

# listbls — Creates a list of all labels used throughout a document\*

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## Abstract

This is a package meant to help a  $\text{\LaTeX}$ -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  $\text{\LaTeX}$  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](#).

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## 1 Installation

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

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\*This file describes version v1.04, last revised 2023/05/24.

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## 1.1 T<sub>E</sub>Xlive

This package is bundled in T<sub>E</sub>Xlive, 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](#)<sup>1</sup>:  
`git clone https://github.com/NobbZ/nixos-config.git` or  
`git clone git@github.com:NobbZ/listlbls.git` or  
`gh repo clone NobbZ/listlbls`
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>`
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

1. Browse to <http://ctan.org/pkg/listlbls>.
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}`

`draft` (*Opt*) If `draft` is given as option, `\listoflabels` will typeset the list of labels.

`final` (*Opt*) If `final` is given as option, `\listoflabels` will do nothing. Please remember, that `final` is set globally by most documentclasses.

- `totoc` (*Opt*) If this is given the List of Labels will appear in a table of contents (unnumbered).
- `notoc` (*Opt*) If this is given the List of Labels will *not* appear in a table of contents, but it will still have a headline.
- `numtoc` (*Opt*) Typesets a numbered headline, this option also implies `totoc`!
- `nonameref` (*Opt*) Even if the package `nameref` is detected, it will not be used.

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 8.

- `\label`    `{<name>}` Use `\label` as you are used to it!
- `\listoflabels`    [`<label>`] This macro will typeset the list of labels when this module is in draft mode. It will itself register the label from the optional arg, defaulting to “`special:listoflabels`”.

## 3 Contribution and bugreports

If you have feature-requests or bug-reports, please feel free to report them on the [project page at GitHub<sup>2</sup>](#).

If you want to contribute then follow these steps:

1. Visit the [project page at GitHub<sup>3</sup>](#),
2. fork 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.

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<sup>1</sup><https://github.com/>

<sup>2</sup><https://github.com/NobbZ/listlbls>

<sup>3</sup><https://github.com/NobbZ/listlbls>

## 4 Known issues and limitations

### 4.1 `\include`

Documents containing `\include` will not work. Currently there is no logic to recurse through the different `.aux`-files.

Please see [🔗 nobbz/listlbls#4](https://github.com/nobbz/listlbls/issues/4)<sup>4</sup> for more information.

## 5 Implementation

```
1 (*package)
2 \newif\ifl1bls@draft \l1bls@draftfalse
3 \newif\ifl1bls@totoc \l1bls@totocfalse
4 \newif\ifl1bls@numtoc \l1bls@numtocfalse
5 \newif\ifl1bls@nameref \l1bls@namereftrue
```

### 5.1 Options

`draft` (*Opt*) Check for `draft`-option:

```
6 \DeclareOption{draft}{\l1bls@drafttrue }
```

`final` (*Opt*) Check for `final`-option:

```
7 \DeclareOption{final}{\l1bls@draftfalse }
```

`totoc` (*Opt*) Check for `totoc`-option:

```
8 \DeclareOption{totoc}{\l1bls@totoctrue }
```

`notoc` (*Opt*) Check for `notoc`-option:

```
9 \DeclareOption{notoc}{\l1bls@totocfalse }
```

`numtoc` (*Opt*) Check for `numtoc`-option:

```
10 \DeclareOption{numtoc}{\l1bls@numtoctrue }
```

`nonameref` (*Opt*) Check for `nonameref`-option:

```
11 \DeclareOption{nonameref}{\l1bls@namereffalse }
```

Process the options:

```
12 \ProcessOptions*\relax
```

### 5.2 Loading auxilliary packages

Load the package translations to provide internationalised caption for the `\listoflabels`.

```
13 \RequirePackage{translations}
```

---

<sup>4</sup><https://github.com/nobbz/listlbls/issues/4>

## 5.3 Set up internationalisation

Define fallback translations:

```
14 \DeclareTranslationFallback%
15   {llbls-listoflabels}%
16   {List of Labels}
17 \DeclareTranslationFallback%
18   {llbls-onpage}%
19   {on page}
```

