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

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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 (*package)
```

- 2 \NeedsTeXFormat{LaTeX2e}
- 3 \ProvidesPackage{hypdoc}%
- $_4$ [2016/05/16 v1.12 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} $$ $$ $$ $$ \DeclareOption{numbered} $$ \DeclareOption$
- 7 \ProcessOptions*\relax

3.2 Package loading

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

- 9 \RequirePackage{doc}
- 10 $\irr \gray \g$
- 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
                                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 {\contentsname}{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
                                                                                     {\contentsname}{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
                                                                                      {\glossaryname}{glossary\theHD@unique}%
                                                       215
                                                                           \endgroup
                                                       ^{216}
                                                                       \fi
                                                                       \verb|\HDorg@glossary@prologue| \\
                                                       217
                                                       218 }%
                                                       219 \HDorg@theglossary
                                                       220 }
                \glossaryname
                                                       221 \providecommand*{\glossaryname}{Change History}
                                                       3.10 Index
                                                       222 \newcounter{HD@hypercount}
           \HD@helplength
                                                       223 \newlength{\HD@helplength}
             \ifHD@savedest
                                                       224 \newif\ifHD@savedest
                                                       225 \HD@savedesttrue
                                                       226 \AtBeginDocument{%
                                                       227 \HD@savedest@init
                                                       229 \RequirePackage{rerunfilecheck}[2009/12/10]
    \HD@savedest@init
                                                       230 \begingroup
                                                       231 \catcode'\^^M=\active
                                                       232 \@firstofone{\endgroup
                                                       233 \def\HD@savedest@init{%
                                                       234
                                                                      \ifHD@savedest
                                                                           \let\HDorg@tilde~%
                                                       235
                                                       ^{236}
                                                                           \let~\HD@savedest@entry
                                                                           \verb|\def| HDorg@catcodeM{\the\catcode'\^^M}| % \\
                                                       237
                                                                           \color= \col
                                                       238
                                                                           \def^^M{}%
                                                       239
                                                                           \label{linear} $$\prod_{f\in Exists}\sigma_hd}{}{\
                                                       240
                                                                           \let~\HDorg@tilde
                                                       241
                                                                           \catcode'\^^M=\HDorg@catcodeM\relax
                                                       242
                                                                           \newwrite\HD@savedest@out
                                                       243
                                                       244
                                                                           \RerunFileCheck{\jobname.hd}{%
                                                       245
                                                                              \verb|\dimmediate| close out \| HD@savedest@out|
                                                       246
                                                                           }{}%
                                                                           \verb|\dimmediate| openout \ HD@savedest@out=\jobname.hd\\ relax|
                                                       247
                                                       248
                                                                           \let\HD@savedest@add\@gobble
                                                       249
                                                                       \fi
                                                       250
                                                                  }%
                                                       251
\HD@savedest@entry
                                                                   \def\HD@savedest@entry#1^^M{%
                                                       252
                                                                     \ensuremath{\texttt{Qnamedef{HD.#1}{}}}
                                                       253
                                                      254 }%
                                                       255 }
```

```
\HD@savedest@add
                                                            256 \def\HD@savedest@add#1{%
                                                            257 \immediate\write\HD@savedest@out{\string~#1}%
                                                            258 }
             \ifHD@targetraise
                                                            259 \newif\ifHD@targetraise
                                                            260 \HD@targetraisetrue
                           \HD@target
                                                            261 \def\HD@target{%
                                                            262
                                                                        \ifHD@targetraise
                                                                            \ifhmode
                                                            263
                                                            264
                                                                                \settoheight{\HD@helplength}{[H]}%
                                                            265
                                                                                \addtolength{\HD@helplength}{0.4ex}%
                                                                                \label{localized} $$ \arrowvert all the lambda of the la
                                                            266
                                                            267
                                                                                   \HD@maketarget
                                                                               }%
                                                            268
                                                            269
                                                                            \else
                                                                               \HD@maketarget
                                                            270
                                                                            \fi
                                                            271
                                                            272
                                                                       \else
                                                            273
                                                                           \HD@maketarget
                                                            274 \fi
                                                            275 }
              \HD@maketarget
                                                            276 \def\HD@maketarget{%
                                                                        \stepcounter{HD@hypercount}%
                                                            278
                                                                        \def\HD@next{%
                                                            279
                                                                           \displaystyle \left( \frac{HD.\tilde{HD}@hypercount}{}\right),}\%
                                                            280 }%
                                                                        \ifHD@savedest
                                                            281
                                                                           \expandafter\ifx\csname HD.\the\c@HD@hypercount\endcsname\@empty
                                                            282
                                                                            \else
                                                            283
                                                                                \left( HD@next\right) 
                                                            284
                                                                            \fi
                                                            285
                                                                       \fi
                                                            286
                                                                        \HD@next
                                                            287
                                                            288 }
                   \CodelineIndex
                                                            289 \g@addto@macro\CodelineIndex{%
                                                            291 }
                            \PageIndex
                                                            292 \g@addto@macro\PageIndex{%
                                                                        \let\special@index\HD@page@wrindex
                                                            294 }
\HD@codeline@wrindex
                                                            295 \def\HD@codeline@wrindex#1{%
                                                            296
                                                                        \begingroup
                                                            297
                                                                            \let\HDorg@encapchar\encapchar
                                                            298
                                                                            \def\encapchar ##1\encapchar ##2\@nil{%}
                                                            299
                                                                                \HDorg@encapchar
                                                            300
                                                                               \verb| hdclindex{\theta c@HD@hypercount}{\#\#1}%|
                                                            301
                                                                           }%
                                                                            \codeline@wrindex{%
                                                            302
                                                                                #1\encapchar\encapchar\olimits
                                                            303
                                                                           }%
                                                            304
```

```
\endgroup
                          305
                          306 }
       \HD@page@wrindex
                          307 \def\HD@page@wrindex#1{%
                              \begingroup
                          308
                                \let\HDorg@encapchar\encapchar
                          309
                                \def\encapchar##1\encapchar##2\@nil{%
                          310
                          311
                                 \HDorg@encapchar
                          312
                                 hdpindex{##1}%
                          313
                                \HDorg@index{#1\encapchar\encapchar\@nil}%
                          314
                          315
                              \endgroup
                          316 }
               \hdclindex
                          317 \def\hdclindex#1#2#3{\%}
                              \csname\ifx\#2\relax\else\#2\fi\endcsname\{\%
                                319
                          320
                               \HD@savedest@add{#1}%
                          321 }%
                          322 }
                \hdpindex
                          323 \left( \frac{4}{2} \right)
                          324 \csname\ifx\\#1\\relax\else#1\fi\endcsname{\%
                          325
                                \hyperpage{#2}%
                          326 }%
                          327 }
                          3.11
                                 \PrintDescribeMacro
\HDorg@PrintDescribeMacro
                          \PrintDescribeMacro
                          329 \renewcommand\PrintDescribeMacro[1]{%
                          330 \begingroup
                                \let\HDorg@MacroFont\MacroFont
                          331
                                \def\MacroFont{%
                          332
                                 \HD@target
                          333
                                 \HDorg@MacroFont
                          334
                          335
                                \verb|\HDorg@PrintDescribeMacro{#1}| %
                          336
                          337
                              \endgroup
                          338 }
                          3.12
                                 \PrintMacroName
  \verb|\HDorg@PrintMacroName||
                          339 \let\HDorg@PrintMacroName\PrintMacroName
         \PrintMacroName
                          340 \renewcommand\PrintMacroName[1]{\%
                          341
                              \begingroup
                                \let\HDorg@MacroFont\MacroFont
                          343
                                \def\MacroFont{%
                          344
                                 \HD@target
                          345
                                 \HDorg@MacroFont
                          346
                                \verb|\HDorg@PrintMacroName{#1}| %
                          347
                          348
                              \endgroup
                          349 }
```

