# The scrindex package

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### 2016/05/16 v1.2

#### Abstract

This package redefines environment 'theindex' of package index, if a class from KOMA-Script is loaded. Also option idxtotoc is supported. Index preambles can be given either by means of package index or via the interface provided by KOMA-Script.

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### 1 Documentation

Package index, written by David M. Jones, detects the standard classes article, report, and book. It redefines environment 'theindex' for its needs. However, it does not know other classes such as KOMA-Script. This package closes the compatibility gap between KOMA-Script's classes and package index.

Environment theindex is redefined to support both package index and KOMA-Script's classes. Thus both the prologe of package index and the preamble of KOMA-Script's classes are available. Also class option idxtotoc of KOMA-Script is supported.

<sup>\*</sup>Please report any issues at https://github.com/ho-tex/oberdiek/issues

#### 1.1 Usage

The package scrindex is loaded without options:

\usepackage{scrindex}

It loads package index and requests version 2004/01/20 or later. LATEX's package interface allows multiple calls of the same package. The package is loaded at its first package loading command. At later times LATEX only checks options and a requested version date. Therefore it does not harm to add \usepackage{index} before or after \usepackage{scrindex}.

Also the class does not matter. Environment theindex is only redefined for a supported class:

- scrartcl
- scrreprt
- scrbook

#### 1.2 Preambles

Both the prologue of package index and the preamble of KOMA-Script's classes are supported. The position depends on the class.

#### 1.2.1 Class scrartcl

- 1 (\*example1)
- 2 \documentclass{scrartcl}
- 3 \usepackage{scrindex}
- 4 \setindexpreamble{Preamble of \texttt{scrartcl}\dotfill EOL}
- 5 \makeindex
- 6 \begin{document}
- 7 \section{First Section}
- 8 \index{first}
- 9 \index{section}
- 10 \printindex[default]%
- 11 [Prologue of package \texttt{index}\dotfill EOL]%
- 12 \end{document}
- 13 (/example1)

The prologue of package index is first set straight after the section title spanning both columns. Then the preamble of KOMA-Script follows in the first left column.

Index	
Prologue of package index	EOL
Preamble of scrartcl EOL	
first, 1	
section, 1	

#### 1.2.2 Classes scrreprt and scrbook

- 14 (\*example2)
- 15 \documentclass[openany]{scrbook}% or scrreprt
- 16 \usepackage{scrindex}
- 18 \makeindex
- 19 \begin{document}
- 20 \chapter{First Chapter}
- $21 \setminus index\{first\}$
- $22 \setminus index\{chapter\}$
- 23 \printindex[default]%

```
24 [Prologue of package \texttt{index}\dotfill EOL]% 25 \end{document} 26 \langle -26 \rangle
```

The order of the two preambles are different for the classes scrreprt and scrbook. First KOMA-Script's chapter preamble is set, then the prologue of package index follows. Both are set spanning both columns.

```
    Index

    Preamble of class scrbook
    EOL

    Prologue of package index
    EOL

    chapter, 1
    first, 1
```

