The holtxdoc package

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Abstract

The package is used for the documentation of my packages in DTX format. It contains some private macros and setup for my needs. Thus do not use it. I have separated the part that may be useful for others in package hypdoc.

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*Please report any issues at https://github.com/ho-tex/oberdiek/issues

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1 No usage

Caution: *This package is not intended for public use!*

It contains the macros and settings to generate the documentation of my packages in CTAN:pkg/oberdiek. Thus the package does not know anything about compatibility. Only my current packages' documentation must compile.

Older versions were more interesting, because they contained code to add hyperref's features to LaTeX's doc system, e.g. bookmarks and index links. I separated this stuff and made a new package hypdoc.

2 Implementation

```
1 ⟨*package⟩
```

Package identification.

```
2 \NeedsTeXFormat{LaTeX2e}
3 \ProvidesPackage{holtxdoc}%
4   [2019/12/09 v0.30 Private additional ltxdoc support (HO)]
5 \PassOptionsToPackage{pdfencoding=auto}{hyperref}
6 \RequirePackage[numbered]{hypdoc}[2010/03/26]
7 \RequirePackage{hyperref}[2010/03/30]
8 \RequirePackage{pdftexcmds}[2010/04/01]
9 \RequirePackage{ltxcmds}[2010/03/09]
10 \RequirePackage{hologo}[2011/11/22]
11 \RequirePackage{array}
```

2.1 Help macros

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

2.2 Font setup for LuaLaTeX

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

2.3 Date

```
\ltx@IfUndefined{pdf@filemoddate}{%
}{%
  \edef\hld@temp{\pdf@filemoddate{\jobname.dtx}}%
  \ifx\hld@temp\ltx@empty
  \else
    \begingroup
      \def\x#1:#2#3#4#5#6#7#8#9{%
        \year=#2#3#4#5\relax
        \month=#6#7\relax
        \day=#8#9\relax
        \y
      }%
      \def\y#1#2#3#4#5\@nil{%
        \time=#1#2\relax
        \multiply\time by 60\relax
        \advance\time#3#4\relax
      }%
      \expandafter\x\hld@temp\@nil
      \edef\x{\endgroup
        \year=\the\year\relax
        \month=\the\month\relax
        \day=\the\day\relax
        \time=\the\time\relax
      }%
    \x
    \edef\hld@temp{%
      \noexpand\hypersetup{%
        pdfcreationdate=\hld@temp,%
        pdfmoddate=\hld@temp
      }%
    }%
    \hld@temp
  \fi
}
```

2.4 History

\historyname

```
\providecommand*{\historyname}{History}

\newcommand*{\StartHistory}{%
  \section{\historyname}%
}
\@ifpackagelater{hyperref}{2009/11/27}{%
  \newcommand*{\HistVersion}[1]{%
    \subsection*{[#1]}% hash-ok
    \addcontentsline{toc}{subsection}{[#1]}% hash-ok
    \def\HistLabel##1{%
      \begingroup
        \protected@edef\@currentlabel{[#1]}% hash-ok
```

```
        \label{##1}%
      \endgroup
    }%
  }%
}{%
  \newcommand*{\HistVersion}[1]{%
    \subsection*{%
      \phantomsection
      \addcontentsline{toc}{subsection}{[#1]}% hash-ok
      [#1]% hash-ok
    }%
    \def\HistLabel##1{%
      \begingroup
        \protected@edef\@currentlabel{[#1]}% hash-ok
        \label{##1}%
      \endgroup
    }%
  }%
}
\newenvironment{History}{%
  \StartHistory
  \def\Version##1{%
    \HistVersion{##1}%
    \@ifnextchar\end{%
      \let\endVersion\relax
    }{%
      \let\endVersion\enditemize
      \itemize
    }%
  }%
  \raggedright
}{}
```

2.5 Formatting macros

`\UrlFoot`
#1: text
#2: url

```
\newcommand{\URL}[2]{%
  \begingroup
    \def\link{\href{#2}}%
    #1%
  \endgroup
  \footnote{Url: \url{#2}}%
}
```