3.13\theCodelineNo

```
\HDorg@theCodelineNo
```

350 \let\HDorg@theCodelineNo\theCodelineNo

\theCodelineNo

```
351 \renewcommand*\theCodelineNo{%
                                    \label{thm:linear_loss} $$\left(\HD\ength_{\HD\ength}\CodelineNo\}\%$$
353
                                    \ifdim\HD@helplength<\MacroIndent
354
                                               \verb|\addtolength|{\hdown} {\hdown} {\hd
355
                                                \label{lap}%
                                                          \begingroup\HD@target\endgroup
356
                                                          \hspace*{-\HD@helplength}%
357
                                             }%
358
                                    \else
359
                                            \HD@target
360
                                  \fi
361
```

\HDorg@theCodelineNo 362

363 }

\HDorg@index

```
364 \AtBeginDocument{%
    \let\HDorg@index\index
365
366 }
```

\SpecialUsageIndex 3.14

\HDorg@SpecialUsageIndex

```
367 \let\HDorg@SpecialUsageIndex\SpecialUsageIndex
368 \renewcommand*\SpecialUsageIndex[1]{%
    \@bsphack
369
370 \begingroup
     \HD@target
371
     \let\index\HDorg@index
372
373
     \let\HDorg@encapchar\encapchar
374
     \edef\encapchar usage{%
375
        \HDorg@encapchar hdclindex{\the\c@HD@hypercount}{usage}%
376
      \HDorg@SpecialUsageIndex{#1}%
377
378
    \endgroup
    \@esphack
379
380 }
```

3.15 \autoindex

```
381 \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
382 \expandafter\ifx\csname autoindex\endcsname\relax
383 \else
```

