

# 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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\*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 `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   [2019/12/09 v0.30 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{array}
```

### 2.1 Help macros

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

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

```

## 2.4 History

\historyname

```

57 \providecommand*{\historyname}{History}

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

```

```

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

```

## 2.5 Formatting macros

```

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

\NameEmail
#1: name
#2: email address
107 \newcommand*\NameEmail[2]{%
108   \expandafter\hld@NameEmail\expandafter{#2}{#1}%
109 }
110 \def\hld@NameEmail#1#2{%
111   \expandafter\hld@@NameEmail\expandafter{#2}{#1}%
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
119     \ifx\#1\%
120       \href{mailto:#2}{\nolinkurl{#2}}%
121     \else
122       #1%
123       \ifx\#2\%
124       \else
125         \footnote{%
126           #1's email address: %
127           \href{mailto:#2}{\nolinkurl{#2}}%
128         }%
129       \fi
130     \fi
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]{%
138   \bibitem{#1}
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]{%
146   \href{http://mirrors.ctan.org/#1}{\nolinkurl{CTAN:#1}}%
147 }
148 \newcommand*{\CTANpkg}[1]{%
149   \href{http://ctan.org/pkg/#1}{\nolinkurl{CTAN:pkg:#1}}%
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]{%
161   \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]{%
167   \par
168   \addvspace{4.5ex plus 1ex}%
169   \vskip -\parskip
170   \noindent
171   \hspace{-\leftmargini}%
172   \def\M##1{\texttt{\{\}\meta{##1}\texttt{\}}}%
173   \def\*\{\unskip\,\texttt{*}}%
174   \begin{tabular}{|l|}%
175     \hline
176     \expandafter\SpecialUsageIndex\csname #1\endcsname
177     \cs{#1}%
178   }{%
179     \\\%
180     \hline
181   \end{tabular}%
182   \nobreak
183   \par
184   \nobreak
185   \vspace{2.3ex}%
186   \vskip -\parskip
187   \noindent
188   \ignorespacesafterend
189 }

```

## 2.6 Names

```
190 \def\TeX{\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{plainTeX}}
198 \providecommand*\teTeX{\hologo{teTeX}}
199 \providecommand*\mikTeX{\hologo{MiKTeX}}
200 \providecommand*\MakeIndex{\textsl{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{%
213   \section*{Index}%
214   \markboth{Index}{Index}%
215   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   \fi
221   definition; plain numbers refer to the %
222   \ifcodeline@index
223     code lines %
224   \else
225     pages %
226   \fi
227   where the entry is used.%
228 }
```

### 2.7.2 Page layout

```
229 \addtolength{\textheight}{\headheight}
230 \addtolength{\textheight}{\headsep}
231 \setlength{\headheight}{0pt}
232 \setlength{\headsep}{0pt}

233 \addtolength{\topmargin}{-10mm}
234 \addtolength{\textheight}{20mm}

235 \end{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 T<sub>E</sub>X 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<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`.

## 3.4 Refresh file name databases

If your T<sub>E</sub>X distribution (T<sub>E</sub>X Live, MiK<sub>T</sub><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 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.

**[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`.

**[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.

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