
        \let\endVersion\relax
92
93
      }{%
        \let\endVersion\enditemize
94
95
        \itemize
      }%
96
    }%
97
    \raggedright
99 }{}
```

#### 2.5 Formatting macros

```
\UrlFoot
#1: text
#2: url
100 \newcommand{\URL}[2]{%
101
     \begingroup
       \left( \frac{\pi}{\pi}\right) 
102
       #1%
103
     \endgroup
104
     \footnote{Url: \url{#2}}%
105
106 }
\NameEmail
#1: name
#2: email address
107 \newcommand*{\NameEmail}[2]{%
     \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{%}
114
    \ifx\\#1#2\\%
115
       \hld@warn{%
```

```
116
         Command \string\NameEmail\space without name and email%
      }%
117
118
     \else
       \ifx\\#1\\%
119
         \href{mailto:#2}{\nolinkurl{#2}}%
120
       \else
121
         #1%
122
         \ifx\\#2\\%
123
         \else
124
125
           \footnote{%
             #1's email address: %
126
             \href{mailto:#2}{\nolinkurl{#2}}%
127
          }%
128
129
         \fi
       \fi
130
131
     \fi
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}
138
139
    Package \xpackage{#1}, #2, #3.%
140
    \ifx\\#4\\\else\space#4\fi\par
141 }
142 \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]{%
     \href{https://groups.google.com/group/#1/topics}{\nolinkurl{news:#1}}%
152
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]{%
    \href{news:#1}{\nolinkurl{#1}}%
165 }
   The following environment declcs is derived from environment decl of
ltxguide.cls:
166 \newenvironment{declcs}[1]{%
167
    \par
    \addvspace{4.5ex plus 1ex}%
```

```
169
    \vskip -\parskip
    \noindent
170
171
    \hspace{-\leftmargini}%
172
    \def\*{\unskip\,\texttt{*}}%
173
    \begin{tabular}{|1|}%
174
      \hline
175
      \expandafter\SpecialUsageIndex\csname #1\endcsname
176
      \cs{#1}%
177
178 }{%
179
      \\%
      \hline
180
    \end{tabular}%
181
    \nobreak
182
183
    \par
184
    \nobreak
    \vspace{2.3ex}%
    \vskip -\parskip
186
    \noindent
187
    \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{YeLaTeX}}

198 \providecommand*{\teTeX}{\hologo{teTeX}}

199 \providecommand*{\mikTeX}{\hologo{MiKTeX}}

200 \providecommand*{\MakeIndex}{\textsl{MakeIndex}}

201 \providecommand*{\iniTeX}{\hologo{iniTeX}}

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
215
     Numbers written in italic refer to the page %
216
     where the corresponding entry is described; %
     numbers underlined refer to the %
217
     \ifcodeline@index
```

```
219
       code line of the %
     \fi
220
221
     definition; plain numbers refer to the %
222
     \ifcodeline@index
       code lines %
223
224
     \else
       pages %
225
     \fi
226
     where the entry is used.%
227
228 }
2.7.2 Page layout
229 \addtolength{\textheight}{\headheight}
230 \addtolength{\textheight}{\headsep}
231 \setlength{\headheight}{Opt}
232 \setlength{\headsep}{0pt}
233 \addtolength{\topmargin}{-10mm}
234 \addtolength{\textheight}{20mm}
235 (/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 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 TeX:

```
tex holtxdoc.dtx
```

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

**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} $\operatorname{holtxdoc.sty} \to \operatorname{tex/latex/oberdiek/holtxdoc.sty}$ $\operatorname{holtxdoc.pdf} \to \operatorname{doc/latex/oberdiek/holtxdoc.pdf}$ $\operatorname{holtxdoc.dtx} \to \operatorname{source/latex/oberdiek/holtxdoc.dtx}$
```

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]

 $\bullet$  \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]

 $\bullet$  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.
- $\bullet$  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       \*	\historyname
A \addcontentsline	\hspace
B \begin	\ifx 26, 114, 119, 123, 140 \ignorespacesafterend 188 \IndexPrologue 212 \iniTeX 202 \itemize
\CodelineIndex	J \jobname
D \day	\link 102 \ltx@empty 26 \ltx@IfUndefined 23 \LuaLaTeX 194 \LuaTeX 193
E \EnableCrossrefs	M \M 172
\end	\MakeIndex 200 \markboth 214 \meta 172 \mikTeX 199 \month 31, 43 \multiply 37

\newenvironment	\textgreater
\nolinkurl	\texts1
\Package       133         \PackageInfo       13         \PackageWarningNoLine       16	\the
\par       140, 167, 183         \parskip       169, 186         \PassOptionsToPackage       5         \pdf@filemoddate       25         \pdfLaTeX       192	U         \unskip       173         \URL       100         \url       105
\pdfTeX	V       \Verb     135       \Version     89       \vskip     169, 186       \vscape     185
57, 198, 199, 200, 201, 202, 203 \ProvidesPackage	\vspace
R \raggedright	\x 29, 40, 41, 47 \xclass 156 \XeLaTeX 196
S         \section       59, 213         \setcounter       206         \setlength       231, 232         \setmathfont       21         \space       116, 140         \SpecialUsageIndex       176         \StartHistory       58, 88         \subsection       63, 74	\xemail       160         \XeTeX       195         \xext       159         \xfile       158         \xmodule       155         \xnewsgroup       163         \xoption       157         \xpackage       139, 154
T \teTeX	\y