listlbls — Creates a list of all labels used throughout a document*

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Abstract

This is a package meant to help a \LaTeX-writer to keep track all the defined labels by typesetting a complete list of labels wherever the author requests it. Keep in mind, that you might need to have additional \LaTeX runs to get the references right.

This package is based on an answer David Carlisle gave on \TeX-Stackexchange in the thread List of all labels with hyperlinks.

Contents

<table>
<thead>
<tr>
<th>Number</th>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Installation</td>
<td>1</td>
</tr>
<tr>
<td>1.1</td>
<td>\TeXlive</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td>From Github</td>
<td>1</td>
</tr>
<tr>
<td>1.3</td>
<td>From CTAN</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Usage</td>
<td>2</td>
</tr>
<tr>
<td>2.1</td>
<td>Initialization</td>
<td>2</td>
</tr>
<tr>
<td>2.2</td>
<td>Macros</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Contribution and bugreports</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Implementation</td>
<td>3</td>
</tr>
<tr>
<td>4.1</td>
<td>Options</td>
<td>3</td>
</tr>
<tr>
<td>4.2</td>
<td>Loading auxiliary packages</td>
<td>3</td>
</tr>
<tr>
<td>4.3</td>
<td>Set up internationalisation</td>
<td>3</td>
</tr>
<tr>
<td>4.3.1</td>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>4.3.2</td>
<td>German</td>
<td>4</td>
</tr>
<tr>
<td>4.3.3</td>
<td>French</td>
<td>4</td>
</tr>
<tr>
<td>4.4</td>
<td>Internal stuff</td>
<td>4</td>
</tr>
<tr>
<td>4.5</td>
<td>External stuff</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Change History</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Index</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>List of Labels</td>
<td>6</td>
</tr>
</tbody>
</table>

1 Installation

The following explanations are only valid for Linux-like systems with gnu-make available.

1.1 \TeXlive

This package is bundled in \TeXlive, so you can simply (sudo) tlmgr install listlbls (which should work for windows as well)

1.2 From Github

1. Check out the sourcecode from GitHub:
   git clone git@github.com:NobbZ/listlbls.git

2. Switch to the source-folder:
   cd listlbls

3. Checkout the branch/tag you desire: master for latest release, develop for latest builds (might be broken) or the version number desired.
   git checkout <branch/tag>

†This file describes version v1.03, last revised 2014/08/04.
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4. Compile the document using make:
   make all

5. You can do either a user-installation or a system-wide installation:
   user: make inst
   system: make install (will ask for root!)

1.3 From CTAN

2. Download the package as zip archive (“Download” at the bottom of the page).
   wget http://mirrors.ctan.org/macros/latex/contrib/listlbls.zip
3. Unzip wherever you want.
   unzip listlbls.zip
4. cd into the directory you unzipped to.
   cd listlbls
5. You can do either a user-installation or a system-wide installation:
   user: make inst
   system: make install (will ask for root!)

2 Usage

2.1 Initialization

Just activate the package as usual: \usepackage[⟨options⟩]{listlbls}

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>draft</td>
<td>If draft is given as option, \listoflabels will typeset the list of labels.</td>
</tr>
<tr>
<td>final</td>
<td>If final is given as option, \listoflabels will do nothing. Please remember, that final is set globally by most documentclasses.</td>
</tr>
<tr>
<td>totoc</td>
<td>If this is given the List of Labels will appear in a table of contents (unnumbered).</td>
</tr>
<tr>
<td>notoc</td>
<td>If this is given the List of Labels will not appear in a table of contents, but it still will have a headline.</td>
</tr>
<tr>
<td>numtoc</td>
<td>Typesets a numbered headline, this option also implies totoc!</td>
</tr>
<tr>
<td>nonameref</td>
<td>Even if the package nameref if detected, it will not be used.</td>
</tr>
</tbody>
</table>

This document was typeset with \usepackage[draft,totoc]{listlbls} also the package nameref was loaded.
A locally set option will win against a globally set contrary option!

2.2 Macros

Then anywhere in your document, you can use the \listoflabels-macro to typeset a list of labels. An example can be seen on page 6.

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>\label</td>
<td>Use \label as you are used to it!</td>
</tr>
<tr>
<td>\listoflabels</td>
<td>This macro will typeset the list of labels when this module is in draft mode. It will itself register the label “special:listoflabels”.</td>
</tr>
</tbody>
</table>

3 Contribution and bugreports

If you have feature-requests or bug-reports, please feel free to report them on the project page at GitHub.

If you want to contribute then follow these steps:

1. Visit the project page at GitHub,
2. forkt it,
3. clone it to your local machine,
4. create a branch “feature/(feature name)”,
5. do your changes,
6. push them back to GitHub,
7. create a pull request to develop,
8. and wait for approval.

