# The hypdoc package

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#### Abstract

This package adds hyper features to the package doc that is used in the documentation system of LaTeX  $2_{\mathcal{E}}$ . Bookmarks are added and references are linked as far as possible.

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

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## 1 Features

The package adds the following features:

Bookmarks: For supporting bookmarks package hyperref is loaded. Some TEX code inside section titles can cause problems during bookmark processing; these can be warnings, ugly bookmark titles or even errors. With the help of \pdfstringdefDisableCommands or \texorpdfstring you can manage these things, see hyperref's package documentation.

Additional bookmarks: Unnumbered bookmark entries are generated for:

- Table of contents
- List of figures
- List of tables
- Index
- Glossary

Option numbered controls, whether these section or chapters should be numbered. The exception is the table of contents if this it would be the first numbered section. Then just a bookmark is added.

Metadata: The loaded package hyperref, enforced by option pdfusetitle, tries to detect \title and \author and sets the corresponding PDF information fields. In case of problems see the previous item about bookmarks. These enries can be overwritten or new ones added by \hypersetup after the packages is loaded, see documentation of package hyperref.

References, links: Because of package \hyperref \ref become links, also \url, footnote referencing are supported.

**Index:** The main part of this package deals with index links in order to support the kind of index that package doc provides.

Thumbnails: Package thumbpdf is loaded for the case that the PDF file also should contain thumbnails, see the documentation of this package. But thumbnail embedding is not really necessary, because nowadays AcrobatReader is able to generate and view thumbnails on the fly.

# 2 Usage

The purpose of this packages is to add PDF features to the documentation of LaTeX packages. Thus just load the package in the driver file that generates the documentation:

```
\usepackage{hypdoc}
```

Package doc is loaded by hypdoc, thus you also can replace a \usepackage{doc} with this line. At any case, the package must be loaded before macros of package doc such as \CodelineIndex or \PageIndex are used.

If the class ltxdoc is used, you can also use the configuration file for this class to add package hypdoc. Add the following line to the file ltxdoc.cfg (or create a new one):

\AtEndOfClass{\RequirePackage{hypdoc}}

#### 2.1 Options

There is one option numbered. It controls, whether the starred versions of section or chapter inside \tableofcontents, \listoffigures, ...should be replaced by the non-star versions.

#### 2.2 Simple example

Example of a simple driver file foobar.drv of a package foobar. Often the driver file is packed in the file foobar.dtx and can be extracted by docstrip or if an instruction file for docstrip is provided by:

```
tex foobar.ins
```

Note that although docstrip doesn't rely on LATEX, sometimes you need to run the .ins file through LATEX. Oddly enough, often the only LATEX feature in use is \NeedsTeXFormat{LaTeX2e} in the first line.

```
\documentclass{ltxdoc}
\usepackage{hypdoc}
\RecordChanges
\EnableCrossrefs
\CodelineIndex
\begin{document}
\title{Title for package \texttt{foobar}}
\author{Author of package \texttt{foobar}}
\date{...}
\maketitle
\tableofcontents
\DocInput{foobar.dtx}
\PrintChanges
\PrintIndex
\end{document}
```

Then compile it, for example with pdfLATEX.

```
pdflatex foobar.drv
makeindex -s gind.ist foobar.idx
makeindex -s gglo.ist -o foobar.gls foobar.glo
pdflatex foobar.drv
```

You will need several cycles until the cross references and similar things are correct.

#### 2.3 Example source2e.tex

The source code of the base of LATEX is available as a bunch of .dtx files. LATEX provides the file source2e.tex to merge them all together.

Now you can either load package hypdoc in a private copy of this file (please, respect the LPPL) or use the configuration file ltxdoc.cfg. Example that also sets A4 paper size:

```
\PassOptionsToClass{a4paper}{article}
\AtEndOfClass{\RequirePackage{hypdoc}}
```

Then source2e.tex can be compiled by pdfTFX, for example:

```
pdflatex source2e
makeindex -s gind.ist source2e.idx
makeindex -s gglo.ist -o source2e.glo source2e.gls
pdflatex source2e
makeindex -s gind.ist source2e.idx
makeindex -s gglo.ist -o source2e.glo source2e.gls
pdflatex source2e
```

# 3 Implementation

```
_1 \langle *package \rangle
```

- 2 \NeedsTeXFormat{LaTeX2e}
- 3 \ProvidesPackage{hypdoc}%
- $_4$  [2016/10/02 v1.13 Hyper extensions for doc.sty (HO)]%

The package identification is done at the top of the .dtx file in order to use only one identification string.

