The scrindex package

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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.

^{*}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 \( \delta \) example 2 \\\
15 \\ documentclass[openany] \{ \scrbook} \( \delta \) 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 \( / \example 2 \)
```

The order of the two preambles are different for the classes scrrept 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						
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}{%
      \edef\indexname{%
34
        \the\@nameuse{idxtitle@\@indextype}%
35
36
      }%
37
      \if@twocolumn
        \@restonecolfalse
38
      \else
39
        \@restonecoltrue
40
      \fi
41
42
      \idx@heading
      \thispagestyle{\indexpagestyle}%
      \columnseprule\z@
44
      \columnsep 35\p@
45
      \index@preamble\par\nobreak
46
      \parindent\z@
47
      \parskip\z@ \@plus .3\p@\relax
48
49
      \parfillskip\z@ \@plus 1fil\relax
50
      \let\item\@idxitem
51
    }{%
      \if@restonecol
52
        \onecolumn
53
      \else
54
55
        \clearpage
56
57
    \@ifclasswith{scrartcl}{idxtotoc}{%
58
      \renewcommand*{\idx@heading}{%
59
        \twocolumn[%
60
          \addsec{\indexname}%
61
```

```
62
            \ifx\index@prologue\@empty
63
            \else
64
              \index@prologue
              \bigskip
66
         ]%
67
         \@mkboth{\indexname}{\indexname}%
68
       }%
69
     }{%
70
       \renewcommand*{\idx@heading}{%
71
72
         \twocolumn[%
73
            \section*{\indexname}%
74
            \ifx\index@prologue\@empty
75
            \else
76
              \index@prologue
77
              \bigskip
            \fi
78
         ]%
79
         \@mkboth{\indexname}{\indexname}%
80
81
       }%
    }%
82
83 }{}
84 \@ifclassloaded{scrreprt}{%
     \renewenvironment{theindex}{%
86
       \edef\indexname{%
87
         \the\@nameuse{idxtitle@\@indextype}%
       }%
88
       \if@twocolumn
89
         \@restonecolfalse
90
       \else
91
92
         \@restonecoltrue
93
       \setchapterpreamble{\index@preamble}%
94
       \idx@heading
95
       \thispagestyle{\indexpagestyle}%
96
       \columnseprule\z@
97
       \columnsep 35\p@
98
99
       \parindent\z@
100
       \parskip\z@ \@plus .3\p@\relax
101
       \parfillskip\z@ \@plus 1fil\relax
       \let\item\@idxitem
102
     }{%
103
       \if@restonecol
104
105
         \onecolumn
106
       \else
107
         \clearpage
108
       \fi
109
     }%
     \@ifclasswith{scrreprt}{idxtotoc}{%
110
       \renewcommand*{\idx@heading}{%
111
112
         \if@openright
113
            \cleardoublepage
114
         \else
            \clearpage
115
         \fi
116
         \twocolumn[%
117
118
            \addchap{\indexname}%
119
            \ifx\index@prologue\@empty
```

```
120
                                   \else
                                         \index@prologue
121
122
                                        \bigskip
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
135
                                  \chapter*{\indexname}%
136
                                  \ifx\index@prologue\@empty
137
                                         \index@prologue
138
                                         \bigskip
139
                                  \fi
140
                           1%
141
                            \@mkboth{\indexname}{\indexname}%
142
                     }%
143
             }%
144
145 }{}
146 \@ifclassloaded{scrbook}{%
               \renewenvironment{theindex}{%
147
                      \edef\indexname{%
148
                            \the\@nameuse{idxtitle@\@indextype}%
149
150
151
                      \if@twocolumn
                            \@restonecolfalse
152
                      \else
153
                            \@restonecoltrue
154
                      \fi
155
                      \setchapterpreamble{\index@preamble}%
156
157
                      \idx@heading
                      \thispagestyle{\indexpagestyle}%
158
159
                      \columnseprule\z@
                      \columnsep 35\p@
160
                      \parindent\z@
161
                      \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
162
163
                      \parfillskip\z@ \@plus 1fil\relax
164
                      \let\item\@idxitem
165
166
                      \if@restonecol
167
                            \onecolumn
                      \else
168
                            \clearpage
169
170
                      \fi
171
172
               \@ifclasswith{scrbook}{idxtotoc}{%
                      \renewcommand*{\idx@heading}{%
173
174
                            \if@openright
                                  \cleardoublepage
175
176
                            \else
177
                                  \clearpage
```

```
178
          \fi
          \twocolumn[%
179
180
            \addchap{\indexname}%
181
            \ifx\index@prologue\@empty
            \else
182
              \index@prologue
183
              \bigskip
184
            \fi
185
         ]%
186
          \@mkboth{\indexname}{\indexname}%
187
       }%
188
     }{%
189
        \renewcommand*{\idx@heading}{%
190
191
          \if@openright
            \cleardoublepage
192
193
          \else
194
            \clearpage
          \fi
195
          \twocolumn[%
196
            \chapter*{\indexname}%
197
            \ifx\index@prologue\@empty
198
            \else
199
              \index@prologue
200
              \bigskip
201
            \fi
202
203
204
          \@mkboth{\indexname}{\indexname}%
       }%
205
    }%
206
207 }{}
208 (/package)
```

