# The showlabels package

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This package helps you keep track of all the labels you define, by putting the name of new labels into the margin whenever the \label command is used.

You can do the same thing for other commands (see below). The only one for which this is obviously useful is the \cite command, but it is also reasonable to do it with, for example, the \ref or \begin commands.

Invoke this package with the command \usepackage{showlabels} in the preamble, and you may give the following options:

> [default] all notes are placed in the text's outer margin outer inner ...inner margin left ...left margin

right ...right margin

marginal [default] put notes in the margin

inline put notes inline, as much as possible, and ignore any of

the margin-placement options above

nolabel do not insert a marginal note for \label commands (see

command \showlabels below)

draft [default] does nothing, partner of... final turns off all the package's functionality

If you don't use the twoside option, then all pages are 'right-hand' pages, and the 'outer margin' is the right hand one.

The package will also work in the presence of the twocolumn option. In this case, the options inner, outer, left and right will be ignored, and the label will be placed in the nearer margin.

If you want to change the font the labels appear in, redefine the \showlabelfont command, which by default expands to \small\ttfamily. For example, to have labels in a slanted font, you could include the definition

### \renewcommand{\showlabelfont}{\small\slfamily}

in the preamble of your document. If you want still more control over the labels, you can instead override \showlabelsetlabel, which initially expands to just \showlabelfont #1. You can use this mechanism to get a variety of effects. For example, if you say

\usepackage{showlabels,rotating}
\renewcommand{\showlabelsetlabel}[1]
 {\begin{turn}{60}\showlabelfont #1\end{turn}}

then you end up with your labels at a jaunty angle in the margin.

If you wish the package to do its magic with the command \foo (most typically \cite), then give the command \showlabels{foo}. The default behaviour of the package is to give the command \showlabels{label} internally; if you don't want this to happen - perhaps because you *only* want \cite commands highlighted - then give the option nolabel to the \usepackage command: \usepackage [nolabel] {showlabels}.

By default, the package displays labels in the margin of the document, but as an alternative, labels can be kept inline as much as possible; this is much more legible when there are multiple labels on a single line. To select this, give the option inline, and to select the default behaviour, use marginal.

Finally, we have the options final and draft. The option final turns off all the functionality of this package. This is included so that if that option is given globally in the \documentclass declaration then this package does respect it. draft does nothing, and therefore simply continues the default behaviour of this package; it is here to partner the final option.

#### Compatibility with other packages, and other problems

The {showlabels} package works by redefining the \label command, along with the internal IATeX commands \@eqnnum, \@makecaption and \maketag@@@ (for {amsmath}). All the other commands it defines are 'hidden' by prefixing them with 'SL@', with the exception of the user commands \showlabelfont and \showlabelsetlabel. Each of the three redefined commands carefully includes its previous definition. The {showlabels} package should therefore come last of the packages you include using \usepackage.

In version 1.1, the package was modified to conform to the slightly different mechanism that amsmath uses to produce equation numbers. Do note that the \usepackage{showlabels} command must appear after the \usepackage{amsmath} if it is to detect that you are using the {amsmath} package<sup>1</sup>.

In version 1.3e, the program became compatible with the {hyperref} package in particular, and in general with other packages which themselves modify the \label command. This will work, however, only if the {showlabels} package is loaded after other packages which do this. Notwithstanding Sebastian Rahtz's excellent general advice on this, {showlabels} should be loaded after {hyperref}.

For reasonably obvious reasons, this package will not work at all well with the {multicol} package, and for possibly less obvious reasons, it won't work with the leqno option either (at some point it should be modified to at least recognise and warn of the conflict in either case, though it's not obvious to me how to do

<sup>&</sup>lt;sup>1</sup>Note that AMS-IAT<sub>E</sub>X and the amstex package have been declared 'obsolete' in favour of the amsmath package. This package now claims conformance with the amsmath package alone, though it will probably work with older versions in fact.

that). The package *should* now work with {wrapfig}, though I'm not sure that I've exhausted that package's various clevernesses, and there might be some spacing and layout bugs which manifest themselves in that context. Please report them; in the mean time, using option inline should act as a workaround for any that appear.

When labels appear in the margins, they sometimes appear on the 'wrong' side in twoside mode. This is a fairly inevitable side-effect of the way that TeX builds pages, and a specific symptom of the general problem described in <a href="http://www.tex.ac.uk/cgi-bin/texfaq2html?label=oddpage">http://www.tex.ac.uk/cgi-bin/texfaq2html?label=oddpage</a>. As that answer suggests, there are bear-traps involved in the standard solutions. Now, showlabels is (a) permanently teetering on the edge of clashing with everything else that messes around with labels, and (b) a draft-only package rather than anything that would appear in a final document. (a) means that I'm rather nervous about putting too much cleverness in there, and incidentally shy of putting any dependencies on other packages; (b) means that I feel it doesn't really matter enough to be worth removing robustness. So I'm afraid I don't plan to change this, and I simply put up with the occasional slip. Again the inline option is a possible workaround.

The package might still work with LATEX2.09, but that's neither supported, nor even still tested.

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The canonical home page of the package is <a href="http://purl.org/nxg/dist/showlabels">http://purl.org/nxg/dist/showlabels</a>, and it is on CTAN at <a href="mailto:/macros/latex/contrib/supported/showlabels">mailto:/macros/latex/contrib/supported/showlabels</a>.

#### Other packages

David Carlisle's {showkeys} does roughly the same thing, but it will only handle \label and \cite keys.

#### History and Credits

I've received bug reports, fixes, or implementable suggestions from many people, including Andreas Balser, Francis M. C. Ching, Michael Friendly, Tino Görtemöller, Lester L. Helms, Hagen Kleinert, Olivier Michel, Sungmo Park, Ignacy Sawicki, Andrei Shelankov, Patrick Sibille, David R. Leal Valmana, Jiři Vesely, Elmar Walhorn, Roland Winkler. Many thanks to all. If I've missed your name out of this list, please accept my apologies, and do let me know.

Back in 29-Jan-92, Darrel Hankerson <hank@ducvax.auburn.edu>, made the update to NFSS, and changed the name to 'showlabel.sty'.

The package was originally released by me on 21-Sep-91, under the name labels.sty.