

# 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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# 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   [2010/04/03 v0.16 Private additional ltxdoc support (HO)]
5 \RequirePackage[numbered]{hypdoc}[2010/03/26]
6 \RequirePackage{pdftexcmds}[2010/04/01]
7 \RequirePackage{ltxcmds}[2010/03/09]
8 \RequirePackage{array}
```

## 2.1 Help macros

```
9 \def\hld@info#1{%
10   \PackageInfo{holtxdoc}{#1\@gobble}%
11 }
12 \def\hld@warn#1{%
13   \PackageWarningNoLine{holtxdoc}{#1}%
14 }
```

## 2.2 Date

```
15 \ltx@ifundefined{pdf@filemoddate}{%
16 }{%
17   \edef\hld@temp{\pdf@filemoddate{\jobname.dtx}}%
18   \ifx\hld@temp\ltx@empty
19   \else
20     \begingroup
21       \def\x#1:#2#3#4#5#6#7#8#9{%
22         \year=#2#3#4#5\relax
23         \month=#6#7\relax
24         \day=#8#9\relax
25         \y
26     }%
27     \def\y#1#2#3#4#5@nil{%
28       \time=#1#2\relax
29       \multiply\time by 60\relax
30       \advance\time#3#4\relax
31     }%
32     \expandafter\x\hld@temp@nil
33     \edef\x{\endgroup
34       \year=\the\year\relax
35       \month=\the\month\relax
36       \day=\the\day\relax
37       \time=\the\time\relax
38     }%
39     \x
40     \edef\hld@temp{%
41       \noexpand\hypersetup{%
42         pdfcreationdate=\hld@temp,%
```

```

43      pdfmoddate=\hld@temp
44      }%
45      }%
46      \hld@temp
47  \fi
48 }

2.3 History

49 \newcommand*{\StartHistory}{%
50   \section{History}%
51 }
52 \@ifpackagelater{hyperref}{2009/11/27}{%
53   \newcommand*{\HistVersion}[1]{%
54     \subsection*{[#1]}% hash-ok
55     \addcontentsline{toc}{subsection}{[#1]}% hash-ok
56     \def\HistLabel##1{%
57       \begingroup
58         \edef@\currentlabel{[#1]}% hash-ok
59         \label{##1}%
60       \endgroup
61     }%
62   }%
63 }{%
64   \newcommand*{\HistVersion}[1]{%
65     \subsection*{%
66       \phantomsection
67       \addcontentsline{toc}{subsection}{[#1]}% hash-ok
68       [#1]}% hash-ok
69   }%
70   \def\HistLabel##1{%
71     \begingroup
72       \edef@\currentlabel{[#1]}% hash-ok
73       \label{##1}%
74     \endgroup
75   }%
76 }%
77 }
78 \newenvironment{History}{%
79   \StartHistory
80   \def\Version##1{%
81     \HistVersion{##1}%
82     \itemize
83   }%
84   \let\endVersion\enditemize
85 }{}}

```

## 2.4 Formatting macros

```

\UrlFoot
#1: text
#2: url

86 \newcommand{\URL}[2]{%
87   \begingroup
88   \def\link{\href{#2}}%
89   #1%
90   \endgroup
91   \footnote{Url: \url{#2}}%
92 }

\NameEmail
#1: name
#2: email address

93 \newcommand*{\NameEmail}[2]{%

```

```

94   \expandafter\hld@NameEmail\expandafter{#2}{#1}%
95 }
96 \def\hld@NameEmail#1#2{%
97   \expandafter\hld@@NameEmail\expandafter{#2}{#1}%
98 }
99 \def\hld@@NameEmail#1#2{%
100   \ifx\\#1#2\\%
101     \hld@warn{%
102       Command \string\NameEmail\space without name and email%
103     }%
104   \else
105     \ifx\\#1\\%
106       \href{mailto:#2}{\nolinkurl{#2}}%
107     \else
108       #1%
109     \ifx\\#2\\%
110       \else
111         \footnote{%
112           #1's email address: %
113           \href{mailto:#2}{\nolinkurl{#2}}%
114         }%
115       \fi
116     \fi
117   \fi
118 }

119 \newcommand*{\Package}[1]{\texttt{#1}}
120 \newcommand*{\File}[1]{\texttt{#1}}
121 \newcommand*{\Verb}[1]{\texttt{#1}}
122 \newcommand*{\CS}[1]{\texttt{\expandafter@gobble\string\\#1}}
123 \newcommand*{\CTAN}[1]{%
124   \href{ftp://ftp.ctan.org/tex-archive/#1}{\nolinkurl{CTAN:#1}}%
125 }

126 \newcommand*{\Newsgroup}[1]{%
127   \href{http://groups.google.com/group/#1/topics}{\nolinkurl{news:#1}}%
128 }

