Manual of robustindex package

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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, the `ind` file included.)

You can now use

```
\index{alpha}
```

$$\text{\textbackslash index\{alpha!see beta\}}$$

$$\text{\textbackslash index\{gamma|textbf\}}$$

$$\text{\textbackslash index\{ampersand@\textbackslash\&|textbf\}}$$

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 LaTeX command `\vert`.

We also have a command `\gobblepageref`, a variant of `\see`, used as in

$$\text{\textbackslash index\{alpha!see also gamma\textbackslash gobblepageref\}}$$

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

$$\text{\textbackslash index\{discussion|(\}}$$

on the first page of the range, followed by

$$\text{\textbackslash index\{discussion|)\}}$$

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

$$\text{\textbackslash indexincontents}$$

somewhere before the `\printindex`.

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

Index

The `multind` option

The `multind` option provides support for many indexes. Suppose the preamble contains `\usepackage[multind]{robustindex}[2018/04/15]`.

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 LaTeX 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 (with extension `ind`) and LaTeX 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

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

Option `multind` works with the original compilation sequence. That is the main point of all our hacking. For instance, the file `multisample.tex` produces multiple indexes and may be processed in this old fashioned way:

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

Older versions of `robustindex.sty` may give different results. Use version `2018/04/15` or later. We recommend to bundle `robustindex.sty` with your `tex` and `ind` file when moving files to another computer.

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

Embellishment

One may embellish an index with letter 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