For unique command names this package uses HD@ as prefix

## 3.1 Options

\ifHD@numbered

- $5 \neq 5$
- $\label{lem:condition} \begin{tabular}{l} $$ \DeclareOption{numbered} {\DeclareOption{numbered} } $$ \end{tabular} $$$
- 7 \ProcessOptions\*\relax

#### 3.2 Package loading

```
{\tt 8 \ \ \ \ \ \ \ } [2010/03/24]
```

- 9 \RequirePackage{doc}
- 10  $\irr \$ umexpr $\$ Qundefined
- 11 \RequirePackage{calc}%
- 12 \fi
- 13 \RequirePackage[%
- 14 hyperindex=false,%
- 15 pdfusetitle,%
- 16 colorlinks,%
- 17 pdfpagelabels%
- 18 ]{hyperref}[2002/05/09]%
- 19 \hypersetup{%
- 20 plainpages=false,%
- 21 bookmarksopen,%
- 22 bookmarksnumbered,%
- 23 bookmarksopenlevel=0,%
- 24 pdfstartview={FitBH \hypercalcbp{%
- 25 \paperheight-\topmargin-lin-\headheight-\headsep
- 26 }},%
- 27 }
- $28 \ensuremath{\mbox{\sc NequirePackage\{thumbpdf\}}}$

```
29 \newcounter{HD@unique}
                                                         \theHD@unique
                                                                                                                                         30 \renewcommand{\theHD@unique}{%
                                                                                                                                                          \number\value{HD@unique}%
                                                                                                                                        32 }
                                                                                                                                         33 \g@addto@macro\Hy@UseMaketitleInfos{%
                                                                                                                                                          \ensuremath{\texttt{O}}\ifundefined{fileinfo}{}{%
                                                                                                                                         35
                                                                                                                                                                \ifx\@pdfsubject\@empty
                                                                                                                                                                       \hypersetup{pdfsubject={\fileinfo}}%
                                                                                                                                         36
                                                                                                                                                                \fi
                                                                                                                                         37
                                                                                                                                         38 }%
                                                                                                                                        39 }
                                                                                                                                         40 \pdfstringdefDisableCommands{%
                                                                                                                                                      \let\thanks\@gobble
                                                                                                                                         42 \let\footnote\@gobble
                                                                                                                                         43 \left(\frac{43}{\text{textbackslash }\#1}\right)
                                                                                                                                         44 \let\normalfont\@empty
                                                                                                                                         45 \let\scshape\@empty
                                                                                                                                        46 \left(\frac{3}{4}\right)
                                                                                                                                       47 }
                                                                                                                                    3.2.1 Patch for bug latex/4096
                                                                                                                                         48 \begingroup\expandafter\expandafter\expandafter\endgroup
                                                                                                                                         49 \expandafter\ifx\csname mod@math@codes\endcsname\relax
                                                                                                                                         50 \else
                                                                                                                                        51
                                                                                                                                                         \def\HD@ModFix#1{%
                                                                                                                                                             \mbox{mathcode}\ \#1=\ \#1\
                                                                                                                                       52
                                                                                                                                        53 }%
                                                                                                                                                         \verb|\g@addto@macro\mod@math@codes{%}|
                                                                                                                                         54
                                                                                                                                                               \HD@ModFix\-%
                                                                                                                                         55
                                                                                                                                                               \HD@ModFix\+%
                                                                                                                                         56
                                                                                                                                                               \HD@ModFix\:%
                                                                                                                                         57
                                                                                                                                         58
                                                                                                                                                               \HD@ModFix\=%
                                                                                                                                         59
                                                                                                                                                               \HD@ModFix\*%
                                                                                                                                        60 }%
                                                                                                                                        61 \fi
                                                                                                                                                              Bookmarks
                                                                                                                                     3.3
                                              \HD@sectionpatch
                                                                                                                                         62 \def\HD@sectionpatch{%
                                                                                                                                         63 \ifHD@numbered
                                                                                                                                         64
                                                                                                                                                               \HD@@sectionpatch{section}%
                                                                                                                                                               \HD@@sectionpatch{chapter}%
                                                                                                                                         65
                                                                                                                                         66
                                                                                                                                                          \else
                                                                                                                                                               \verb|\label{lem:lem:hp:eq} \label{lem:hp:eq} $$ \operatorname{Lower} \operatorname
                                                                                                                                         67
                                                                                                                                         68
                                                                                                                                                        \fi
                                                                                                                                         69 }
                                        \HD@@sectionpatch
                                                                                                                                         70 \def\HD@@sectionpatch#1{%
                                                                                                                                                         \expandafter\let\csname HDorg@@#1\expandafter\endcsname
                                                                                                                                         71
                                                                                                                                                               \csname #1\endcsname
                                                                                                                                         72
                                                                                                                                                          \ensuremath{\texttt{@namedef}}{\#1}{\%}
                                                                                                                                         73
                                                                                                                                                               74
                                                                                                                                         75
                                                                                                                                                        }%
                                                                                                                                         76 }
\HD@disable@writebookmark
```