`\NameEmail`
#1: name
#2: email address

```
\newcommand*{\NameEmail}[2]{%
  \expandafter\hld@NameEmail\expandafter{#2}{#1}%
}
\def\hld@NameEmail#1#2{%
  \expandafter\hld@@NameEmail\expandafter{#2}{#1}%
}
\def\hld@@NameEmail#1#2{%
  \ifx\\#1#2\\%
    \hld@warn{%
```

```
      Command \string\NameEmail\space without name and email%
    }%
  \else
    \ifx\\#1\\%
      \href{mailto:#2}{\nolinkurl{#2}}%
    \else
      #1%
      \ifx\\#2\\%
      \else
        \footnote{%
          #1's email address: %
          \href{mailto:#2}{\nolinkurl{#2}}%
        }%
      \fi
    \fi
  \fi
}
\newcommand*{\Package}[1]{\texttt{#1}}
\newcommand*{\File}[1]{\texttt{#1}}
\newcommand*{\Verb}[1]{\texttt{#1}}
\newcommand*{\CS}[1]{\texttt{\expandafter\@gobble\string\\#1}}
\newcommand*{\bibpackage}[4]{%
  \bibitem{#1}
  Package \xpackage{#1}, #2, #3.%
  \ifx\\#4\\\else\space#4\fi\par
}
\newcommand*{\CTAN}[1]{%
  \href{https://ctan.org/tex-archive/#1}{\nolinkurl{CTAN:#1}}%
}
\newcommand*{\CTANinstall}[1]{%
  \href{http://mirrors.ctan.org/#1}{\nolinkurl{CTAN:#1}}%
}
\newcommand*{\CTANpkg}[1]{%
  \href{http://ctan.org/pkg/#1}{\nolinkurl{CTAN:pkg/#1}}%
}
\newcommand*{\Newsgroup}[1]{%
  \href{https://groups.google.com/group/#1/topics}{\nolinkurl{news:#1}}%
}
\newcommand*{\xpackage}[1]{\textsf{#1}}
\newcommand*{\xmodule}[1]{\textsf{#1}}
\newcommand*{\xclass}[1]{\textsf{#1}}
\newcommand*{\xoption}[1]{\textsf{#1}}
\newcommand*{\xfile}[1]{\texttt{#1}}
\newcommand*{\xext}[1]{\texttt{.#1}}
\newcommand*{\xemail}[1]{%
  \textless\texttt{#1}\textgreater%
}
\newcommand*{\xnewsgroup}[1]{%
  \href{news:#1}{\nolinkurl{#1}}%
}
```

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

```
\newenvironment{declcs}[1]{%
  \par
  \addvspace{4.5ex plus 1ex}%
```

```
  \vskip -\parskip
  \noindent
  \hspace{-\leftmargini}%
  \def\M##1{\texttt{\{}\meta{##1}\texttt{\}}}%
  \def\*{\unskip\,\texttt{*}}%
  \begin{tabular}{|l|}%
    \hline
    \expandafter\SpecialUsageIndex\csname #1\endcsname
    \cs{#1}%
}{%
    \\%
    \hline
  \end{tabular}%
  \nobreak
  \par
  \nobreak
  \vspace{2.3ex}%
  \vskip -\parskip
  \noindent
  \ignorespacesafterend
}
```

2.6 Names

```
\def\eTeX{\hologo{eTeX}}
\def\pdfTeX{\hologo{pdfTeX}}
\def\pdfLaTeX{\hologo{pdfLaTeX}}
\def\LuaTeX{\hologo{LuaTeX}}
\def\LuaLaTeX{\hologo{LuaLaTeX}}
\def\XeTeX{\hologo{XeTeX}}
\def\XeLaTeX{\hologo{XeLaTeX}}
\def\plainTeX{\hologo{plainTeX}}
\providecommand*{\teTeX}{\hologo{teTeX}}
\providecommand*{\mikTeX}{\hologo{MiKTeX}}
\providecommand*{\MakeIndex}{\textsl{MakeIndex}}
\providecommand*{\docstrip}{\textsf{docstrip}}
\providecommand*{\iniTeX}{\hologo{iniTeX}}
\providecommand*{\VTeX}{\hologo{VTeX}}
```

2.7 Setup

2.7.1 Package **doc**

```
\CodelineIndex
\EnableCrossrefs
\setcounter{IndexColumns}{2}
```

```
\DoNotIndex{\begingroup,\endgroup,\bgroup,\egroup}
\DoNotIndex{\def,\edef,\xdef,\global,\long,\let}
\DoNotIndex{\expandafter,\noexpand,\string}
\DoNotIndex{\else,\fi,\or}
\DoNotIndex{\relax}
```

```
\IndexPrologue{%
  \section*{Index}%
  \markboth{Index}{Index}%
  Numbers written in italic refer to the page %
  where the corresponding entry is described; %
  numbers underlined refer to the %
  \ifcodeline@index
```

```
    code line of the %
  \fi
  definition; plain numbers refer to the %
  \ifcodeline@index
    code lines %
  \else
    pages %
  \fi
  where the entry is used.%
}
```

2.7.2 Page layout

```
\addtolength{\textheight}{\headheight}
\addtolength{\textheight}{\headsep}
\setlength{\headheight}{0pt}
\setlength{\headsep}{0pt}

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

⟨/package⟩
```

3 Installation

3.1 Download

Package. This package is available on CTAN[1]:

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

CTAN:macros/latex/contrib/oberdiek/holtxdoc.pdf Documentation.

