

**NAME**

texindy – create sorted and tagged index from raw LaTeX index

**SYNOPSIS**

```
texindy [-V?h] [-qv] [-iglr] [-d magic] [-o outfile.ind] [-t log] \
        [-L lang] [-C codepage] [-M module] [idx0 idx1 ...]
```

**GNU-Style Long Options for Short Options:**

```
-V / --version
-? / -h / --help
-q / --quiet
-v / --verbose
-i / --stdin
-g / --german
-l / --letter-ordering
-r / --no-ranges
-d / --debug           (multiple times)
-o / --out-file
-t / --log-file
-L / --language
-C / --codepage
-M / --module          (multiple times)
-I / --input-markup    (supported: latex, xelatex, omega)
```

**DESCRIPTION**

**texindy** is the LaTeX-specific command of xindy, the flexible indexing system. It takes a raw index as input, and produces a merged, sorted and tagged index. Merging, sorting, and tagging is controlled by xindy modules, with a convenient set already preloaded.

Files with the raw index are passed as arguments. If no arguments are passed, the raw index will be read from standard input.

A good introductory description of **texindy** appears in the indexing chapter of the LaTeX Companion (2nd ed.)

If you want to produce an index for LaTeX documents with special index markup, the command *xindy* (1) is probably more of interest for you.

**texindy** is an approach to merge support for the *make-rules* framework, own xindy modules (e.g., for special LaTeX commands in the index), and a reasonable level of MakeIndex compatibility.

**OPTIONS**

```
--version / -V
    output version numbers of all relevant components and exit.

--help / -h / -?
    output usage message with options explanation.

--quiet / -q
    Don't output progress messages. Output only error messages.

--verbose / -v
    Output verbose progress messages.
```

`--debug magic / -d magic`

Output debug messages, this option may be specified multiple times. *magic* determines what is output:

magic	remark
-----	
script	internal progress messages of driver scripts
keep_tmpfiles	don't discard temporary files
markup	output markup trace, as explained in xindy manual
level=n	log level, n is 0 (default), 1, 2, or 3

`--out-file outfile.ind / -o outfile.ind`

Output index to file *outfile.ind*. If this option is not passed, the name of the output file is the base name of the first argument and the file extension *ind*. If the raw index is read from standard input, this option is mandatory.

`--log-file log.ilg / -t log.ilg`

Output log messages to file *log.ilg*. These log messages are independent from the progress messages that you can influence with `--debug` or `--verbose`.

`--language lang / -L lang`

The index is sorted according to the rules of language *lang*. These rules are encoded in a xindy module created by *make-rules*.

If no input encoding is specified via `--codepage` or enforced by input markup, a xindy module for that language is searched with a latin, a cp, an iso, ascii, or utf8 encoding, in that order.

`--codepage enc / -C enc`

There are two different situations and use cases for this option.

1. Input markup is `latex` (the default).

Then **texindy**'s raw input is assumed to be encoded in LaTeX Internal Character Representation (LICR). I.e., non-ASCII characters are encoded as command sequences. This option tells xindy the encoding it shall use for letter group headings. (Additionally it specifies the encoding used internally for sorting — but that doesn't matter for the result.)

Only LICR encodings for Latin script alphabets are supported; more precisely characters that are in LaTeX latin1, latin2, and latin3 LICR encodings.

Even when you specify `utf8` as codepage, only these characters will be known. But if you use non-Latin alphabets, you probably use (or should use) XeLaTeX or LuaLaTeX and then you have a different input markup.

2. Input markup is `xelatex` or `omega`.

Then this option is ignored; codepage `utf8` is enforced.

**texindy**'s raw input is assumed to be UTF-8 encoded, LICR is not used.

`--module module / -M module`

Load the xindy module *module.xdy*. This option may be specified multiple times. The modules are searched in the xindy search path that can be changed with the environment variable `XINDY_SEARCHPATH`.

`--input-markup input / -I input`

Specifies the input markup of the raw index. Supported values for *input* are `latex`, `xelatex`, and `omega`.

`latex` input markup is the one that is emitted by default from the LaTeX kernel, or by the `index` macro package of David Jones, when used with standard LaTeX or pdfLaTeX. `^^`-notation of single byte characters is supported. Usage of LaTeX's *inputenc* package is assumed as well, i.e., raw input is encoded in LICR.

`xelatex` input markup is like `latex`, but without *inputenc* usage. Raw input is encoded in UTF-8. LuaLaTeX has the same input markup, there's no special option value for it.

`omega` input markup is like `latex` input markup, but with Omega's `^^`-notation as encoding for non-ASCII characters. LICR encoding is not used then, and `utf8` is enforced to be the codepage for sorting and for output of letter group headings.

## SUPPORTED LANGUAGES / CODEPAGES

The following languages are supported:

### Latin scripts

albanian	gypsy	portuguese
croatian	hausa	romanian
czech	hungarian	russian-iso
danish	icelandic	slovak-small
english	italian	slovak-large
esperanto	kurdish-bedirxan	slovenian
estonian	kurdish-turkish	spanish-modern
finnish	latin	spanish-traditional
french	latvian	swedish
general	lithuanian	turkish
german-din	lower-sorbian	upper-sorbian
german-duden	norwegian	vietnamese
greek-iso	polish	

German recognizes two different sorting schemes to handle umlauts: normally, `ä` is sorted like `ae`, but in phone books or dictionaries, it is sorted like `a`. The first scheme is known as *DIN order*, the second as *Duden order*.

