

# 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

|                   |  |          |
|-------------------|--|----------|
| <b>1</b>          | <b>Documentation</b>                                   | <b>1</b> |
| 1.1               | Usage  | 2        |
| 1.2               | Preambles  | 2        |
| 1.2.1             | Class <code>scartcl</code>                             | 2        |
| 1.2.2             | Classes <code>scrreprt</code> and <code>scrbook</code> | 2        |
| <b>2</b>          | <b>Implementation</b>                                  | <b>3</b> |
| <b>3</b>          | <b>Installation</b>                                    | <b>6</b> |
| 3.1               | Download   | 6        |
| 3.2               | Bundle installation                                    | 6        |
| 3.3               | Package installation                                   | 7        |
| 3.4               | Refresh file name databases                            | 7        |
| 3.5               | Some details for the interested                        | 7        |
| <b>4</b>          | <b>History</b>   | <b>8</b> |
| [2008/07/07 v1.0] |  | 8        |
| [2008/08/11 v1.1] |  | 8        |
| [2016/05/16 v1.2] |  | 8        |

## 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 prologue of package `index` and the preamble of KOMA-Script’s classes are available. Also class option `idxtotoc` of KOMA-Script is supported.

---

\*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. L<sup>A</sup>T<sub>E</sub>X's package interface allows multiple calls of the same package. The package is loaded at its first package loading command. At later times L<sup>A</sup>T<sub>E</sub>X 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.

|  |  |
|--|--|
| <b>Index</b>                                     |  |
| Prologue of package <code>index</code> ..... EOL |  |
| Preamble of <code>scrartcl</code> .. EOL         |  |
| first, 1   |  |
| section, 1                                       |  |

### 1.2.2 Classes `scrreprt` and `scrbook`

```
14 <*example2>
15 \documentclass[openany]{scrbook}% or scrreprt
16 \usepackage{scrindex}
17 \setindexpreamble{Preamble of class \texttt{scrbook}\dotfill EOL}
18 \makeindex
19 \begin{document}
```

```

20 \chapter{First Chapter}
21 \index{first}
22 \index{chapter}
23 \printindex[default]%
24 [Prologue of package \texttt{index}\dotfill EOL]%
25 \end{document}
26 \end{example2}

```

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.

|  |     |
|--|-----|
| <b>Index</b>                                 |     |
| Preamble of class <code>scrbook</code> ..... | EOL |
| Prologue of package <code>index</code> ..... | EOL |
| chapter, 1                                   |     |
| first, 1                                     |     |

## 2 Implementation

```

27 (*package)
28 \NeedsTeXFormat{LaTeX2e}
29 \ProvidesPackage{scrindex}
30 [2016/05/16 v1.2 Package index with KOMA-Script classes (HO)]%
31 \RequirePackage{index}[2004/01/20]%
32 \@ifclassloaded{scrartcl}{%
33   \renewenvironment{theindex}{%
34     \edef\indexname{%
35       \the\@nameuse{idxtitle@\@indextype}}%
36     }%
37     \if@twocolumn
38       \@restonecolfalse
39     \else
40       \@restonecoltrue
41     \fi
42     \idx@heading
43     \thispagestyle{\indexpagestyle}%
44     \columnseprule\z@
45     \columnsep 35\p@
46     \index@preamble\par\nobreak
47     \parindent\z@
48     \parskip\z@ \@plus .3\p@\relax
49     \parfillskip\z@ \@plus 1fil\relax
50     \let\item\idxitem
51   }{%
52     \if@restonecol
53       \onecolumn
54     \else
55       \clearpage
56     \fi
57   }%
58   \@ifclasswith{scrartcl}{idxtotoc}{%
59     \renewcommand*{\idx@heading}{%
60       \twocolumn[%
61         \addsec{\indexname}}%

