# The scrindex package

### Heiko Oberdiek\*

# 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.

## Contents

| 1 | Dog  | mentation                          | 1 |
|---|------|------------------------------------|---|
|   | 1.1  | Jsage                              | 2 |
|   | 1.2  | Preambles                          | 2 |
|   |      | 1.2.1 Class scrartcl               | 2 |
|   |      | 1.2.2 Classes scrreprt and scrbook | 2 |
| 2 | Imp  | ementation                         | 3 |
| 3 | Inst | llation                            | 6 |
|   | 3.1  | Download                           | 6 |
|   | 3.2  | Bundle installation                | 6 |
|   | 3.3  | Package installation               | 6 |
|   | 3.4  | Refresh file name databases        | 7 |
|   | 3.5  | Some details for the interested    | 7 |
| 4 | His  | ry                                 | 7 |
|   |      | /07/07 v1.0]                       | 7 |
|   |      | /08/11 v1.1                        | 7 |
|   | -    | /05/16 v1.2]                       | 7 |
| K | Ind  | ,                                  | 7 |

#### 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 \langle **example1 \rangle 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 \langle /example1 \rangle
```

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 scrartclEOL       |  |  |
| first, 1                      |  |  |
| section, 1                    |  |  |

### 1.2.2 Classes scrreprt and scrbook

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

# 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
                     \fi
                     \idx@heading
42
43
                     \thispagestyle{\indexpagestyle}%
44
                     \columnseprule\z@
45
                     \columnsep 35\p@
46
                     \index@preamble\par\nobreak
47
                     \parindent\z@
                     \protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\pro
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
                                   \else
64
                                          \index@prologue
65
                                          \bigskip
66
                                   \fi
                           ]%
67
                             \@mkboth{\indexname}{\indexname}%
68
69
                    ጉ%
             }{%
70
```

```
\renewcommand*{\idx@heading}{%
 71
 72
         \twocolumn[%
            \section*{\indexname}%
 73
 74
            \ifx\index@prologue\@empty
 75
 76
              \index@prologue
 77
              \bigskip
 78
           \fi
         ]%
 79
          \@mkboth{\indexname}{\indexname}%
 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
       \thispagestyle{\indexpagestyle}%
 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
     \@ifclasswith{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
            \else
120
121
              \index@prologue
122
              \bigskip
            \fi
123
124
          \@mkboth{\indexname}{\indexname}%
125
       }%
126
127
     }{%
       \renewcommand*{\idx@heading}{%
128
         \if@openright
129
130
           \cleardoublepage
         \else
131
132
           \clearpage
```

```
\fi
133
                         \twocolumn[%
134
                              \chapter*{\indexname}%
135
                              \ifx\index@prologue\@empty
136
137
138
                                   \index@prologue
139
                                   \bigskip
140
                              \fi
                        ]%
141
                         \@mkboth{\indexname}{\indexname}%
142
                  }%
143
            }%
144
145 }{}
146 \cline{1}46 \cline{1}46 \cline{1}46 \cline{1}47 \cline{1}47 \cline{1}48 \cline{1}49 \cline{1}
             \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
                   \thispagestyle{\indexpagestyle}%
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
                   \else
168
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
                              \else
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
197
            \chapter*{\indexname}%
            \ifx\index@prologue\@empty
198
199
               \index@prologue
200
201
               \bigskip
202
            \fi
          1%
203
          \@mkboth{\indexname}{\indexname}%
204
205
     }%
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:pkg/tds). 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
```