77 \def\HD@disable@writebookmark#1#2#3#4#5{}

```
\HD@guesstoclevel A wild guessing of the toclevel. There is the hope, that the macro #1 starts with
                    a sectioning command.
                     78 \def\HD@guesstoclevel#1{\%
                        \expandafter\HD@@guesstoclevel#1\section\HD@end
                     80 }
\HD@@guesstoclevel
                     81 \def\HD@@guesstoclevel#1#2\HD@end{%
                        \@ifundefined{toclevel@\expandafter\@gobble\string#1\@empty}{%
                     82
                         1%
                     83
                        }{%
                     84
                         \@nameuse{toclevel@\expandafter\@gobble\string#1\@empty}%
                     85
                     86 }%
```

#### 3.4 \tableofcontents

87 }

#### \HDorg@tableofcontents

88 \let\HDorg@tableofcontents\tableofcontents

\tableofcontents

As first section the table of contents shouldn't go into the toc itself. Also a number looks too funny then. Just a bookmark is enough in this case.

```
89 \def\tableofcontents{%
    \begingroup
90
      \@ifundefined{c@section}{%
 91
       \def\c@section{0}%
 92
      }{}%
 93
 94
    \expandafter\endgroup
 95
    \ifcase\c@section
 96
      \stepcounter{HD@unique}%
      \pdfbookmark[\HD@guesstoclevel{\HDorg@tableofcontents}]%
 97
         {\contentsname}{toc\theHD@unique}%
98
      \HDorg@tableofcontents
99
    \else
100
      \ifHD@numbered
101
102
       \stepcounter{HD@unique}%
103
       \pdfbookmark[\HD@guesstoclevel{\HDorg@tableofcontents}]%
104
105
          {\contentsname}{toc\theHD@unique}%
106
      \begingroup
107
       \HD@sectionpatch
108
       \HDorg@tableofcontents
109
      \endgroup
110
    \fi
111
112 }
```