Bundle. All the packages of the bundle 'oberdiek' are also available in a TDS compliant ZIP archive. There the packages are already unpacked and the documentation files are generated. The files and directories obey the TDS standard.

CTAN:install/macros/latex/contrib/oberdiek.tds.zip

TDS refers to the standard "A Directory Structure for TEX Files" (CTAN:pkg/tds). Directories with `texmf` in their name are usually organized this way.

3.2 Bundle installation

Unpacking. Unpack the `oberdiek.tds.zip` in the TDS tree (also known as `texmf` tree) of your choice. Example (linux):

```
unzip oberdiek.tds.zip -d ~/texmf
```

3.3 Package installation

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

```
tex holtxdoc.dtx
```

[1] CTAN:pkg/holtxdoc

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

```
holtxdoc.sty → tex/latex/oberdiek/holtxdoc.sty
holtxdoc.pdf → doc/latex/oberdiek/holtxdoc.pdf
holtxdoc.dtx → source/latex/oberdiek/holtxdoc.dtx
```

If you have a `docstrip.cfg` that configures and enables docstrip's TDS installing feature, then some files can already be in the right place, see the documentation of docstrip.

3.4 Refresh file name databases

If your TEX distribution (TEX Live, MiKTEX, ...) relies on file name databases, you must refresh these. For example, TEX Live users run `texhash` or `mktexlsr`.

3.5 Some details for the interested

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

plain TEX: Run docstrip and extract the files.

LATEX: Generate the documentation.

If you insist on using LATEX for docstrip (really, docstrip does not need LATEX), then inform the autodetect routine about your intention:

```
latex \let\install=y\input{holtxdoc.dtx}
```

Do not forget to quote the argument according to the demands of your shell.

Generating the documentation. You can use both the `.dtx` or the `.drv` to generate the documentation. The process can be configured by the configuration file `ltxdoc.cfg`. For instance, put this line into this file, if you want to have A4 as paper format:

```
\PassOptionsToClass{a4paper}{article}
```

An example follows how to generate the documentation with pdfLATEX:

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

4 History

[1999/06/26 v0.3]

- ...

[2000/08/14 v0.4]

- ...

[2001/08/27 v0.5]

- ...

[2001/09/02 v0.6]

- ...

[2006/06/02 v0.7]

- Major change: most is put into a new package hypdoc.

[2007/10/21 v0.8]

- `\XeTeX` and `\XeLaTeX` added.

[2007/11/11 v0.9]

- `\LuaTeX` added.

[2007/12/12 v0.10]

- `\iniTeX` added.

[2008/08/11 v0.11]

- `\Newsgroup`, `\xnewsgroup`, and `\URL` updated.

[2009/08/07 v0.12]

- `\xmodule` added.

[2009/12/02 v0.13]

- Anchor hack for unnumbered subsections is removed for hyperref $\geq$ 2009/11/27 6.79k.

[2010/02/03 v0.14]

- `\XeTeX` and `\XeLaTeX` are made robust.

[2010/03/10 v0.15]

- `\LuaTeX` changed according to Hans Hagen's definition in the luatex mailing list.

[2010/04/03 v0.16]

- Use date and time of `.dtx` file.

[2010/04/08 v0.17]

- Option pdfencoding=auto added for package hyperref.
- Package hologo added.

[2010/04/18 v0.18]

- Standard index prologue replaced by corrected prologue.

[2010/04/24 v0.19]

- Requested date of package hologo updated.

[2010/12/03 v0.20]

- History is now set using `\raggedright`.

[2011/02/04 v0.21]

- GL needs `\protected@edef` instead of `\edef` in `\HistLabel`.

[2011/11/22 v0.22]

- Font stuff added for LuaLaTeX.

[2012/03/07 v0.23]

- Accept empty history version.

[2012/03/21 v0.24]

- Section title for history uses `\historyname`.

[2016/05/16 v0.25]

- Documentation updates.

[2016/05/16 v0.26]

- Documentation updates.

[2016/05/17 v0.27]

- New name for lm math font

[2019/07/27 v0.28]

- Use CTAN's preferred URL form for packages Documentation updates.

[2019/11/12 v0.29]

- Add `\bibpackage` (previously defined inline in some of the packages). Adjust CTAN links.

[2019/12/09 v0.30]

- Documentation updates.
- Don't use ifluatex legacy package.
- use 'hologo definitions in more cases.

5 Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; plain numbers refer to the code lines where the entry is used.

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