

# The **scrindex** package

Heiko Oberdiek\*  
<heiko.oberdiek at googlemail.com>

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 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> . . . . .	3
<b>2 Implementation</b>	<b>3</b>
<b>3 Installation</b>	<b>6</b>
3.1 Download . . . . .	6
3.2 Bundle installation . . . . .	7
3.3 Package installation . . . . .	7
3.4 Refresh file name databases . . . . .	7
3.5 Some details for the interested . . . . .	7
<b>4 Catalogue</b>	<b>8</b>
<b>5 History</b>	<b>8</b>
[2008/07/07 v1.0] . . . . .	8
[2008/08/11 v1.1] . . . . .	9
[2016/05/16 v1.2] . . . . .	9
<b>6 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`.

---

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

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.

## 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 
```

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 <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@ \oplus .3\p@\relax
49     \parfillskip\z@ \oplus 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          \cmkboth{\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          \cmkboth{\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@ \relax
101    \parfillskip\z@ \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      \cmarkboth{\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         \cmarkboth{\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}{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](http://ctan.org/pkg/scrindex) The source file.

[CTAN:macros/latex/contrib/oberdiek/scrindex.pdf](http://ctan.org/pkg/scrindex) 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](http://ctan.org/install/macros/latex/contrib/oberdiek.tds.zip)

*TDS* refers to the standard “A Directory Structure for TeX Files” ([CTAN:tds/tds.pdf](http://ctan.org/tds/tds.pdf)). Directories with `texmf` in their name are usually organized this way.

---

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

## 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
```

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

<code>scrindex.sty</code>	→ <code>tex/latex/oberdiek/scrindex.sty</code>
<code>scrindex.pdf</code>	→ <code>doc/latex/oberdiek/scrindex.pdf</code>
<code>scrindex-example1.tex</code>	→ <code>doc/latex/oberdiek/scrindex-example1.tex</code>
<code>scrindex-example2.tex</code>	→ <code>doc/latex/oberdiek/scrindex-example2.tex</code>
<code>scrindex.dtx</code>	→ <code>source/latex/oberdiek/scrindex.dtx</code>

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

**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 [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`.

```
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='1.2' />
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.

[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.

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

<b>U</b>	<b>Z</b>
\usepackage . . . . . 3, 16	\z@ . . . . . 44, 47, 48, 49, 97, 99, 100, 101, 159, 161, 162, 163