The \texttt{gettitlestring} package

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Abstract

The \LaTeX\ package addresses packages that are dealing with references to titles (\texttt{\section, \caption, ...}). The package tries to remove \texttt{\label} and other commands from title strings.

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\textsuperscript{*}Please report any issues at \url{https://github.com/ho-tex/gettitlestring/issues}
1 Documentation

1.1 Macros

\GetTitleStringSetup\{\langle key value list\rangle\}

The options are given as comma separated key value pairs. See section 1.2.

\GetTitleString\{\langle text\rangle\}
\GetTitleStringExpand\{\langle text\rangle\}
\GetTitleStringNonExpand\{\langle text\rangle\}

Macro \GetTitleString tries to remove unwanted stuff from \langle text\rangle the result is stored in Macro \GetTitleStringResult. Two methods are available:

\GetTitleStringExpand: The \langle text\rangle is expanded in a context where the unwanted macros are redefined to remove themselves. This is the method used in packages titleref [2], zref-titleref [3] or class memoir [1]. \protect is supported, but fragile material might break.

\GetTitleStringNonExpand: The \langle text\rangle is not expanded. Thus the removal of unwanted material is more difficult. It is especially removed at the start of the \langle text\rangle and spaces are removed from the end. Currently only \label is removed in the whole string, if it is not hidden inside curly braces or part of macro definitions. Thus the removal of unwanted stuff might not be complete, but fragile material will not break. (But the result string can break at a later time, of course).

Option expand controls which method is used by macro \GetTitleString.

\GetTitleStringDisableCommands\{\langle code\rangle\}

The \langle code\rangle is called right before the text is expanded in \GetTitleStringExpand. Additional definitions can be given for macros that should be removed. Keep in mind that expansion means that the definitions must work in expandable context. Macros like \@ifstar or \@ifnextchar or optional arguments will not work. The macro names in \langle code\rangle may contain the at sign @, it has catcode 11 (letter).

1.2 Options

expand: Boolean option, takes values true or false. No value means true. The option specifies the method to remove unwanted stuff from the title string, see below.

Options can be set at the following places:

- \usepackage
- Configuration file gettitlestring.cfg
- \GetTitleStringSetup
2 Implementation

Reload check, especially if the package is not used with \LaTeXX.
\begin{verbatim}
\maketitle
\end{verbatim}
2.1 Options

\RequirePackage{kvoptions}[2009/07/17]
\SetupKeyvalOptions{...}

\endinput
\newcommand*{\GetTitleStringSetup}{{setkeys{gettitlestring}}} \newcommand*{\GetTitleString}{\ifGTS@expand \expandafter\GetTitleStringExpand \else \expandafter\GetTitleStringNonExpand \fi} \newcommand\GetTitleStringExpand{\def\GetTitleStringResult{#1} \begingroup \GTS@DisablePredefinedCmds \GTS@DisableHook \edef\x{\endgroup \noexpand\def\noexpand\GetTitleStringResult{\GetTitleStringResult}}} \newcommand\GetTitleStringNonExpand{\def\GetTitleStringResult{#1} \global\let\GTS@GlobalString\GetTitleStringResult \begingroup \GTS@RemoveLeft \GTS@RemoveRight \let\GetTitleStringResult\GTS@GlobalString} \def\GTS@DisablePredefinedCmds{\let\label\@gobble \let\zlabel\@gobble \let\zref@label\@gobble \let\zref@labelbylist\@gobbletwo \let\zref@labelbyprops\@gobbletwo \let\index\@gobble \let\glossary\@gobble \let\markboth\@gobbletwo}

2.2 \GetTitleString

2.2.1 Expand method
\GTS@DisableHook

\providecommand*{\GTS@DisableHook}{\}

\GetTitleStringDisableCommands

\def\GetTitleStringDisableCommands{\begingroup\makeatletter\GTS@DisableCommands\endgroup\let\GTS@DisableHook\GTS@GlobalString\GTS@DisableCommands}\\

\GTS@DisableCommands

\long\def\GTS@DisableCommands#1{%
\toks0=\expandafter{\GTS@DisableHook}%
\toks2={#1}%
\xdef\GTS@GlobalString{\the\toks0 \the\toks2}%
\endgroup
\let\GTS@DisableHook\GTS@GlobalString\GTS@DisableCommands
}

2.2.2 Non-expand method

\def\GTS@RemoveLeft{%
\toks0=\expandafter{\GTS@DisableHook}%
\toks2={#1}%
\xdef\GTS@GlobalString{\the\toks0 \the\toks2}%
\GTS@PredefinedLeftCmds
\expandafter\futurelet\expandafter\GTS@Token\expandafter\GTS@TestLeftSpace\GTS@GlobalString\GTS@Nil
\GTS@End
}

\long\def\GTS@TestLeft#1#2\GTS@Nil{\ifx\GTS@Token#1\expandafter\GTS@TestLeftEnd\GTS@GlobalString\GTS@Nil\expandafter\GTS@TestLeftEnd\fi}

\long\def\GTS@TestLeftEnd#1\GTS@End{%
\xdef\GTS@GlobalString{\the\toks0}%
\GTS@RemoveLeft
}

\long\def\GTS@Car#1#2\GTS@Nil{#1}
\long\def\GTS@Cdr#1#2\GTS@Nil{#2}
3 Installation

3.1 Download

Package. This package is available on CTAN¹:


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/gettitlestring.tds.zip

TDS refers to the standard “A Directory Structure for T\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 T\TeX:

    tex gettitlestring.dtx

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

    gettitlestring.sty → tex/generic/gettitlestring/gettitlestring.sty
    gettitlestring.pdf → doc/latex/gettitlestring/gettitlestring.pdf
    gettitlestring.dtx → source/latex/gettitlestring/gettitlestring.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.

¹CTAN:pkg/gettitlestring
3.4 Refresh file name databases
If your \TeX{} distribution (\TeX{} Live, MiK\TeX{}, ...) 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:

\begin{verbatim}
latex \\let\install=y\input{gettitlestring.dtx}
\end{verbatim}

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:

\begin{verbatim}
\PassOptionsToClass{a4paper}{article}
\end{verbatim}

An example follows how to generate the documentation with pdfl\TeX{}:

\begin{verbatim}
pdflatex gettitlestring.dtx
makeindex -s gind.ist gettitlestring.idx
pdflatex gettitlestring.dtx
makeindex -s gind.ist gettitlestring.idx
pdflatex gettitlestring.dtx
\end{verbatim}

4 References

[1] Peter Wilson, Lars Madsen: The Memoir Class; 2009/11/17 v1.61803398c; CTAN:pkg/memoir

[2] Donald Arsenau: Titleref.sty; 2001/04/05 ver 3.1; CTAN:pkg/titleref

[3] Heiko Oberdiek: The zref package; 2009/12/08 v2.7; CTAN:pkg/zref

5 History

[2009/12/08 v1.0]
\begin{itemize}
  \item The first version.
\end{itemize}

[2009/12/12 v1.1]
\begin{itemize}
  \item Short info shortened.
\end{itemize}

[2009/12/13 v1.2]
\begin{itemize}
  \item Forgotten third argument for `\textbf{\texttt{InputIfFileExists}}` added.
\end{itemize}
6 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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