

# stmindex package description

Copyright © 2019 DLR FA STM  
v20191208

Martin Rädcl

December 8, 2019

This is an interface to facilitate the creation of a single index for `stm-latex`-based documents. It is build upon the [imakeidx](#) package.

## Contents

<b>1. About</b>	<b>1</b>
<b>2. Usage</b>	<b>1</b>
2.1. Preamble . . . . .	1
2.1.1. Load the package . . . . .	1
2.1.2. Options . . . . .	1
2.1.3. Indexsetup . . . . .	2
2.2. In the document . . . . .	3
<b>3. Known issues</b>	<b>3</b>
<b>Test index</b>	<b>4</b>
<b>A. The code</b>	<b>5</b>
A.1. stmindex.sty . . . . .	5

## 1. About

Using `stmindex` it is possible to create a single index for a document very conveniently. When you want to add items to the default index, it is not necessary to specify the index name each time. This is also possible with the basic version of `\index`, however, this makes it easier in case you at some point need another index.

It is assumed that for a large part of documents a single index is sufficient. However, `stm-latex` can also be used as a blueprint to create other indices.

## 2. Usage

### 2.1. Preamble

#### 2.1.1. Load the package

Load the package by adding

```
\usepackage[<options>]{stmindex}
```

to your document preamble. For a list of options, see subsection 2.1.2.

#### 2.1.2. Options

**Option *standard*** This is a boolean option. Expected values are either `true` or `false`. It controls whether to load the standard index.

```
\usepackage[standard=true|false]{stmindex}
```

`standard=true` is the default. It is used in case `standard=false` is not set explicitly.

**Option *name*** This is a string option. It controls the name of the standard index files. It only has an affect in case option `standard=true`.

```
\usepackage[name=Testindex]{stmindex}
```

The default is *Keywords*.

**Option *title*** This is a string option. It controls the title of the standard index in the document. It only has an affect in case option `standard=true`.

```
\usepackage[title={Test\ index}]{stmindex}
```

The default is *Keywords*. Spaces have to be put by spacing commands explicitly.

**Option *intoc*** This is a boolean option. Expected values are either `true` or `false`. It controls whether to add the standard index to the table of contents. It only has an affect in case option `standard=true`.

```
\usepackage[intoc=true|false]{stmindex}
```

`intoc=true` is the default. It is used in case `intoc=false` is not set explicitly.

**Option *columns*** This is a integer option. It controls the number of columns used in the index. It only has an affect in case option `standard=true`.

```
\usepackage[columns=3]{stmindex}
```

The default is 3.

### 2.1.3. Indexsetup

Use the `\indexsetup` command from `imakeidx` in the preamble to tune the behavior of your index, e.g. the level, e.g.

```
\indexsetup{%  
  level=\section*,%  
  toplevel=section,%  
}
```

in a class with where `\chapter` is the highest level, but you want the index as part of an appendix chapter as a section.

## 2.2. In the document

`stindex` introduces a convenient shortcut command to print the standard index in case the option `standard=true`. Use `\printstindex` at the location of your choosing inside the document to print the standard index.

In case multiple indices are used, the standard `imakeidx` commands apply for printing an index.

## 3. Known issues

There seems to be a problem with the combination of `imakeidx` and the externalization of `tikz` pictures as from `stmtikz`. Externalization must be activated after the call to `imakeidx` to make it work. See <https://tex.stackexchange.com/q/393697>.

## Test index

About, 1

imakeidx, 1, 3

indexsetup, 3

Issues, 3

Options, 2

columns, 2

intoc, 2

name, 2

standard, 2

title, 2

Usage, 2

## A. The code

### A.1. stmindex.sty

```
1 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2 % Header %
3 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
4 %
5 % This file includes an interface to
6 % indices for a LaTeX document
7 % Based upon the imakeidx package:
8 %   https://ctan.org/pkg/imakeidx
9 %
10 % Usage
11 % - Premble:
12 %   - \usepackage{imakeidx}
13 %   - \makeglossaries
14 % - Document: e.g. (Adapt to your type of glossary item)
15 %   - \printindex[type=\acronymtype] or
16 %   - \printglossary[type=\acronymtype,nonumberlist]
17 % - Compilation: e.g. (Adapt to your type of glossary item)
18 %   - makeindex -s [MYTEXFILENAME].ist -o [MYTEXFILENAME].
19 %     acr [MYTEXFILENAME].acn
20 % Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
21 %               Initial draft
22 %
23 % Contact:      Martin Raedel, martin.raedel@dlr.de
24 %               DLR Composite Structures and Adaptive Systems
25 %
26 %               _ _/_/_
27 %               /_/_/_/_/
28 %               www.dlr.de/fa/en      // DLR
29 %
30 % Copyright (C) 2019-... DLR Composite Structures and
31 % Adaptive Systems
32 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
33 % Content %
34 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
35
36 % Declare that this style file requires at least LaTeX
37 % version 2e.
38 \NeedsTeXFormat{LaTeX2e}
```

```

38
39 % Provide the name of your page, the date it was last updated
    , and a comment about what it's used for
40 \ProvidesPackage{stmindex}[2019/11/03 STMs custom LaTeX index
    definitions]
41
42 % For options
43 \@ifpackageloaded{kvoptions}{}{\RequirePackage{kvoptions}}%
44
45 % -----
46 % Options
47 % -----
48
49 \SetupKeyvalOptions{%
50     family=stmindex,%
51     prefix=stmindex@,%
52     setkeys=\kvsetkeys,%
53 }
54
55 % Standard index
56 \DeclareBoolOption[true]{standard}
57
58 % Acronyms
59 \DeclareStringOption[Keywords]{name}
60
61 % Acronyms
62 \DeclareStringOption[Keywords]{title}
63
64 % Put index in toc
65 \DeclareBoolOption[true]{intoc}
66
67 % No new page
68 %\DeclareBoolOption[false]{nonewpage}
69
70 % Number of columns
71 \DeclareStringOption[2]{columns}
72
73 % Process options
74 \ProcessKeyvalOptions{stmindex}
75
76 % -----
77 % Base
78 % -----
79

```

```

80 % If not loaded in advance, load the base package with some
    default options
81 \@ifpackageloaded{stmindexbase}{%}{%
82   \RequirePackage[%
83     %nonewpage={\ifstmindex@nonewpage true\else false\fi}%
84   %]
85   {stmindexbase}%
86 }%
87
88 % -----
89 % Modules
90 % -----
91
92 % Load the standard index
93 \ifstmindex@standard
94   \@ifpackageloaded{stmindexstandard}{%}{%
95     \RequirePackage[%
96       name=\stmindex@name,%
97       title=\stmindex@title,%
98       intoc\ifstmindex@intoc\else{=false}\fi,%
99       columns=\stmindex@columns,%
100     ]{stmindexstandard}%
101   }%
102 \fi
103
104 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
105 % That's it %
106 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
107
108 % Finally, we'll use \endinput to indicate that LaTeX can
    stop reading this file. LaTeX will ignore anything after
    this line.
109 \endinput

```