## 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
```

**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} {\rm scrindex.sty} & \to {\rm tex/latex/oberdiek/scrindex.sty} \\ {\rm scrindex.pdf} & \to {\rm doc/latex/oberdiek/scrindex.pdf} \\ {\rm scrindex-example1.tex} & \to {\rm doc/latex/oberdiek/scrindex-example1.tex} \\ {\rm scrindex-example2.tex} & \to {\rm doc/latex/oberdiek/scrindex-example2.tex} \\ {\rm scrindex.dtx} & \to {\rm 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.

<sup>1</sup>CTAN:pkg/scrindex

#### 3.4 Refresh file name databases

If your T<sub>E</sub>X distribution (T<sub>E</sub>X Live, MiKT<sub>E</sub>X, ...) relies on file name databases, you must refresh these. For example, T<sub>E</sub>X Live 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 TEX: 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 pdfIATEX:

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

# 4 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.

## 5 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.

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

| \@ifclassloaded 32, 84, 146  | \indexpagestyle 43, 96, 158   |
|--|---|
| $\verb \@ifclasswith $   | \item 50, 102, 164  |
| \@indextype 35, 87, 149  |   |
| \@mkboth 68, 80, 125, 142, 187, 204  | M   |
| \Quantum \qq \quantum \quantum \quantum \quantum \quantum \quantum \quantum | \makeindex  |
| \@plus 48, 49, 100, 101, 162, 163  |   |
| $\colone{1}$ \@restonecolfalse 38, 90, 152   | N   |
| \@restonecoltrue $\dots 40, 92, 154$   | \NeedsTeXFormat 28  |
| $\mathbf{A}$   | \nobreak 46   |
| \addchap 118, 180  |   |
| \addsec 61   | 0   |
| (dadbee  | \onecolumn 53, 105, 167   |
| <b>B</b>   | P   |
| \begin   | \p@ 45, 48, 98, 100, 160, 162   |
| \bigskip 65, 77, 122, 139, 184, 201  | \par 46   |
| $\mathbf{C}$   | \parfillskip 49, 101, 163   |
| \chapter 20, 135, 197  | \parindent 47, 99, 161  |
| \cleardoublepage 113, 130, 175, 192  | \parskip 48, 100, 162   |
| \clearpage   | \printindex 10, 23  |
| 55, 107, 115, 132, 169, 177, 194   | \ProvidesPackage 29   |
| \columnsep 45, 98, 160   | <u></u>   |
| · · · · · · · · · · · · · · · · · · ·  |   |
| \columnseprule 44, 97, 159   | ${f R}$   |
| \columnseprule 44, 97, 159   |   |
| D  | \renewcommand 59, 71, 111, 128, 173, 190  |
| D \documentclass   |   |
| D  | \renewcommand 59, 71, 111, 128, 173, 190<br>\renewenvironment 33, 85, 147   |
| D \documentclass   | \renewcommand 59, 71, 111, 128, 173, 190 \renewenvironment 33, 85, 147 \RequirePackage 31   |
| $\begin{array}{c} \mathbf{D} \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$   | \renewcommand 59, 71, 111, 128, 173, 190 \renewenvironment 33, 85, 147 \RequirePackage 31  S \section 7, 73   |
| D \documentclass   | \renewcommand 59, 71, 111, 128, 173, 190 \renewenvironment 33, 85, 147 \RequirePackage 31  S \section 7, 73 \setchapterpreamble 94, 156   |
| $\begin{array}{c} \mathbf{D} \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$   | \renewcommand 59, 71, 111, 128, 173, 190 \renewenvironment 33, 85, 147 \RequirePackage 31  S \section 7, 73   |
| D \documentclass   | \renewcommand 59, 71, 111, 128, 173, 190 \renewenvironment 33, 85, 147 \RequirePackage 31  S \section 7, 73 \setchapterpreamble 94, 156 \setindexpreamble 4, 17   |
| D \documentclass   | \renewcommand 59, 71, 111, 128, 173, 190 \renewenvironment 33, 85, 147 \RequirePackage 31  S \section   |
| D \documentclass   | \renewcommand 59, 71, 111, 128, 173, 190 \renewenvironment 33, 85, 147 \RequirePackage 31  S \section   |
| D \documentclass   | \renewcommand 59, 71, 111, 128, 173, 190 \renewenvironment  |
| D \documentclass   | \renewcommand 59, 71, 111, 128, 173, 190 \renewenvironment 33, 85, 147 \RequirePackage 31  S \section 7, 73 \setchapterpreamble 94, 156 \setindexpreamble 4, 17  T \texttt 4, 11, 17, 24 \the 35, 87, 149 \thispagestyle 43, 96, 158  |
| D \documentclass   | \renewcommand 59, 71, 111, 128, 173, 190 \renewenvironment  |
| D \documentclass   | \renewcommand 59, 71, 111, 128, 173, 190 \renewenvironment 33, 85, 147 \RequirePackage 31  S \section 7, 73 \setchapterpreamble 94, 156 \setindexpreamble 4, 17  T \texttt 4, 11, 17, 24 \the 35, 87, 149 \thispagestyle 43, 96, 158 \twocolumn 60, 72, 117, 134, 179, 196                      |
| D \documentclass   | \renewcommand 59, 71, 111, 128, 173, 190 \renewenvironment 33, 85, 147 \RequirePackage 31  S \section 7, 73 \setchapterpreamble 94, 156 \setindexpreamble 4, 11, 17, 24 \the 4, 11, 17, 24 \the 35, 87, 149 \thispagestyle 43, 96, 158 \twocolumn 60, 72, 117, 134, 179, 196  U                 |
| D \documentclass   | \renewcommand 59, 71, 111, 128, 173, 190 \renewenvironment 33, 85, 147 \RequirePackage 31  S \section 7, 73 \setchapterpreamble 94, 156 \setindexpreamble 4, 17  T \texttt 4, 11, 17, 24 \the 35, 87, 149 \thispagestyle 43, 96, 158 \twocolumn 60, 72, 117, 134, 179, 196                      |
| D \documentclass   | \renewcommand 59, 71, 111, 128, 173, 190 \renewenvironment 33, 85, 147 \RequirePackage 31  S \section 7, 73 \setchapterpreamble 94, 156 \setindexpreamble 4, 17  T \texttt 4, 11, 17, 24 \the 35, 87, 149 \thispagestyle 43, 96, 158 \twocolumn 60, 72, 117, 134, 179, 196  U \usepackage 3, 16 |
| D \documentclass   | \renewcommand 59, 71, 111, 128, 173, 190 \renewenvironment 33, 85, 147 \RequirePackage  |
| D \documentclass   | \renewcommand 59, 71, 111, 128, 173, 190 \renewenvironment 33, 85, 147 \RequirePackage 31  S \section 7, 73 \setchapterpreamble 94, 156 \setindexpreamble 4, 17  T \texttt 4, 11, 17, 24 \the 35, 87, 149 \thispagestyle 43, 96, 158 \twocolumn 60, 72, 117, 134, 179, 196  U \usepackage 3, 16 |