\HDorg@autoindex

\let\HDorg@autoindex\autoindex 384

\autoindex

```
385
    \renewcommand*\autoindex[1]{%
386
     \@bsphack
387
     \begingroup
388
      \HD@target
      \let\index\HDorg@index
389
      390
      \edef\encapchar usage{%
391
        \HDorg@encapchar hdclindex{\the\c@HD@hypercount}{usage}%
392
393
      }%
```

```
\HDorg@autoindex{#1}%
                                                                              394
                                                                              395
                                                                                                 \endgroup
                                                                                                 \@esphack
                                                                              396
                                                                              397 }%
                                                                              398 \fi
                                                                              3.16
                                                                                                       \SpecialEnvIndex
\HDorg@SpecialEnvIndex
                                                                              399 \let\HDorg@SpecialEnvIndex\SpecialEnvIndex
                      \SpecialEnvIndex
                                                                              400 \renewcommand*\SpecialEnvIndex[1]{%
                                                                                            \@bsphack
                                                                              401
                                                                                             \begingroup
                                                                              402
                                                                                                 \HD@target
                                                                              403
                                                                                                 \let\HDorg@encapchar\encapchar
                                                                             404
                                                                              405
                                                                                                 \edef\encapchar usage{%
                                                                                                     \HDorg@encapchar hdclindex{\the\c@HD@hypercount}{usage}%
                                                                              406
                                                                              407
                                                                                                 \HDorg@SpecialEnvIndex{#1}%
                                                                              408
                                                                              409
                                                                                            \endgroup
                                                                              410
                                                                                            \@esphack
                                                                              411 }
                                                                              3.17
                                                                                                       \SortIndex
                   \HDorg@SortIndex
                                                                             412 \let\HDorg@SortIndex\SortIndex
                                          \SortIndex
                                                                              413 \renewcommand*{\SortIndex}[2]{%
                                                                             414 \@bsphack
                                                                             415 \begingroup
                                                                                                \let\index\HD@page@wrindex
                                                                             416
                                                                                                \HDorg@SortIndex{#1}{#2}%
                                                                             417
                                                                             418 \endgroup
                                                                             419
                                                                                            \@esphack
                                                                              420 }
                                                                                                       \@wrglossary
                                                                              3.18
                 \HDorg@wrglossary
                                                                              421 \let\HDorg@wrglossary\@wrglossary
                                   \@wrglossary
                                                                              422 \ensuremath{\mbox{def}\mbox{@wrglossary#1}}\%
                                                                              423 \let\HDorg@encapchar\encapchar
                                                                                            \label{lem:capchar} $$ \encapchar \# 1\encapchar \# 2\encapchar \# 2\enca
                                                                              424
                                                                                                \HDorg@encapchar
                                                                              425
                                                                                                \texttt{hdpindex}\{\#\#1\}\%
                                                                              426
                                                                              427 }%
                                                                              428 \HDorg@wrglossary{#1\encapchar\encapchar\@nil}%
                                                                              429 }
```

3.19 \MacroIndent

```
\MacroIndent automatically calculated.
```

430 \AfterLastShipout{%

431 \if@filesw

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

\HD@SetMacroIndent

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

4 Installation

4.1 Download

Package. This package is available on CTAN¹:

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 TFX:

```
tex hypdoc.dtx
```

¹http://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 IATEX. The .dtx chooses its action depending on the format:

plain T_EX: 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 pdfIATEX:

```
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.

```
448 (*catalogue)
449 <?xml version='1.0' encoding='us-ascii'?>
450 <!DOCTYPE entry SYSTEM 'catalogue.dtd'>
451 <entry datestamp='$Date$' modifier='$Author$' id='hypdoc'>
452 <name>hypdoc</name>
453 <caption>Hyper extensions for doc.sty.</caption>
454 <authorref id='auth:oberdiek'/>
455 <copyright owner='Heiko Oberdiek' year='2002,2006,2007,2009-2011'/>
456 41cense type='lppl1.3'/>
457 <version number='1.12'/>
458 <description>
```

```
This package adds hypertext features to the package
459
      <xref refid='doc'>doc</xref> that is used in the documentation
460
      system of xref refid='latex'>LaTeX2e
461
      and references are linked as far as possible.
462
463
464
      The package is part of the <xref refid='oberdiek'>oberdiek</xref>
465
      bundle.
466
    </description>
    <documentation details='Package documentation'</pre>
467
       href='ctan:/macros/latex/contrib/oberdiek/hypdoc.pdf'/>
468
469 <ctan file='true' path='/macros/latex/contrib/oberdiek/hypdoc.dtx'/>
470 <miktex location='oberdiek'/>
471 <texlive location='oberdiek'/>
472 <install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip'/>
473 </entry>
474 (/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]

• 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]

 $\bullet~$ Fix for bug latex/4096 added.

[2010/03/26 v1.9]

• Definition of \HD@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.

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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