```

```

62     \ifx\index@prologue\@empty
63     \else
64         \index@prologue
65         \bigskip
66     \fi
67 ]%
68 \mkboth{\indexname}{\indexname}%
69 }%
70 }{%
71 \renewcommand*{\idx@heading}{%
72     \twocolumn[%
73         \section*{\indexname}%
74         \ifx\index@prologue\@empty
75         \else
76             \index@prologue
77             \bigskip
78         \fi
79     ]%
80     \mkboth{\indexname}{\indexname}%
81 }%
82 }%
83 }{}

84 \@ifclassloaded{scrreprt}{%
85     \renewenvironment{theindex}{%
86         \edef\indexname{%
87             \the\@nameuse{idxtitle@\@indextype}%
88         }%
89         \if@twocolumn
90             \@restonecolfalse
91         \else
92             \@restonecoltrue
93         \fi
94         \setchapterpreamble{\index@preamble}%
95         \idx@heading
96         \thispagestyle{\indexpagestyle}%
97         \columnseprule\z@
98         \columnsep 35\p@
99         \parindent\z@
100        \parskip\z@ \@plus .3\p@\relax
101        \parfillskip\z@ \@plus 1fil\relax
102        \let\item\@idxitem
103    }{%
104        \if@restonecol
105            \onecolumn
106        \else
107            \clearpage
108        \fi
109    }%
110 \@ifclasswith{scrreprt}{idxtotoc}{%
111     \renewcommand*{\idx@heading}{%
112         \if@openright
113             \cleardoublepage
114         \else
115             \clearpage
116         \fi
117     \twocolumn[%
118         \addchap{\indexname}%
119         \ifx\index@prologue\@empty

```

```

120     \else
121     \index@prologue
122     \bigskip
123     \fi
124   ]%
125   \@mkboth{\indexname}{\indexname}%
126 }%
127 }{%
128   \renewcommand*{\idx@heading}{%
129     \if@openright
130     \cleardoublepage
131     \else
132     \clearpage
133     \fi
134   \twocolumn[%
135     \chapter*{\indexname}%
136     \ifx\index@prologue\@empty
137     \else
138     \index@prologue
139     \bigskip
140     \fi
141   ]%
142   \@mkboth{\indexname}{\indexname}%
143 }%
144 }%
145 }{}

146 \@ifclassloaded{scrbook}{%
147   \renewenvironment{theindex}{%
148     \edef\indexname{%
149       \the\@nameuse{idxtitle@\@indextype}%
150     }%
151     \if@twocolumn
152     \@restonecolfalse
153     \else
154     \@restonecoltrue
155     \fi
156     \setchapterpreamble{\index@preamble}%
157     \idx@heading
158     \thispagestyle{\indexpagestyle}%
159     \columnseprule\z@
160     \columnsep 35\p@
161     \parindent\z@
162     \parskip\z@ \@plus .3\p@\relax
163     \parfillskip\z@ \@plus 1fil\relax
164     \let\item\@idxitem
165   }{%
166     \if@restonecol
167     \onecolumn
168     \else
169     \clearpage
170     \fi
171   }%
172   \@ifclasswith{scrbook}{idxtotoc}{%
173     \renewcommand*{\idx@heading}{%
174       \if@openright
175       \cleardoublepage
176       \else
177       \clearpage

```

```

178     \fi
179     \twocolumn[%
180       \addchap{\indexname}%
181       \ifx\index@prologue\@empty
182       \else
183         \index@prologue
184         \bigskip
185       \fi
186     ]%
187     \@mkboth{\indexname}{\indexname}%
188   }%
189 }{%
190   \renewcommand*{\idx@heading}{%
191     \if@openright
192       \cleardoublepage
193     \else
194       \clearpage
195     \fi
196     \twocolumn[%
197       \chapter*{\indexname}%
198       \ifx\index@prologue\@empty
199       \else
200         \index@prologue
201         \bigskip
202       \fi
203     ]%
204     \@mkboth{\indexname}{\indexname}%
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: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
```

---

<sup>1</sup>[CTAN:pkg/scrindex](#)

**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
```

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

```
scrindex.sty      → tex/latex/oberdiek/scrindex.sty
scrindex.pdf      → doc/latex/oberdiek/scrindex.pdf
scrindex-example1.tex → doc/latex/oberdiek/scrindex-example1.tex
scrindex-example2.tex → doc/latex/oberdiek/scrindex-example2.tex
scrindex.dtx      → source/latex/oberdiek/scrindex.dtx
```

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 `mktextlsr`.

### 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 `pdf $\LaTeX$` :

```
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.