## 2 Implementation

```
27 (*package)
28 \NeedsTeXFormat{LaTeX2e}
29 \ProvidesPackage{scrindex}
   [2016/05/16 v1.2 Package index with KOMA-Script classes (HO)]%
31 \RequirePackage{index}[2004/01/20]%
32 \@ifclassloaded{scrartcl}{%
   \renewenvironment{theindex}{%
33
34
     \edef\indexname{%
      \the\@nameuse{idxtitle@\@indextype}%
35
     }%
36
     \if@twocolumn
37
      \@restonecolfalse
38
39
     \else
40
      \@restonecoltrue
41
     \idx@heading
42
43
     \thispagestyle{\indexpagestyle}%
44
     \columnseprule\z@
45
     \columnsep 35\p@
46
     \index@preamble\par\nobreak
47
     \parindent\z@
     \parskip\z@ \plus .3\p@\relax
48
     \parfillskip\z@ \@plus 1fil\relax
49
     \let\item\@idxitem
50
51
   }{%
52
     \if@restonecol
53
      \onecolumn
54
     \else
55
      \clearpage
56
     \fi
57
    \@ifclasswith{scrartcl}{idxtotoc}{%
58
     \renewcommand*{\idx@heading}{%
59
      \twocolumn[%
60
        \addsec{\indexname}%
61
        \ifx\index@prologue\@empty
62
63
64
         \index@prologue
65
         \bigskip
66
        \fi
67
      68
     }%
69
   }{%
70
```

```
\renewcommand*{\idx@heading}{%
  71
  72
                     \twocolumn[%
                          \section*{\indexname}%
  73
  74
                          \ifx\index@prologue\@empty
  75
  76
                              \index@prologue
  77
                              \bigskip
                         \fi
  78
  79
                     \mbox{\colored} \mbox{\color
  80
                 }%
  81
          }%
  82
  83 }{}
  84 \@ifclassloaded{scrreprt}{%
             \renewenvironment{theindex}{%
  85
                 \edef\indexname{%
  86
                     \the\@nameuse{idxtitle@\@indextype}%
  87
                 }%
  88
                 \if@twocolumn
  89
                     \@restonecolfalse
  90
  91
                 \else
  92
                     \@restonecoltrue
  93
                 \setchapterpreamble{\index@preamble}%
  94
  95
                 \idx@heading
                 \t \
  96
                 \columnseprule\z@
  97
                 \columnsep 35\p@
  98
                 \parindent\z@
  99
                 \parskip\z@ \@plus .3\p@\relax
100
                 \parfillskip\z@ \@plus 1fil\relax
101
                 \let\item\@idxitem
102
103
104
                 \if@restonecol
105
                     \onecolumn
106
                 \else
107
                     \clearpage
                 \fi
108
109
             \verb|\distance| {\it Cifclasswith \{scrreprt\} \{idxtotoc\} \{\%\}|}
110
                 \renewcommand*{\idx@heading}{%
111
                      \if@openright
112
113
                          \cleardoublepage
114
                      \else
115
                         \clearpage
                     \fi
116
                     \twocolumn[%
117
                          \addchap{\indexname}%
118
                         \ifx\index@prologue\@empty
119
120
                              \index@prologue
121
122
                              \bigskip
123
124
                     \@mkboth{\indexname}{\indexname}%
125
                 }%
126
             }{%
127
                 \renewcommand*{\idx@heading}{%
128
                     \if@openright
129
130
                         \cleardoublepage
131
                     \else
132
                         \clearpage
```

```
133
                      \fi
                      \twocolumn[%
134
                          \chapter*{\indexname}%
135
                          \ifx\index@prologue\@empty
136
137
138
                              \index@prologue
139
                              \bigskip
                          \fi
140
141
                      \mbox{\colored} \mbox{\color
142
                 }%
143
144 }%
145 }{}
146 \ensuremath{\texttt{Qifclassloaded\{scrbook\}\{\%\ensuremath{\texttt{%}}\xspace}}
             \renewenvironment{theindex}{%
147
                  \edef\indexname{%
148
                      \the\@nameuse{idxtitle@\@indextype}%
149
150
                  \if@twocolumn
151
152
                     \@restonecolfalse
153
                  \else
154
                      \@restonecoltrue
155
                  \setchapterpreamble{\index@preamble}%
156
157
                  \idx@heading
                  \t \
158
                  \columnseprule\z@
159
                  \columnsep 35\p@
160
                  \parindent\z@
161
                  \parskip\z@ \@plus .3\p@\relax
162
                  \parfillskip\z@ \@plus 1fil\relax
163
                  \let\item\@idxitem
164
165
166
                  \if@restonecol
167
                      \onecolumn
168
                  \else
169
                      \clearpage
                  \fi
170
171
             \@ifclasswith{scrbook}{idxtotoc}{%
172
                  \renewcommand*{\idx@heading}{%
173
                      \if@openright
174
175
                          \cleardoublepage
176
                      \else
177
                          \clearpage
                      \fi
178
                      \twocolumn[%
179
                          \addchap{\indexname}%
180
                          \ifx\index@prologue\@empty
181
182
                              \index@prologue
183
                              \bigskip
184
                          \fi
185
186
                      \@mkboth{\indexname}{\indexname}%
187
                 }%
188
             }{%
189
                  \renewcommand*{\idx@heading}{%
190
                      \if@openright
191
192
                          \cleardoublepage
193
                      \else
194
                          \clearpage
```

```
\fi
195
       \twocolumn[%
196
         \chapter*{\indexname}%
197
         \ifx\index@prologue\@empty
198
199
           \index@prologue
200
201
           \bigskip
         \fi
202
203
       \@mkboth{\indexname}{\indexname}%
204
205
      ት%
206 }%
207 }{}
208 (/package)
```

### 3 Installation

#### 3.1 Download

**Package.** This package is available on CTAN<sup>1</sup>:

CTAN:macros/latex/contrib/oberdiek/scrindex.dtx The source file.

CTAN:macros/latex/contrib/oberdiek/scrindex.pdf Documentation.

**Bundle.** All the packages of the bundle 'oberdiek' are also available in a TDS compliant ZIP archive. There the packages are already unpacked and the documentation files are generated. The files and directories obey the TDS standard.

CTAN:install/macros/latex/contrib/oberdiek.tds.zip

TDS refers to the standard "A Directory Structure for TEX Files" (CTAN:tds/tds.pdf). Directories with texmf in their name are usually organized this way.