After approval your code will be merged to the development-branch and I will generally not accept pull-requests that edit develop directly.

4 Implementation

4.1 Options

draft  Check for draft-option:
  6\DeclareOption{draft}{\llbls@drafttrue}

final Check for final-option:
  7\DeclareOption{final}{\llbls@draftfalse}

totoc  Check for totoc-option:
  8\DeclareOption{totoc}{\llbls@totoctrue}

notoc  Check for notoc-option:
  9\DeclareOption{notoc}{\llbls@totocfalse}

numtoc  Check for numtoc-option:
  10\DeclareOption{numtoc}{\llbls@numtoctrue}

nonameref  Check for nonameref-option:
  11\DeclareOption{nonameref}{\llbls@namereffalse}

Process the options:
  12\ProcessOptions*\relax

4.2 Loading auxiliary packages

Load the package translations to provide internationalised caption for the \listoflabels.
  13\RequirePackage{translations}

4.3 Set up internationalisation

Define fallback translations:
  14\DeclareTranslationFallback%
  15  {\llbls-listoflabels}%
  16  {List of Labels}
  17\DeclareTranslationFallback%
  18  {\llbls-onpage}%
  19  {on page}
4.3.1 English
\DeclareTranslation{English}
\\{llbls-listoflabels\}
\{List of Labels\}
\DeclareTranslation{English}
\{llbls-onpage\}
\{on page\}

4.3.2 German
\DeclareTranslation{German}
\{llbls-listoflabels\}
\{Sprungmarkenverzeichnis\}
\DeclareTranslation{German}
\{llbls-onpage\}
\{auf Seite\}

4.3.3 French
\DeclareTranslation{French}
\{llbls-listoflabels\}
\{Liste des \'etiquettes\}
\DeclareTranslation{French}
\{llbls-onpage\}
\{\`a la page\}

4.4 Internal stuff
\llbls@headline
\llbls@toccommand
\llbls@tocgroup
Determine if we have \chapter{s} or not and create a command that maps to \chapter or \section as needed.
\ifdefined\chapter*
\ifllbls@numtoc
  \def\llbls@headline{%
    \chapter{List of Labels}\label{special:listoflabels}}
  \else
    \def\llbls@toccommand{\chapter*}
    \def\llbls@tocgroup{chapter}
  \fi
\else
  \ifllbls@numtoc
    \def\llbls@headline{%
      \section{List of Labels}\label{special:listoflabels}}
    \else
      \def\llbls@toccommand{\section*}
      \def\llbls@tocgroup{section}
    \fi
  \fi
\fi
\ifdefined\llbls@headline\else
  \def\llbls@headline{%
    \llbls@toccommand{\GetTranslation{llbls-listoflabels}}%
    \label{special:listoflabels}%
    \ifllbls@totoc
      \addcontentsline{toc}{\llbls@tocgroup}{\GetTranslation{llbls-listoflabels}}%
    \else
      \relax%
    \fi%
\fi
\fi

\llbls@refs
Whether or not we use \nameref in the output.
\ifdefined\nameref
  \ifllbls@nameref
    \newcommand\llbls@refs[1]{\nameref[#1], \ref[#1]}
  \else
  \fi
\else
  \fi

\newcommand\llbls@refs[1]{\ref{#1}}
\fi
\else
\newcommand\llbls@refs[1]{\ref{#1}}
\fi

\llbls@findlabel No explanation yet.
\long\def\llbls@findlabel#1#2\llbls@findlabel{
  \ifx\newlabel#1%
  \llbls@lablist\expandafter{\the\llbls@lablist\llbls@showlabel#2}
  \fi}
\llbls@showlabel Displays a single entry in the \listoflabels
\def\llbls@showlabel#1#2{
  \par
  \noindent Label: %
  \texttt{\detokenize{#1}}\dotfill
  \llbls@refs{#1}~\GetTranslation{llbls-onpage}~\pageref{#1}%
}
\newtoks\llbls@lablist
\newread\llbls@zz
\immediate\openin\llbls@zz=\jobname.aux
\loop
  \ifeof\llbls@zz\else
  \read\llbls@zz to \llbls@tmp
  \expandafter\llbls@findlabel\llbls@tmp\relax\llbls@findlabel
  \repeat

4.5 External stuff
\if\llbls@draft
\listoflabels Print a list of all available labels that are defined throughout the document.
\newcommand\listoflabels{%
  \llbls@headline%
  \the\llbls@lablist}
\else
  \let\listoflabels=\relax
\fi
\endinput

5 Change History

v1.00 General: First public release ............ 1
v1.01 General: Changed maintainer email ....... 1
  Changed some internal stuff to make it releaseable on CTAN ......... 1
  final: Added option ............ 3
  draft: Added option ............ 3
v1.02 General: Added language-support for English, German and French. ....... 1
  Local option wins against global option . 1
  final: Introduced @ifdraft ............ 3
  notoc: Added option ............ 3
  toto: Added option ............ 3
  draft: Introduced @ifdraft ............ 3
  numtoc: Added option ............ 3
v1.03 General: Proceeding with namespace internal macros ............ 1
  \llbls@showlabel: Add support for nameref-package ............ 5
  nonameref: Added option ............ 3
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; numbers in roman refer to the code lines where the entry is used.