# 3.5 \listoffigures

#### \HDorg@listoffigures

113 \let\HDorg@listoffigures\listoffigures

#### \listoffigures

```
114 \def\listoffigures{%
115 \ifHD@numbered
116 \else
117 \stepcounter{HD@unique}%
118 \pdfbookmark[\HD@guesstoclevel{\HDorg@listoffigures}]%
119 {\listfigurename}{toc\theHD@unique}%
120 \fi
121 \begingroup
```

```
122
                                                                             \HD@sectionpatch
                                                                              \HDorg@listoffigures
                                                              123
                                                              124
                                                                          \endgroup
                                                              125 }
                                                              3.6
                                                                              \listoftables
           \HDorg@listoftables
                                                              126 \left( \text{HDorg@listoftables} \right)
                              \listoftables
                                                              127 \def\listoftables{%
                                                              128 \ifHD@numbered
                                                                          \else
                                                              129
                                                                             \stepcounter{HD@unique}%
                                                              130
                                                                              \pdfbookmark[\HD@guesstoclevel{\HDorg@listoftables}]%
                                                              131
                                                                                     {\listtablename}{toc\theHD@unique}%
                                                              132
                                                              133
                                                              134
                                                                          \begingroup
                                                                             \HD@sectionpatch
                                                              135
                                                              136
                                                                             \HDorg@listoftables
                                                              137
                                                                         \endgroup
                                                              138 }
                                                              3.7
                                                                              \thebibliography
\HDorg@thebibliography
                                                              139 \let\HDorg@thebibliography\thebibliography
                   \thebibliography
                                                              140 \def\thebibliography{%
                                                              141 \ifHD@numbered
                                                                         \else
                                                              142
                                                              143
                                                                              \stepcounter{HD@unique}%
                                                                              \pdfbookmark[\HD@guesstoclevel{\HDorg@thebibliography}]%
                                                              144
                                                                                 145
                                                              146
                                                              147
                                                                          \HD@sectionpatch
                                                              148
                                                                          \HDorg@thebibliography
                                                              149 }
                                                              3.8
                                                                              \theindex
                \HDorg@theindex
                                                              150 \let\HDorg@theindex\theindex
                                   \theindex
                                                              151 \def\theindex{%
                                                              153
                                                                         \HD@sectionpatch
                                                              154
                                                                          \g@addto@macro\IndexParms{%
                                                              155
                                                                              \ifHD@numbered
                                                              156
                                                              157
                                                              158
                                                                                 \let\Hy@writebookmark\HDorg@writebookmark
                                                              159
                                                              160
                                                                             \let\bfseries\HD@bfseries
                                                              161
                                                                         \verb|\def| HD@toclevel@index{\def|} we will be a considered for the constant of the constant of
                                                              162
```