#### 3.2 Bundle installation

**Unpacking.** Unpack the oberdiek.tds.zip in the TDS tree (also known as texmf tree) of your choice. Example (linux):

```
unzip oberdiek.tds.zip -d ~/texmf
```

Script installation. Check the directory TDS:scripts/oberdiek/ for scripts that need further installation steps. Package attachfile2 comes with the Perl script pdfatfi.pl that should be installed in such a way that it can be called as pdfatfi. Example (linux):

```
chmod +x scripts/oberdiek/pdfatfi.pl
cp scripts/oberdiek/pdfatfi.pl /usr/local/bin/
```

#### 3.3 Package installation

**Unpacking.** The .dtx file is a self-extracting docstrip archive. The files are extracted by running the .dtx through plain TEX:

tex scrindex.dtx

<sup>&</sup>lt;sup>1</sup>http://ctan.org/pkg/scrindex

**TDS.** Now the different files must be moved into the different directories in your installation TDS tree (also known as texmf tree):

```
\begin{array}{lll} \text{scrindex.sty} & \rightarrow \text{tex/latex/oberdiek/scrindex.sty} \\ \text{scrindex.pdf} & \rightarrow \text{doc/latex/oberdiek/scrindex.pdf} \\ \text{scrindex-example1.tex} & \rightarrow \text{doc/latex/oberdiek/scrindex-example1.tex} \\ \text{scrindex-example2.tex} & \rightarrow \text{doc/latex/oberdiek/scrindex-example2.tex} \\ \text{scrindex.dtx} & \rightarrow \text{source/latex/oberdiek/scrindex.dtx} \end{array}
```

If you have a docstrip.cfg that configures and enables docstrip's TDS installing feature, then some files can already be in the right place, see the documentation of docstrip.

#### 3.4 Refresh file name databases

If your TEX distribution (teTEX, mikTEX, ...) relies on file name databases, you must refresh these. For example, teTEX users run texhash or mktexlsr.

#### 3.5 Some details for the interested

Unpacking with LATEX. The .dtx chooses its action depending on the format:

plain T<sub>E</sub>X: Run docstrip and extract the files.

LATEX: Generate the documentation.

If you insist on using LATEX for docstrip (really, docstrip does not need LATEX), then inform the autodetect routine about your intention:

```
latex \let\install=y\input{scrindex.dtx}
```

Do not forget to quote the argument according to the demands of your shell.

Generating the documentation. You can use both the .dtx or the .drv to generate the documentation. The process can be configured by the configuration file ltxdoc.cfg. For instance, put this line into this file, if you want to have A4 as paper format:

```
\PassOptionsToClass{a4paper}{article}
```

An example follows how to generate the documentation with pdfLATEX:

```
pdflatex scrindex.dtx
makeindex -s gind.ist scrindex.idx
pdflatex scrindex.dtx
makeindex -s gind.ist scrindex.idx
pdflatex scrindex.dtx
```

## 4 Catalogue

The following XML file can be used as source for the TEX Catalogue. The elements caption and description are imported from the original XML file from the Catalogue. The name of the XML file in the Catalogue is scrindex.xml.

```
<version number='1.2'/>
218
219
    <description>
     This package redefines environment `theindex' of package `index',
220
     if a class from xref refid='koma-script'>KOMA-Script is loaded.
221
222
      Also option 'idxtotoc' is supported. Index preambles can be given
223
     either by means of package `index' or via the interface provided
224
     by cript'>KOMA-Script
      225
     The package is part of the xref refid='oberdiek'>oberdiek
226
     bundle.
227
    </description>
228
    <documentation details='Package documentation'</pre>
229
       href='ctan:/macros/latex/contrib/oberdiek/scrindex.pdf'/>
230
    <ctan file='true' path='/macros/latex/contrib/oberdiek/scrindex.dtx'/>
231
232 <miktex location='oberdiek'/>
233 <texlive location='oberdiek'/>
234 <install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip'/>
235 </entry>
236 (/catalogue)
```

## 5 History

## [2008/07/07 v1.0]

First version, also published in newsgroup de.comp.text.tex:
 "Re: Zähler bei \index"<sup>2</sup>

## [2008/08/11 v1.1]

- Code is not changed.
- URLs updated.

### [2016/05/16 v1.2]

• Documentation updates.

### 6 Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; plain numbers refer to the code lines where the entry is used.

$\mathbf{Symbols}$	В
\@empty 62, 74, 119, 136, 181, 198	\begin 6, 19
\@idxitem 50, 102, 164	\bigskip 65, 77, 122, 139, 184, 201
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\@ifclasswith 58, 110, 172	\chapter 20, 135, 197
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\@mkboth 68, 80, 125, 142, 187, 204	\clearpage 55, 107, 115, 132, 169, 177, 194
\@nameuse 35, 87, 149	\columnsep 45, 98, 160
\@plus 48, 49, 100, 101, 162, 163	\columnseprule 44, 97, 159
\@restonecolfalse	
\@restonecoltrue 40, 92, 154	D
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\documentclass 2, 15
${f A}$	\dotfill 4, 11, 17, 24
\addchap 118, 180	${f E}$
\addsec 61	\end 12, 25

 $<sup>^2\</sup>mathrm{Url:\ http://groups.google.com/group/de.comp.text.tex/msg/39575b5e2f29be1e}$ 

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59, 71, 95, 111, 128, 157, 173, 190	\parindent 47, 99, 161
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\if@twocolumn 37, 89, 151	\ProvidesPackage 29
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121, 136, 138, 181, 183, 198, 200	\RequirePackage 31
\indexname $34$ ,	
61, 68, 73, 80, 86, 118, 125,	${f S}$
135, 142, 148, 180, 187, 197, 204	\section
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