

# The `scrindex` package

Heiko Oberdiek

<heiko.oberdiek at gmail.com>

2008/08/11 v1.1

## Abstract

This package redefines environment ‘theindex’ of package `index`, if a class from KOMA-Script is loaded. Also option `idxdotoc` 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>scrartcl</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>Catalogue</b>	<b>8</b>
<b>5</b>	<b>History</b>	<b>8</b>
	[2008/07/07 v1.0]	8
	[2008/08/11 v1.1]	9
<b>6</b>	<b>Index</b>	<b>9</b>

## 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 `idxdotoc` of KOMA-Script is supported.

## 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.

Index	
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 [2008/08/11 v1.1 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}{idx@toc}{%
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{idx@title@\@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}{idx@toc}{%
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 \end{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 T<sub>E</sub>X 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>[ftp://ftp.ctan.org/tex-archive/](http://ftp.ctan.org/tex-archive/)

**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

**Attached source.** The PDF documentation on CTAN also includes the `.dtx` source file. It can be extracted by AcrobatReader 6 or higher. Another option is `pdftk`, e.g. unpack the file into the current directory:

```
pdftk scrindex.pdf unpack_files output .
```

**Unpacking with L<sup>A</sup>T<sub>E</sub>X.** The `.dtx` chooses its action depending on the format:

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

**L<sup>A</sup>T<sub>E</sub>X:** Generate the documentation.

If you insist on using L<sup>A</sup>T<sub>E</sub>X for `docstrip` (really, `docstrip` does not need L<sup>A</sup>T<sub>E</sub>X), 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 pdfL<sup>A</sup>T<sub>E</sub>X:

```
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 [T<sub>E</sub>X 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`.

```
209 (*catalogue)
210 <?xml version='1.0' encoding='us-ascii'?>
211 <!DOCTYPE entry SYSTEM 'catalogue.dtd'>
212 <entry datestamp='$Date$' modifier='$Author$' id='scrindex'>
213   <name>scrindex</name>
214   <caption>Make index package work with Koma-script classes.</caption>
215   <authorref id='auth:oberdiek'/>
216   <copyright owner='Heiko Oberdiek' year='2008'/>
217   <license type='lppl1.3'/>
218   <version number='1.1'/>
219   <description>
220     This package redefines environment 'theindex' of package 'index',
221     if a class from <xref refid='koma-script'>KOMA-Script</xref> is loaded.
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 <xref refid='koma-script'>KOMA-Script</xref>.
225     <p/>
226     The package is part of the <xref refid='oberdiek'>oberdiek</xref>
227     bundle.
228   </description>
229   <documentation details='Package documentation'
230     href='ctan:/macros/latex/contrib/oberdiek/scrindex.pdf'/>
231   <ctan file='true' path='/macros/latex/contrib/oberdiek/scrindex.dtx'/>
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>

---

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



[2008/08/11 v1.1]

- Code is not changed.
- URLs updated.

## 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.

Symbols	
<code>\@empty</code> . . . . .	62, 74, 119, 136, 181, 198
<code>\@idxitem</code> . . . . .	50, 102, 164
<code>\@ifclassloaded</code> . . . . .	32, 84, 146
<code>\@ifclasswith</code> . . . . .	58, 110, 172
<code>\@indextype</code> . . . . .	35, 87, 149
<code>\@mkboth</code> . . . . .	68, 80, 125, 142, 187, 204
<code>\@nameuse</code> . . . . .	35, 87, 149
<code>\@plus</code> . . . . .	48, 49, 100, 101, 162, 163
<code>\@restonecolfalse</code> . . . . .	38, 90, 152
<code>\@restonecoltrue</code> . . . . .	40, 92, 154
A	
<code>\addchap</code> . . . . .	118, 180
<code>\addsec</code> . . . . .	61
B	
<code>\begin</code> . . . . .	6, 19
<code>\bigskip</code> . . . . .	65, 77, 122, 139, 184, 201
C	
<code>\chapter</code> . . . . .	20, 135, 197
<code>\cleardoublepage</code> . . . . .	113, 130, 175, 192
<code>\clearpage</code> . . . . .	55, 107, 115, 132, 169, 177, 194
<code>\columnsep</code> . . . . .	45, 98, 160
<code>\columnseprule</code> . . . . .	44, 97, 159
D	
<code>\documentclass</code> . . . . .	2, 15
<code>\dotfill</code> . . . . .	4, 11, 17, 24
E	
<code>\end</code> . . . . .	12, 25
I	
<code>\idx@heading</code> . . . . .	42, 59, 71, 95, 111, 128, 157, 173, 190
<code>\if@openright</code> . . . . .	112, 129, 174, 191
<code>\if@restonecol</code> . . . . .	52, 104, 166
<code>\if@twocolumn</code> . . . . .	37, 89, 151
<code>\ifx</code> . . . . .	62, 74, 119, 136, 181, 198
<code>\index</code> . . . . .	8, 9, 21, 22
<code>\index@preamble</code> . . . . .	46, 94, 156
<code>\index@prologue</code> . . . . .	62, 64, 74, 76, 119, 121, 136, 138, 181, 183, 198, 200
<code>\indexname</code> . . . . .	34, 61, 68, 73, 80, 86, 118, 125, 135, 142, 148, 180, 187, 197, 204
<code>\indexpagestyle</code> . . . . .	43, 96, 158
<code>\item</code> . . . . .	50, 102, 164
M	
<code>\makeindex</code> . . . . .	5, 18
N	
<code>\NeedsTeXFormat</code> . . . . .	28
<code>\nobreak</code> . . . . .	46
O	
<code>\onecolumn</code> . . . . .	53, 105, 167
P	
<code>\p@</code> . . . . .	45, 48, 98, 100, 160, 162
<code>\par</code> . . . . .	46
<code>\parfillskip</code> . . . . .	49, 101, 163
<code>\parindent</code> . . . . .	47, 99, 161
<code>\parskip</code> . . . . .	48, 100, 162
<code>\printindex</code> . . . . .	10, 23
<code>\ProvidesPackage</code> . . . . .	29
R	
<code>\renewcommand</code> . . . . .	59, 71, 111, 128, 173, 190
<code>\renewenvironment</code> . . . . .	33, 85, 147
<code>\RequirePackage</code> . . . . .	31
S	
<code>\section</code> . . . . .	7, 73
<code>\setchapterpreamble</code> . . . . .	94, 156
<code>\setindexpreamble</code> . . . . .	4, 17
T	
<code>\texttt</code> . . . . .	4, 11, 17, 24
<code>\the</code> . . . . .	35, 87, 149
<code>\thispagestyle</code> . . . . .	43, 96, 158
<code>\twocolumn</code> . . . . .	60, 72, 117, 134, 179, 196
U	
<code>\usepackage</code> . . . . .	3, 16
Z	
<code>\z@</code> . . . . .	44, 47, 48, 49, 97, 99, 100, 101, 159, 161, 162, 163