163

164

\begingroup

\count@=\HD@toclevel@index\relax

```
\advance\count@ by 1 %
                 165
                      166
                 167
                     \endgroup
                     \def\index@prologue{%
                 168
                 169
                      \ifHD@numbered
                 170
                      \else
                 171
                       \begingroup
                        \stepcounter{HD@unique}%
                 172
                         173
                         \pdfbookmark[\HD@toclevel@index]%
                 174
                           {\indexname}{index\theHD@unique}%
                 175
                       \endgroup
                 176
                      \fi
                 177
                      \HDorg@index@prologue
                 178
                     }%
                 179
                     \HDorg@theindex
                 181 }
  \HDorg@bfseries
                 182 \let\HDorg@bfseries\bfseries
     \HD@bfseries
                 183 \def\HD@bfseries{\futurelet\HD@hfil\HD@@bfseries}\%
    \HD@@bfseries
                 184 \def\HD@@bfseries{%
                 185 \HDorg@bfseries
                 186 \ifx\HD@hfil\hfil
                      \expandafter\HD@@@bfseries
                 187
                 188 \fi
                 189 }
   \HD@@@bfseries
                 190 \def\HD@@@bfseries\hfil#1\hfil{%
                 191
                     \ifx\\#1\\%
                 192
                     \else
                      \additineskip}[0pt]{\%}
                 193
                       194
                       195
                       196
                      }%
                 197
                    \fi
                 198
                    \  \hfil#1\hfil
                 200 }%
     \HD@margin
                 201 \def\HD@margin{1mm}
                 3.9
                      \theglossary
\HDorg@theglossary
                 202 \let\HDorg@theglossary\theglossary
      \theglossary
                 203 \def\theglossary{%
                     \let\HDorg@glossary@prologue\glossary@prologue
                 204
                 205 \let\HDorg@writebookmark\Hy@writebookmark
                 206 \HD@sectionpatch
                 207 \def\glossary@prologue{%
                 208
                      \ifHD@numbered
                 209
                      \else
```

```
\begingroup
                                                    210
                                                                          \let\Hy@writebookmark\HDorg@writebookmark
                                                    211
                                                                          \stepcounter{HD@unique}%
                                                    212
                                                                          \pdfbookmark[\HD@guesstoclevel{\HDorg@glossary@prologue}]%
                                                    213
                                                    214
                                                                                 {\changehistoryname}{glossary\theHD@unique}%
                                                    215
                                                                       \endgroup
                                                    ^{216}
                                                                   \fi
                                                                   \HDorg@glossary@prologue
                                                    217
                                                    218 }%
                                                    219 \HDorg@theglossary
                                                    220 }
               \glossaryname
                                                    221 \providecommand*{\glossaryname}{Change History}
               \glossaryname
                                                    222 \providecommand*{\changehistoryname}{\glossaryname}
                                                    3.10 Index
                                                    223 \newcounter{HD@hypercount}
          \HD@helplength
                                                    224 \newlength{\HD@helplength}
            \ifHD@savedest
                                                    225 \neq 25
                                                    226 \HD@savedesttrue
                                                    227 \Lambda tBeginDocument{\%}
                                                    228 \HD@savedest@init
                                                    229 }
                                                    230 \RequirePackage{rerunfilecheck}[2009/12/10]
    \HD@savedest@init
                                                    231 \begingroup
                                                   232 \catcode`\^^M=\active
                                                   233 \@firstofone{\endgroup
                                                   234 \def\HD@savedest@init{\%
                                                                  \ifHD@savedest
                                                    235
                                                                       \let\HDorg@tilde~%
                                                    236
                                                                       \let~\HD@savedest@entry
                                                    237
                                                    238
                                                                       \end{\color=0.05cm} $$\end{\color=0.05cm} \color= \color=0.05cm} $$\color=0.05cm (\color=0.05cm) $$\color=0.05cm (\color=0.0
                                                    239
                                                                       \colored{M}=\active
                                                    240
                                                                       \ensuremath{\mbox{def}^{\mbox{M}}}\%
                                                    241
                                                                       \InputIfFileExists{\jobname.hd}{}{}%
                                                    242
                                                                       \let~\HDorg@tilde
                                                                       \catcode`\^^M=\HDorg@catcodeM\relax
                                                    243
                                                    244
                                                                       \newwrite\HD@savedest@out
                                                    245
                                                                       \RerunFileCheck{\jobname.hd}{%
                                                    246
                                                                          \verb|\dimmediate| close out \| HD@savedest@out
                                                    247
                                                                      }{}%
                                                                       \verb|\dimmediate| openout| HD@savedest@out=\\jobname.hd\\relax|
                                                    248
                                                    249
                                                                       \let\HD@savedest@add\@gobble
                                                    250
                                                    251
                                                                   \fi
                                                    252
                                                               }%
\HD@savedest@entry
                                                               \def\HD@savedest@entry#1^^M{%
                                                    253
                                                                 \ensuremath{\texttt{Qnamedef{HD.#1}{}}}
                                                    254
                                                    255 }%
                                                    256 }
```

```
\HD@savedest@add
                       257 \def\HD@savedest@add#1{%
                            259 }
     \ifHD@targetraise
                       260 \newif\ifHD@targetraise
                       261 \HD@targetraisetrue
          \HD@target
                       262 \def\HD@target{%
                            \ifHD@targetraise
                       263
                             \ifhmode
                       264
                       265
                               \settoheight{\HD@helplength}{[H]}%
                       266
                               \addtolength{\HD@helplength}{0.4ex}%
                               \label{localized} $$ \operatorname{D\Philelplength}[0pt][0pt]_{\%} $$
                       267
                       268
                                \HD@maketarget
                              }%
                       269
                       270
                             \else
                              \HD@maketarget
                       271
                             \fi
                       272
                       273
                           \else
                       274
                             \HD@maketarget
                       275 \fi
                       276 }
     \HD@maketarget
                       277 \def\HD@maketarget{%
                            \stepcounter{HD@hypercount}%
                       279
                            \def\HD@next{%
                       280
                             \displaystyle \left( \frac{HD.\tilde{HD}@hypercount}{}\right),}
                       281
                            \ifHD@savedest
                       282
                             \expandafter\ifx\csname HD.\the\c@HD@hypercount\endcsname\@empty
                       283
                             \else
                       284
                               \left( HD@next\right) 
                       285
                             \fi
                       286
                       287
                           \fi
                            \HD@next
                       288
                       289 }
       \CodelineIndex
                       290 \g@addto@macro\CodelineIndex{%
                           \let\special@index\HD@codeline@wrindex
                       292 }
           \PageIndex
                       293 \g@addto@macro\PageIndex{%
                            \let\special@index\HD@page@wrindex
                       295 }
\HD@codeline@wrindex
                       296 \def\HD@codeline@wrindex#1{%
                       297
                            \begingroup
                       298
                             \let\HDorg@encapchar\encapchar
                       299
                             \def\encapchar ##1\encapchar ##2\@nil{%}
                       300
                               \HDorg@encapchar
                       301
                              \verb| hdclindex{\theta c@HD@hypercount}{\#\#1}%|
                       302
                             }%
                             \codeline@wrindex{%
                       303
                       304
                               #1\encapchar\encapchar\@nil
                             }%
                       305
```

```
\endgroup
                          306
                          307 }
       \HD@page@wrindex
                          308 \def\HD@page@wrindex#1{%
                              \begingroup
                          309
                               \let\HDorg@encapchar\encapchar
                          310
                               \def\encapchar##1\encapchar##2\@nil{%
                          311
                          312
                                 \HDorg@encapchar
                          313
                                hdpindex{##1}%
                          314