129 \newcommand*{\xpackage}[1]{\textsf{#1}}
130 \newcommand*{\xmodule}[1]{\textsf{#1}}
131 \newcommand*{\xclass}[1]{\textsf{#1}}
132 \newcommand*{\xooption}[1]{\textsf{#1}}
133 \newcommand*{\xfile}[1]{\texttt{#1}}
134 \newcommand*{\xext}[1]{\texttt{.#1}}
135 \newcommand*{\xemail}[1]{%
136   \textless\texttt{#1}\textgreater%
137 }
138 \newcommand*{\xnewsgroup}[1]{%
139   \href{news:#1}{\nolinkurl{#1}}%
140 }

```

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

```

141 \newenvironment{declcs}[1]{%
142   \par
143   \addvspace{4.5ex plus 1ex}%
144   \vskip -\parskip
145   \noindent
146   \hspace{-\leftmargini}%
147   \def\M##1{\texttt{\{ \} \meta{##1}\texttt{\}}}}%
148   \def\*{\unskip\texttt{*}}%
149   \begin{tabular}{|l|}%
150     \hline
151     \expandafter\SpecialUsageIndex\csname #1\endcsname

```

```

152      \cs{#1}%
153 }%
154   \\%
155   \hline
156 \end{tabular}%
157 \nobreak
158 \par
159 \nobreak
160 \vspace{2.3ex}%
161 \vskip -\parskip
162 \noindent
163 \ignorespacesafterend
164 }

```

## 2.5 Names

```

165 \providecommand*{\eTeX}{\mbox{$\varepsilon$-\TeX}}
166 \providecommand*{\pdfTeX}{pdf\TeX}
167 \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).

```

168 \providecommand*{\LuaTeX}{%
169   \begingroup
170     Lua%
171     \setbox0\hbox{aT}%
172     \setbox2\hbox{a\kern0ptT}%
173     \ifdim\wd0<\wd2 %
174     \else
175       \setbox0\hbox{oT}%
176       \setbox2\hbox{o\kern0ptT}%
177       \ifdim\wd0<\wd2 %
178       \else
179         \setbox0\hbox{To}%
180         \setbox2\hbox{T\kern0pto}%
181       \fi
182       \ifdim\wd0<\wd2 %
183         \dimen0=\wd0 %
184         \advance\dimen0-\wd2 %
185         \kern\dimen0 %
186       \fi
187   \fi

```

```

188      \TeX
189  \endgroup
190 }

191 \def\@temp#1#2{%
192   \@ifundefined{\expandafter\@gobble\string#1}{%
193     \DeclareRobustCommand*{#1}{%
194       \texorpdfstring{%
195         \begingroup
196         X%
197         \kern-.1em\relax
198         \@ifundefined{rotatebox}{e}{%
199           \lower0.5ex\hbox{%
200             \setbox0=\hbox{E}%
201             \dimen0=\ht0 %
202             \advance\dimen0 by \dp0 %
203             \raise\dimen0\hbox{\rotatebox{180}{\box0}}%
204           }%
205         }%
206         }{Xe}%
207         \ifx\TeX#2\relax
208           \kern-.15em\relax
209         \fi
210         #2%
211       \endgroup
212     }%
213   }{}%
214 }

215 \@temp\XeTeX\TeX
216 \@temp\XeLaTeX\LaTeX
217 \providecommand*{\teTeX}{te\TeX}
218 \providecommand*{\mikTeX}{mik\TeX}
219 \providecommand*{\MakeIndex}{\textsf{MakeIndex}}
220 \providecommand*{\docstrip}{\textsf{docstrip}}
221 \providecommand*{\plainTeX}{\mbox{plain-\TeX}}
222 \providecommand*{\iniTeX}{\mbox{ini-\TeX}}
223 \providecommand*{\VTeX}{\V\TeX}

```

## 2.6 Setup

### 2.6.1 Package doc

```

224 \CodelineIndex
225 \EnableCrossrefs
226 \setcounter{IndexColumns}{2}

227 \DoNotIndex{\begingroup,\endgroup,\bgroup,\egroup}
228 \DoNotIndex{\def,\edef,\xdef,\global,\long,\let}
229 \DoNotIndex{\expandafter,\noexpand,\string}
230 \DoNotIndex{\else,\fi,\or}
231 \DoNotIndex{\relax}

```

### 2.6.2 Page layout

```

232 \addtolength{\textheight}{\headheight}
233 \addtolength{\textheight}{\headsep}
234 \setlength{\headheight}{0pt}
235 \setlength{\headsep}{0pt}

236 \addtolength{\topmargin}{-10mm}
237 \addtolength{\textheight}{20mm}

238 </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: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-Tex:

```
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`.

### 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`.

---

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

### 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-T<sub>E</sub>X:** 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.

[2010/04/03 v0.16]

- Use date and time of .dtx file.

## 5 Index

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