### 5.3.1 English

```
20 \DeclareTranslation{English}%
21   {llbls-listoflabels}%
22   {List of Labels}
23 \DeclareTranslation{English}%
24   {llbls-onpage}%
25   {on page}
```

### 5.3.2 German

```
26 \DeclareTranslation{German}%
27   {llbls-listoflabels}%
28   {Sprungmarkenverzeichnis}
29 \DeclareTranslation{German}%
30   {llbls-onpage}%
31   {auf Seite}
```

### 5.3.3 French

```
32 \DeclareTranslation{French}%
33   {llbls-listoflabels}%
34   {Liste des \textquotesingle etiquettes}
35 \DeclareTranslation{French}%
36   {llbls-onpage}%
37   {\`a la page}
```

### 5.3.4 Portuguese

```
38 \DeclareTranslation{Portuguese}%
39   {llbls-listoflabels}%
40   {Lista de R\textquotesingle{os}tulos}
41 \DeclareTranslation{Portuguese}%
42   {llbls-onpage}%
43   {na p\textquotesingle{a}gina}
```

## 5.4 Internal stuff

```
\llbls@headline Determine if we have \chapters or not and create a command that maps to \chapter or
\llbls@toccommand \section as needed.
\llbls@tocgroup
```

```
44 \ifdefined\chapter
45   \ifllbls@numtoc
46     \def\llbls@headline{%
```

We are using `\llbls@labelname` here and in the other possible definitions of `\llbls@headline` to be able to set the label name in the `\listoflabels` macro.

```

47     \chapter{List of Labels}\label {\llbls@labelname }}
48 \else
49     \def\llbls@toccommand{\chapter*}
50     \def\llbls@tocgroup{chapter}
51     \fi
52 \else
53     \ifllbls@numtoc
54         \def\llbls@headline{%
55             \section{List of Labels}\label {\llbls@labelname }}
56     \else
57         \def\llbls@toccommand{\section*}
58         \def\llbls@tocgroup{section}
59     \fi
60 \fi
61 \ifdefined\llbls@headline\else
62     \def\llbls@headline{%
63         \llbls@toccommand{\GetTranslation{llbls-listoflabels}}}%
64     \label {\llbls@labelname }%
65     \ifllbls@totoc %
66         \addcontentsline{toc}%
67             {\llbls@tocgroup}%
68             {\GetTranslation{llbls-listoflabels}}}%
69     \relax%
70     \fi%
71 }
72 \fi

```

`\llbls@refs` Whether or not we use `\nameref` in the output.

```

73 \ifdefined\nameref
74     \ifllbls@nameref
75         \newcommand\llbls@refs[1]{\nameref {#1}, \ref{#1}}
76     \else
77         \newcommand\llbls@refs[1]{\ref{#1}}
78     \fi
79 \else
80     \newcommand\llbls@refs[1]{\ref{#1}}%
81 \fi

```

`\llbls@findlabel` No explanation yet.

```

82 \long\def\llbls@findlabel#1#2\llbls@findlabel{%
83     \ifx\newlabel#1%
84         \llbls@lablist \expandafter{\the\llbls@lablist \llbls@showlabel #2}
85     \fi}

```

`\llbls@showlabel` Displays a single entry in the `\listoflabels`

```

86 \def\llbls@showlabel#1#2{%
87     \par\noindent Label: %
88     \texttt{\detokenize{#1}}\dotfill%
89     \llbls@refs {#1}~\GetTranslation{llbls-onpage}~\pageref{#1}%
90 }

91 \newtoks\llbls@lablist
92 \newread\llbls@zz
93 \immediate\openin\llbls@zz =\jobname.aux
94 \loop
95 \ifEOF\llbls@zz \else
96 \read\llbls@zz to \llbls@tmp
97 \expandafter\llbls@findlabel \llbls@tmp \relax\llbls@findlabel
98 \repeat