                               \HDorg@index{#1\encapchar\encapchar\@nil}%
                          315
                          316
                              \endgroup
                          317 }
               \hdclindex
                          318 \left| 4\% \right|
                              \csname\ifx\#2\relax\else\#2\fi\endcsname\{\%
                               320
                          321
                               \HD@savedest@add{#1}%
                          322 }%
                          323 }
               \hdpindex
                          324 \left( \frac{4}{2} \right)
                              \csname if x \ \#1 \ else \#1 \ fi\ end csname \ \%
                          326
                               \hyperpage{#2}%
                          327 }%
                          328 }
                          3.11
                                 \PrintDescribeMacro
\HDorg@PrintDescribeMacro
                          \PrintDescribeMacro
                          330 \renewcommand\PrintDescribeMacro[1]{%
                              \begingroup
                               \let\HDorg@MacroFont\MacroFont
                          332
                               \def\MacroFont{%
                          333
                                 \HD@target
                          334
                                 \HDorg@MacroFont
                          335
                          336
                               \HDorg@PrintDescribeMacro{#1}%
                          337
                          338
                              \endgroup
                          339 }
                          3.12
                                 \PrintMacroName
  \HDorg@PrintMacroName
                          340 \let\HDorg@PrintMacroName\PrintMacroName
         \PrintMacroName
                          341 \renewcommand\PrintMacroName[1]{\%
                          342
                              \begingroup
                          343
                               \let\HDorg@MacroFont\MacroFont
                          344
                               \def\MacroFont{%
                          345
                                 \HD@target
                          346
                                 \HDorg@MacroFont
                          347
                               \verb|\HDorg@PrintMacroName{#1}| %
                          348
                          349
                              \endgroup
                          350 }
```

```
3.13
                                                                                                                                                          \theCodelineNo
              \HDorg@theCodelineNo
                                                                                                                       351 \let\HDorg@theCodelineNo\theCodelineNo
                                               \theCodelineNo
                                                                                                                       352 \renewcommand*\theCodelineNo{%
                                                                                                                                            \label{thm:linear_loss} $$\left(\HD\ength_{\HD\ength}\CodelineNo\}\%$$
                                                                                                                      354
                                                                                                                                            \ifdim\HD@helplength<\MacroIndent
                                                                                                                       355
                                                                                                                                                 \verb|\addtolength|{\hdown} {\hdown} {\hd
                                                                                                                       356
                                                                                                                                                 \label{lap}%
                                                                                                                                                        \begingroup\HD@target\endgroup
                                                                                                                       357
                                                                                                                                                        \hspace*{-\HD@helplength}%
                                                                                                                       358
                                                                                                                                                 }%
                                                                                                                       359
                                                                                                                                            \else
                                                                                                                       360
                                                                                                                                                 \HD@target
                                                                                                                       361
                                                                                                                                          \fi
                                                                                                                       362
                                                                                                                                           \HDorg@theCodelineNo
                                                                                                                       363
                                                                                                                       364 }
                                                    \HDorg@index
                                                                                                                       365 \AtBeginDocument{%
                                                                                                                       366
                                                                                                                                           \let\HDorg@index\index
                                                                                                                       367 }
                                                                                                                                                          \SpecialUsageIndex
                                                                                                                       3.14
\HDorg@SpecialUsageIndex
                                                                                                                       368 \let\HDorg@SpecialUsageIndex\SpecialUsageIndex
                                                                                                                       369 \renewcommand*\SpecialUsageIndex[1]{%
                                                                                                                       370 \@bsphack
                                                                                                                       371 \begingroup
                                                                                                                                                 \HD@target
                                                                                                                       372
                                                                                                                                                 \let\index\HDorg@index
                                                                                                                       373
                                                                                                                       374
                                                                                                                                                 \let\HDorg@encapchar\encapchar
                                                                                                                       375
                                                                                                                                                 \edef\encapchar usage{%
                                                                                                                       376
                                                                                                                                                           \HDorg@encapchar hdclindex{\the\c@HD@hypercount}{usage}%
                                                                                                                       377
                                                                                                                                                  \HDorg@SpecialUsageIndex{#1}%
                                                                                                                       378
                                                                                                                       379
                                                                                                                                            \endgroup
                                                                                                                                            \@esphack
                                                                                                                       380
                                                                                                                       381 }
                                                                                                                       3.15
                                                                                                                                                           \autoindex
                                                                                                                       382 \verb|\begingroup\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafte
                                                                                                                       383 \expandafter\ifx\csname autoindex\endcsname\relax
                                                                                                                       384 \else
                                  \HDorg@autoindex
                                                                                                                                            \let\HDorg@autoindex\autoindex
                                                                                                                       385
                                                                   \autoindex
                                                                                                                       386
                                                                                                                                            \renewcommand*\autoindex[1]{%
                                                                                                                       387
                                                                                                                                                  \@bsphack
```