\llbls@drafttrue \llbls@numtoctrue \llbls@showlabel \llbls@numtoctrue \llbls@headlinetext \llbls@headline \llbls@headlinenameref \llbls@headlinenametoc \llbls@headlinenametocfalse \llbls@headlinenametoctrue

\llbls@draftfalse \llbls@numtocfalse \llbls@showlabel \llbls@numtoctocfalse \llbls@numtoctrue

\llbls@zz \llbls@refs

\ifllbls@draft \llbls@draftrue \llbls@draffalse \llbls@drafttrue \llbls@draftfalse \llbls@draft

\ifllbls@numtoc \llbls@numtrue \llbls@numfalse \llbls@numtoctrue \llbls@numtocfalse \llbls@numtoc

\ifllbls@notoc \llbls@nottrue \llbls@notfalse \llbls@nottoctrue \llbls@nottocfalse \llbls@notoc

\ifllbls@nonameref \llbls@nonamereftrue \llbls@nonamereffalse \llbls@nonameref

\ifllbls@final \llbls@finaltrue \llbls@finalfalse \llbls@final

\ifllbls@option \llbls@optiontrue \llbls@optionfalse \llbls@option

D \llbls@findlabel \llbls@headlinetext \llbls@nameref \llbls@numtoc

F \llbls@numtocfalse \llbls@numtoctrue

I \llbls@draftrue \llbls@draffalse \llbls@drafttrue \llbls@draftfalse \llbls@draft

\ifllbls@numtoc \llbls@numtrue \llbls@numfalse \llbls@numtoctrue \llbls@numtocfalse \llbls@numtoc

\ifllbls@notoc \llbls@nottrue \llbls@notfalse \llbls@nottoctrue \llbls@nottocfalse \llbls@notoc

\ifllbls@nonameref \llbls@nonamereftrue \llbls@nonamereffalse \llbls@nonameref

\ifllbls@final \llbls@finaltrue \llbls@finalfalse \llbls@final

\ifllbls@option \llbls@optiontrue \llbls@optionfalse \llbls@option

L \label \listoflabels \llbls@draftrue \llbls@draffalse \llbls@drafttrue \llbls@draftfalse \llbls@draft

\ifllbls@numtoc \llbls@numtrue \llbls@numfalse \llbls@numtoctrue \llbls@numtocfalse \llbls@numtoc

\ifllbls@notoc \llbls@nottrue \llbls@notfalse \llbls@nottoctrue \llbls@nottocfalse \llbls@notoc

\ifllbls@nonameref \llbls@nonamereftrue \llbls@nonamereffalse \llbls@nonameref

\ifllbls@final \llbls@finaltrue \llbls@finalfalse \llbls@final

\ifllbls@option \llbls@optiontrue \llbls@optionfalse \llbls@option

\llbls@zz \llbls@refs

List of Labels

Label: sec:install .................................................. Installation, 1 on page 1
Label: ssec:inst-tl ............................................. \TeXlive, 1.1 on page 1
Label: ssec:inst-gh ............................................. From Github, 1.2 on page 1
Label: ssec:inst-ctan ........................................... From CTAN, 1.3 on page 2
Label: sec:usage ................................................... Usage, 2 on page 2
Label: ssec:use-init ............................................. Initialization, 2.1 on page 2
Label: ssec:use-macros .......................................... Macros, 2.2 on page 2
Label: sec:contribute ............................................ Contribution and bugreports, 3 on page 2
Label: sec:implementation ...................................... Implementation, 4 on page 3
Label: ssec:impl-options ........................................ Options, 4.1 on page 3
Label: ssec:impl-aux ............................................ Loading auxiliary packages, 4.2 on page 3
Label: ssec:impl-i18n ........................................... Set up internationalisation, 4.3 on page 3
Label: sssec:impl-i18n-en ....................................... English, 4.3.1 on page 4
Label: sssec:impl-i18n-de ....................................... German, 4.3.2 on page 4
Label: sssec:impl-i18n-fr ....................................... French, 4.3.3 on page 4
Label: ssec:impl-internal ........................................ Internal stuff, 4.4 on page 4
Label: ssec:impl-extern ........................................... External stuff, 4.5 on page 5
Label: special:listoflabels ...................................... List of Labels, 4.5 on page 6