# stmindex package description

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This is an interface to facilitate the creation of a single index for stmlatex-based documents. It is build upon the imakeidx package.

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## 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, stmlatex 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 subsubsection 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*,%
  toclevel=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

stmindex introduces a convenient shortcut command to print the standard index in case the option standard=true. Use \printstmindex 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

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imakeidx, 1, 3	$\operatorname{columns},2$	${\rm title},2$
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## A. The code

#### A.1. stmindex.sty

```
2 % Header
4 %
5 % This file includes an interface to
6 % indices for a LaTeX document
7
  % Based upon the imakeidx package:
      https://ctan.org/pkg/imakeidx
  %
9
  %
10 % Usage
11 %
    - Premble:
12
  %
      - \usepackage{imakeidx}
13 %
       - \makeqlossaries
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].
     acr [MYTEXFILENAME].acn
19
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 %
                                /_/_/_/
                                 I/DLR
28 %
              www.dlr.de/fa/en
29 %
30 % Copyright (C) 2019-... DLR Composite Structures and
     Adaptive Systems
31 %
33 % Content
35
36 % Declare that this style file requires at least LaTeX
     version 2e.
37 \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 \ \ensuremath{\mbox{Oifpackageloaded{kvoptions}{}}{\mbox{NequirePackage{kvoptions}}}{\mbox{$\%$}}
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
```

```
% If not loaded in advance, load the base package with some
      default options
   \@ifpackageloaded{stmindexbase}{}{%
81
82
     \RequirePackage %[%
83
       %nonewpage = { \mid ifstmindex@nonewpage true \mid else false \mid fi} % 
84
     % 7
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
105 % That's it
107
108
   % Finally, we'll use \endingut to indicate that LaTeX can
      stop reading this file. LaTeX will ignore anything after
      this line.
109 \endinput
```