# \edef\encapchar usage{%

388

389

390

391

392

\begingroup

\HD@target

\let\index\HDorg@index

393 \HDorg@encapchar hdclindex{\the\c@HD@hypercount}{usage}% 394 }%

```
\HDorg@autoindex{#1}%
                                                                              395
                                                                              396
                                                                                                 \endgroup
                                                                              397
                                                                                                 \@esphack
                                                                              398 }%
                                                                              399 \fi
                                                                              3.16
                                                                                                       \SpecialEnvIndex
\HDorg@SpecialEnvIndex
                                                                              400 \let\HDorg@SpecialEnvIndex\SpecialEnvIndex
                      \SpecialEnvIndex
                                                                              401 \renewcommand*\SpecialEnvIndex[1]{%
                                                                                            \@bsphack
                                                                              402
                                                                                             \begingroup
                                                                              403
                                                                                                 \HD@target
                                                                              404
                                                                              405
                                                                                                 \let\HDorg@encapchar\encapchar
                                                                              406
                                                                                                 \edef\encapchar usage{%
                                                                                                      \HDorg@encapchar hdclindex{\the\c@HD@hypercount}{usage}%
                                                                              407
                                                                              408
                                                                                                 \HDorg@SpecialEnvIndex{#1}%
                                                                              409
                                                                              410
                                                                                            \endgroup
                                                                              411
                                                                                            \@esphack
                                                                              412 }
                                                                              3.17
                                                                                                       \SortIndex
                   \HDorg@SortIndex
                                                                              413 \let\HDorg@SortIndex\SortIndex
                                          \SortIndex
                                                                              414 \renewcommand*{\SortIndex}[2]{%
                                                                              415 \@bsphack
                                                                              416 \begingroup
                                                                                                \let\index\HD@page@wrindex
                                                                              417
                                                                                                \HDorg@SortIndex{#1}{#2}%
                                                                              418
                                                                                            \endgroup
                                                                              419
                                                                              420 \@esphack
                                                                              421 }
                                                                                                       \@wrglossary
                                                                              3.18
                 \HDorg@wrglossary
                                                                              422 \let\HDorg@wrglossary\@wrglossary
                                   \@wrglossary
                                                                              423 \ensuremath{\mbox{def}\mbox{@wrglossary#1}}\%
                                                                              424 \left( \text{HDorg@encapchar} \right)
                                                                                            \label{lem:capchar} $$ \encapchar \# 1\encapchar \# 2\encapchar \# 2\enca
                                                                              425
                                                                                                \HDorg@encapchar
                                                                              426
                                                                                                \texttt{hdpindex}\{\#\#1\}\%
                                                                              427
                                                                              428 }%
                                                                              429 \HDorg@wrglossary{#1\encapchar\encapchar\@nil}%
                                                                              430 }
```