3 Installation

3.1 Download

Package. This package is available on CTAN¹:

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
```

¹CTAN:pkg/scrindex

3.3 Package installation

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

```
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} & scrindex.sty & \rightarrow tex/latex/oberdiek/scrindex.sty \\ & scrindex.pdf & \rightarrow doc/latex/oberdiek/scrindex.pdf \\ & scrindex-example1.tex & \rightarrow doc/latex/oberdiek/scrindex-example1.tex \\ & scrindex-example2.tex & \rightarrow doc/latex/oberdiek/scrindex-example2.tex \\ & scrindex.dtx & \rightarrow 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 T_EX distribution (T_EX Live, MiKT_EX, ...) relies on file name databases, you must refresh these. For example, T_EX Live users run texhash or mktexlsr.

3.5 Some details for the interested

Unpacking with I₄TFX. The .dtx chooses its action depending on the format:

plain T_EX: 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 History

[2008/07/07 v1.0]

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

[2008/08/11 v1.1]

- Code is not changed.
- $\bullet~$ 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.

$\mathbf{Symbols}$	${f E}$
\@empty 62, 74, 119, 136, 181, 198	\end 12, 25
\@idxitem 50, 102, 164	_
\@ifclassloaded 32, 84, 146	I
\@ifclasswith 58, 110, 172	\idx@heading 42,
\@indextype 35, 87, 149	59, 71, 95, 111, 128, 157, 173, 190
\@mkboth 68, 80, 125, 142, 187, 204	\if@openright 112, 129, 174, 191
\@nameuse 35, 87, 149	\if@restonecol 52, 104, 166 \if@twocolumn 37, 89, 151
\@plus 48, 49, 100, 101, 162, 163	\ifx 62, 74, 119, 136, 181, 198
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C	(makerindex
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\cleardoublepage 113, 130, 175, 192	\NeedsTeXFormat
\clearpage	\nobreak 46
55, 107, 115, 132, 169, 177, 194	
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\columnseprule 44, 97, 159	\onecolumn 53, 105, 167
D	Р
\documentclass 2, 15	\p@ 45, 48, 98, 100, 160, 162
	\par 46
2 II nl. https://groupg.google.com/group/do	comp +out +ou /mag/20E7EhEc2f20hc1c

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

\parfillskip 49, 101, 163	\setindexpreamble
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\renewenvironment 33, 85, 147	${f U}$
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${f s}$	${f z}$
\section	\z@ 44, 47, 48, 49,
\setchapterpreamble 94, 156	97, 99, 100, 101, 159, 161, 162, 163