

# Manual of robustindex package

Wilberd van der Kallen

2017

## Introduction

Amazingly often a third party changes the page numbers without rerunning `makeindex`. We therefore want to have an index in which the page numbers automatically synchronise with the document.

The package `robustindex` achieves this by invoking the `\pageref` mechanism on automatically generated labels of the form `ind.2`, `ind.4`, `...`

Only after adding/deleting/modifying an `\index{entry}` command, or after changing the order of `\index{entry}` commands, does one have to rerun `makeindex`. (How would you change the order? By moving a block of text that contains an `\index` command.)

Make sure to run `makeindex` at least once after the last change to the `\index` commands. Keep an eye on the `TEX` log file. It often contains a warning that you need to rerun `LATEX` or `makeindex`.

## Standard usage

Put

```
\usepackage{makeidx}
\usepackage{robustindex}
\makeindex
```

in your preamble. If you use the `hyperref` package, go against their advice and put

```
\usepackage{robustindex}
```

*after* the `hyperref` declaration, *or* turn off `hyperindex` as in

```
\usepackage[plainpages=false,hyperindex=false]{hyperref}.
```

That should be all. (You may have to trash old auxiliary files.)

You can now use

```
\index{alpha}
\index{alpha!see beta}
```

```
\index{gamma|textbf}
\index{ampersand@&|textbf}
```

in the usual manner.

See <https://en.wikibooks.org/wiki/LaTeX/Indexing>.

The symbol | has a special meaning inside an `\index` command and cannot be escaped. To get | as output use the L<sup>A</sup>T<sub>E</sub>X command `\vert`.

We also have a command `\gobblepageref` used as in

```
\index{alpha!see also gamma\gobblepageref}
```

## Page ranges

Some features of `makeindex` had to be repurposed. In particular, *implicit* page ranges are no longer supported.

If you want a page range in the index you have to use the *explicit* page range mechanism of `makeindex` as in

```
\index{discussion|{}
```

on the first page of the range, followed by

```
\index{discussion|)}
```

on the last page of the range.

## Table of contents

If there is a table of contents and you want the index listed in it, put the command

```
\indexincontents
```

somewhere before the `\printindex`.

Before discussing the `multind` option we now use `\printindex` to get an index (on a new page).

## Index

< comes before alphabet, 4

alpha, 1

    see also gamma

    see beta, 2

&, **2**

discussion, 1–2

gamma, **1**

Wilberd, 1

## The multind option

The `multind` option provides support for multiple indexes. For the package to function properly we now require that the argument to an `\index` command starts with at least two lower case letters or with the symbol `<`. So use `\index{new york@New York}` instead of `\index{New York}`, `\index{za@z}` instead of `\index{z}`.

If you have an entry that should go before the letter a, then start the argument of `\index` with `<`, as in `\index{<@$$ comes before alphabet}`.

Suppose the preamble contains `\usepackage[multind]{robustindex}`.

Let us say we want to use four indexes. First we choose tags to identify them. Say we use the tags `main`, `bis`, `a1`, `b1`. The tag `main` is always known and the index with tag `main` becomes active at the `\begin{document}`.

With the `\setindex` command we activate an index. Thus `\setindex{bis}` tells L<sup>A</sup>T<sub>E</sub>X that the active index is now the index identified by the tag `bis`, until the next `\setindex` command. The other indexes are inactivated. If a tag has not been encountered before, then a new index with that tag is created. The `\index` command and the `\printindex` commands write to/from the active index. All indexes are hidden in one big index file and L<sup>A</sup>T<sub>E</sub>X knows how to find the active index in there.

If you wish you may use `\sindex[bis]{entry}` as shorthand for

```
\setindex{bis}\index{entry}
```

and `\sindex{entry}` as shorthand for

```
\setindex{main}\index{entry}.
```

The compilation sequence does not change. That is the main point of all our hacking. For instance, the file `multisample.tex` produces multiple indexes and is processed like this

```
latex multisample.tex
makeindex multisample
latex multisample.tex
latex multisample.tex
```

## Embellishment

One may embellish an index with headings, like this.

```
\setindex{main}
\renewcommand{\indexname}{Embellished Index}
\renewcommand{\indexcapstyle}[1]{\indexspace\textsc{#1}\par}
\printindex
```

This gives

## Embellished Index

< comes before alphabet, 4

A

alpha, 1

    see also gamma

    see beta, 2

&, **2**

D

discussion, 1-2

G

gamma, **1**

W

Wilberd, 1