#### 3.19 \MacroIndent

```
\MacroIndent automatically calculated.
```

```
431 \AfterLastShipout{%
```

432 \if@filesw

```
433 \immediate\write\@auxout{%
434 \string\providecommand\string\HD@SetMacroIndent[1]{}%
435 }%
436 \immediate\write\@auxout{%
437 \string\HD@SetMacroIndent{\number\value{CodelineNo}}%
438 }%
439 \fi
440 }
```

#### \HD@SetMacroIndent

```
441 \def\HD@SetMacroIndent#1{%
442 \begingroup
443 \value{CodelineNo}=#1\relax
444 \settowidth{\MacroIndent}{\HDorg@theCodelineNo\}%
445 \global\MacroIndent\MacroIndent
446 \endgroup
447 }
448 \(/package)
```

#### 4 Installation

#### 4.1 Download

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

CTAN:macros/latex/contrib/oberdiek/hypdoc.dtx The source file.

CTAN:macros/latex/contrib/oberdiek/hypdoc.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.

#### 4.2 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/
```

#### 4.3 Package installation

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

```
tex hypdoc.dtx
```

<sup>1</sup>http://ctan.org/pkg/hypdoc

**TDS.** Now the different files must be moved into the different directories in your installation TDS tree (also known as texmf tree):

```
hypdoc.sty \rightarrow tex/latex/oberdiek/hypdoc.sty hypdoc.pdf \rightarrow doc/latex/oberdiek/hypdoc.pdf hypdoc.dtx \rightarrow source/latex/oberdiek/hypdoc.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.

#### 4.4 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.

#### 4.5 Some details for the interested

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

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

IATEX: 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{hypdoc.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 pdfIATFX:

```
pdflatex hypdoc.dtx
makeindex -s gind.ist hypdoc.idx
pdflatex hypdoc.dtx
makeindex -s gind.ist hypdoc.idx
pdflatex hypdoc.dtx
```

# 5 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 hypdoc.xml.

```
This package adds hypertext features to the package
460
      <xref refid='doc'>doc</xref> that is used in the documentation
461
      system of xref refid='latex'>LaTeX2e
462
      and references are linked as far as possible.
463
464
465
      The package is part of the <xref refid='oberdiek'>oberdiek</xref>
466
      bundle.
467
    </description>
    <documentation details='Package documentation'</pre>
468
       href='ctan:/macros/latex/contrib/oberdiek/hypdoc.pdf'/>
469
470 <ctan file='true' path='/macros/latex/contrib/oberdiek/hypdoc.dtx'/>
471 <miktex location='oberdiek'/>
472 <texlive location='oberdiek'/>
473 <install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip'/>
475 (/catalogue)
```

# 6 History

# [2002/05/10 v1.0]

• First standalone version.

# [2006/02/20 v1.1]

- Option numbered added.
- \HD@savedest@init fixed (empty .hd file triggered first page with fl ligature).
- Bookmarks for \listoffigures and \listoftables.
- Documentation: features and usage added.
- LPPL 1.3.

#### [2006/04/27 v1.2]

• \HD@target fixed (multicol.dtx).

#### [2006/06/01 v1.3]

• Support for package amsdtx's \autoindex added.

#### [2006/06/02 v1.4]

 $\bullet\,$  Bookmark fixed if there are several table of contents, bibliographies, glossaries, ...

# [2007/04/11 v1.5]

• Line ends sanitized.

# [2007/11/12 v1.6]

- Bug fix in \listoffigures (Axel Sommerfeldt).
- Markup added in implementation section.

## [2009/12/10 v1.7]

• Use of package rerunfilecheck.

# [2010/02/03 v1.8]

• Fix for bug latex/4096 added.

# [2010/03/26 v1.9]

- Definition of  $\mbox{\em MD@SetMacroIndex}$  is provided in the .aux file.

# [2011/05/05 v1.10]

• \raisebox in \HD@target with height and depth of Opt (request of GL).

# [2011/08/19 v1.11]

• Latest comma in option list for hyperref removed to avoid option clash because of LATEX 2011/06/27 with the new \in@.

# [2016/05/16 v1.12]

• Documentation updates.

# [2016/10/02 v1.13]

• Fixes to bookmarknames, also introduce \changehistoryname

## 7 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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