| Symbols                                  |                                  | E                                      |   |
|--|----------------------------------|--|---|
| <code>\@empty</code> . . . . .           | 62, 74, 119, 136, 181, 198       | <code>\end</code> . . . . .            | 12, 25  |
| <code>\@idxitem</code> . . . . .         | 50, 102, 164                     | <b>I</b>                               |   |
| <code>\@ifclassloaded</code> . . . . .   | 32, 84, 146                      | <code>\idx@heading</code> . . . . .    | 42,<br>59, 71, 95, 111, 128, 157, 173, 190                                |
| <code>\@ifclasswith</code> . . . . .     | 58, 110, 172                     | <code>\if@openright</code> . . . . .   | 112, 129, 174, 191  |
| <code>\@indextype</code> . . . . .       | 35, 87, 149                      | <code>\if@restonecol</code> . . . . .  | 52, 104, 166  |
| <code>\@mkboth</code> . . . . .          | 68, 80, 125, 142, 187, 204       | <code>\if@twocolumn</code> . . . . .   | 37, 89, 151   |
| <code>\@nameuse</code> . . . . .         | 35, 87, 149                      | <code>\ifx</code> . . . . .            | 62, 74, 119, 136, 181, 198  |
| <code>\@plus</code> . . . . .            | 48, 49, 100, 101, 162, 163       | <code>\index</code> . . . . .          | 8, 9, 21, 22  |
| <code>\@restonecolfalse</code> . . . . . | 38, 90, 152                      | <code>\index@preamble</code> . . . . . | 46, 94, 156   |
| <code>\@restonecoltrue</code> . . . . .  | 40, 92, 154                      | <code>\index@prologue</code> . . . . . | 62, 64, 74, 76, 119,<br>121, 136, 138, 181, 183, 198, 200                 |
| <b>A</b>                                 |                                  | <code>\indexname</code> . . . . .      | 34,<br>61, 68, 73, 80, 86, 118, 125,<br>135, 142, 148, 180, 187, 197, 204 |
| <code>\addchap</code> . . . . .          | 118, 180                         | <code>\indexpagestyle</code> . . . . . | 43, 96, 158   |
| <code>\addsec</code> . . . . .           | 61                               | <code>\item</code> . . . . .           | 50, 102, 164  |
| <b>B</b>                                 |                                  | <b>M</b>                               |   |
| <code>\begin</code> . . . . .            | 6, 19                            | <code>\makeindex</code> . . . . .      | 5, 18   |
| <code>\bigskip</code> . . . . .          | 65, 77, 122, 139, 184, 201       | <b>N</b>                               |   |
| <b>C</b>                                 |                                  | <code>\NeedsTeXFormat</code> . . . . . | 28  |
| <code>\chapter</code> . . . . .          | 20, 135, 197                     | <code>\nobreak</code> . . . . .        | 46  |
| <code>\cleardoublepage</code> . . . . .  | 113, 130, 175, 192               | <b>O</b>                               |   |
| <code>\clearpage</code> . . . . .        | 55, 107, 115, 132, 169, 177, 194 | <code>\onecolumn</code> . . . . .      | 53, 105, 167  |
| <code>\columnsep</code> . . . . .        | 45, 98, 160                      | <b>P</b>                               |   |
| <code>\columnseprule</code> . . . . .    | 44, 97, 159                      | <code>\p@</code> . . . . .             | 45, 48, 98, 100, 160, 162   |
| <b>D</b>                                 |                                  | <code>\par</code> . . . . .            | 46  |
| <code>\documentclass</code> . . . . .    | 2, 15                            |  |   |
| <code>\dotfill</code> . . . . .          | 4, 11, 17, 24                    |  |   |

<sup>2</sup>Url: <https://groups.google.com/group/de.comp.text.tex/msg/39575b5e2f29be1e>

|                                       |                            |                                     |                                      |
|---------------------------------------|----------------------------|-------------------------------------|--------------------------------------|
| <code>\parfillskip</code> .....       | 49, 101, 163               | <code>\setindexpreable</code> ..... | 4, 17                                |
| <code>\parindent</code> .....         | 47, 99, 161                |                                     |                                      |
| <code>\parskip</code> .....           | 48, 100, 162               | <b>T</b>                            |                                      |
| <code>\printindex</code> .....        | 10, 23                     | <code>\texttt</code> .....          | 4, 11, 17, 24                        |
| <code>\ProvidesPackage</code> .....   | 29                         | <code>\the</code> .....             | 35, 87, 149                          |
|                                       |                            | <code>\thispagestyle</code> .....   | 43, 96, 158                          |
| <b>R</b>                              |                            | <code>\twocolumn</code> ..          | 60, 72, 117, 134, 179, 196           |
| <code>\renewcommand</code>            | 59, 71, 111, 128, 173, 190 |                                     |                                      |
| <code>\renewenvironment</code> .....  | 33, 85, 147                | <b>U</b>                            |                                      |
| <code>\RequirePackage</code> .....    | 31                         | <code>\usepackage</code> .....      | 3, 16                                |
|                                       |                            |                                     |                                      |
| <b>S</b>                              |                            | <b>Z</b>                            |                                      |
| <code>\section</code> .....           | 7, 73                      | <code>\z@</code> .....              | 44, 47, 48, 49,                      |
| <code>\setchapterpreable</code> ..... | 94, 156                    |                                     | 97, 99, 100, 101, 159, 161, 162, 163 |