`*-iso` language names assume that the raw index entries are in ISO 8859-9 encoding.

`gypsy` is a northern Russian dialect.

### Cyrillic scripts

belarusian	mongolian	serbian
bulgarian	russian	ukrainian
macedonian		

### Other scripts

greek	klinton
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### Available Codepages

This is not yet written. You can look them up in your xindy distribution, in the `modules/lang/language/` directory (where *language* is your language). They are named `variant-codepage-lang.xdy`, where *variant-* is most often empty (for german, it's `din5007`

and duden; for spanish, it's modern and traditional, etc.)

< Describe available codepages for each language >

< Describe relevance of codepages (as internal representation) for LaTeX inputenc >

## TEXINDY STANDARD MODULES

There is a set of **texindy** standard modules that help to process LaTeX index files. Some of them are automatically loaded. Some of them are loaded by default, this can be turned off with a **texindy** option. Others may be specified as `--module` argument to achieve a specific effect.

xindy Module	Category	Description
<b>Sorting</b>		
word-order	Default	A space comes before any letter in the alphabet: <code>``index style''</code> is listed before <code>``indexing''</code> . Turn it off with option <code>-l</code> .
letter-order	Add-on	Spaces are ignored: <code>``index style''</code> is sorted after <code>``indexing''</code> .
keep-blanks	Add-on	Leading and trailing white space (blanks and tabs) are not ignored; intermediate white space is not changed.
ignore-hyphen	Add-on	Hyphens are ignored: <code>``ad-hoc''</code> is sorted as <code>``adhoc''</code> .
ignore-punctuation	Add-on	All kinds of punctuation characters are ignored: hyphens, periods, commas, slashes, parentheses, and so on.
numeric-sort	Auto	Numbers are sorted numerically, not like characters: <code>``V64''</code> appears before <code>``V128''</code> .
<b>Page Numbers</b>		
page-ranges	Default	Appearances on more than two consecutive pages are listed as a range: <code>``1--4''</code> . Turn it off with option <code>-r</code> .
ff-ranges	Add-on	Uses implicit <code>``ff''</code> notation for ranges of three pages, and explicit ranges thereafter: <code>2f</code> , <code>2ff</code> , <code>2--6</code> .
ff-ranges-only	Add-on	Uses only implicit ranges: <code>2f</code> , <code>2ff</code> .
book-order	Add-on	Sorts page numbers with common book numbering scheme correctly -- Roman numerals first, then Arabic numbers, then others: <code>i</code> , <code>1</code> , <code>A</code> .

## Markup and Layout

<code>tex</code>	Auto	Handles basic TeX conventions.
<code>latex-loc-fmts</code>	Auto	Provides LaTeX formatting commands for page number encapsulation.
<code>latex</code>	Auto	Handles LaTeX conventions, both in raw index entries and output markup; implies <code>tex</code> .
<code>makeindex</code>	Auto	Emulates the default MakeIndex input syntax and quoting behavior.
<code>latin-lettergroups</code>	Auto	Layout contains a single Latin letter above each group of words starting with the same letter.
<code>german-sty</code>	Add-on	Handles umlaut markup of babel's german and ngerman options.

## COMPATIBILITY TO MAKEINDEX

**xindy** does not claim to be completely compatible with MakeIndex, that would prevent some of its enhancements. That said, we strive to deliver as much compatibility as possible. The most important incompatibilities are

- For raw index entries in LaTeX syntax, `\index{aaa|bbb}` is interpreted differently. For MakeIndex `bbb` is markup that is output as a LaTeX tag for this page number. For **xindy**, this is a location attribute, an abstract identifier that will be later associated with markup that should be output for that attribute.

For straight-forward usage, when `bbb` is `textbf` or similar, we supply location attribute definitions that mimic MakeIndex's behaviour.

For more complex usage, when `bbb` is not an identifier, no such compatibility definitions exist and may also not been created with current **xindy**. In particular, this means that by default the LaTeX package `hyperref` will create raw index files that cannot be processed with **xindy**. This is not a bug, this is the unfortunate result of an intended incompatibility. It is currently not possible to get both `hyperref`'s index links and use **xindy**.

A similar situation is reported to exist for the `memoir` LaTeX class.

Programmers who know Common Lisp and Lex and want to work on a remedy should please contact the author.

- If you have an index range and a location attribute, e.g., `\index{key\attr}` starts the range, one needs (1) to specify that attribute in the range closing entry as well (i.e., as `\index{key\attr}`) and (2) one needs to declare the index attribute in an **xindy** style file.

MakeIndex will output the markup `\attr{page1--page2}` for such a construct. This is not possible to achieve in **xindy**, output will be `\attrMarkup{page1}--\attrMarkup{page2}`. (This is actually considered a bug, but not a high priority one.)

The difference between MakeIndex page number tags and **xindy** location attributes was already explained in the previous item.

- The MakeIndex compatibility definitions support only the default raw index syntax and markup definition. It is not possible to configure raw index parsing or use a MakeIndex style file to describe output markup.

## ENVIRONMENT

`TEXINDY_AUTO_MODULE`

This is the name of the xindy module that loads all auto-loaded modules. The default is `texindy`.

## AUTHOR

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## LEGALESE

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