```

## 5.5 External stuff

99 `\ifllbls@draft`

`\listoflabels` Print a list of all available lables that are defined throughout the document.  
`\llbls@labelname`

```

100 \newcommand{\listoflabels}[1][special:listoflabels]{%
101   \def\llbls@labelname{#1}%
102   \llbls@headline %
103   \the\llbls@lablist }

104 \else
105   \let\listoflabels =\relax
106 \fi
107 \endinput
108 \</package>

```

## 6 Change History

v1.00 – 2014/07/25	General: First public release . . . . .	1	v1.02 – 2014/08/04	<code>\llbls@showlabel</code> : Add support for nameref-package . . . . .	6
v1.01 – 2014/07/25	General: Changed maintainer email . . . . .	1	v1.03 – 2014/08/04	General: Proceeding with namespacing internal macros . . . . .	1
	Changed some internal stuff to make it releasable on CTAN . . . . .	1		<code>nonameref</code> : Added option . . . . .	4
	<code>draft</code> : Added option . . . . .	3	v1.04 – 2023/05/24	General: Add issues and limitations section . . . . .	3
	<code>final</code> : Added option . . . . .	3		Add Portuguese translation . . . . .	5
v1.02 – 2014/07/27	General: Added languag-support for English, German and French. . . . .	1		Fix build problems due to bitrotten dependencies . . . . .	1
	Local option wins agains global option	1		Switch back to lmodern for documentation . . . . .	1
	<code>draft</code> : Introduced <code>@ifdraft</code> . . . . .	3		<code>\listoflabels</code> : add optional argument to change the name of the label used.	6
	<code>final</code> : Introduced <code>@ifdraft</code> . . . . .	3			
	<code>notoc</code> : Added option . . . . .	4			
	<code>numtoc</code> : Added option . . . . .	4			
	<code>totoc</code> : Added option . . . . .	4			

## 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; numbers in *roman* refer to the code lines where the entry is used.

<b>D</b>	<code>\listoflabels</code> .. <i>2, 100, 105</i>	<code>\llbls@tmp</code> . . . . .	96, 97	
<code>draft</code> (option) . . . . .	<i>2, 6</i>	<code>\llbls@draftfalse</code> . . . . .	<i>2, 7</i>	
		<code>\llbls@draftrue</code> . . . . .	6	
<b>F</b>	<code>\llbls@findlabel</code> . . . . .	<i>82, 97</i>	<code>\llbls@tocgroup</code> . . . . .	44
<code>final</code> (option) . . . . .	<i>2, 7</i>	<code>\llbls@headline</code> . . . . .	<i>44, 102</i>	
		<code>\llbls@labelname</code> . . . . .		
		. . . . .	<i>47, 55, 64, 100</i>	
<code>\ifllbls@draft</code> . . . . .	<i>2, 99</i>	<code>\llbls@lablist</code> . . . . .	<i>84, 91, 103</i>	
<code>\ifllbls@nameref</code> . . . . .	<i>5, 74</i>	<code>\llbls@namereffalse</code> . . . . .	11	
<code>\ifllbls@numtoc</code> . . . . .	<i>4, 45, 53</i>	<code>\llbls@namereftrue</code> . . . . .	5	
<code>\ifllbls@totoc</code> . . . . .	<i>3, 65</i>	<code>\llbls@numtocfalse</code> . . . . .	4	
		<code>\llbls@numtoctrue</code> . . . . .	10	
<b>L</b>	<code>\llbls@refs</code> . . . . .	<i>73, 89</i>	<b>N</b>	
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		<code>\nameref</code> . . . . .	<i>73, 75</i>	
		<code>nonameref</code> (option) . . . . .	<i>2, 11</i>	
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		<code>numtoc</code> (option) . . . . .	<i>2, 10</i>	

	O		T
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final . . . . .	2, <u>7</u>	numtoc . . . . .	2, <u>10</u>
		totoc . . . . .	2, <u>8</u>
			totoc (option) . . . . .
			2, <u>8</u>

## List of Labels

Label: sec:install . . . . .	Installation, 1 on page 1
Label: ssec:inst-tl . . . . .	TeXlive, 1.1 on page 2
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Label: ssec:inst-ctan . . . . .	From CTAN, 1.3 on page 2
Label: sec:usage . . . . .	Usage, 2 on page 2
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