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.

Contents

1 Documentation **1**
1.1 Usage . . . 2
1.2 Preambles . . . 2
1.2.1 Class scrartcl . . . 2
1.2.2 Classes scrreprt and scrbook . . . 2

2 Implementation **3**

3 Installation **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 Catalogue **7**

5 History **8**
[2008/07/07 v1.0] . . . 8
[2008/08/11 v1.1] . . . 8
[2016/05/16 v1.2] . . . 8

6 Index **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 compatibiliy 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 ⟨*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]%
```

```
  [Prologue of package \texttt{index}\dotfill EOL]%
\end{document}
⟨/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.

Index

Preamble of class scrbook . . . . . EOL
Prologue of package index . . . . . EOL

chapter, 1	
first, 1	

2 Implementation

```
⟨*package⟩
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{scrindex}
  [2016/05/16 v1.2 Package index with KOMA-Script classes (HO)]%
\RequirePackage{index}[2004/01/20]%
\@ifclassloaded{scrartcl}{%
  \renewenvironment{theindex}{%
    \edef\indexname{%
      \the\@nameuse{idxtitle@\@indextype}%
    }%
    \if@twocolumn
      \@restonecolfalse
    \else
      \@restonecoltrue
    \fi
    \idx@heading
    \thispagestyle{\indexpagestyle}%
    \columnseprule\z@
    \columnsep 35\p@
    \index@preamble\par\nobreak
    \parindent\z@
    \parskip\z@ \@plus .3\p@\relax
    \parfillskip\z@ \@plus 1fil\relax
    \let\item\@idxitem
  }{%
    \if@restonecol
      \onecolumn
    \else
      \clearpage
    \fi
  }%
  \@ifclasswith{scrartcl}{idxtotoc}{%
    \renewcommand*{\idx@heading}{%
      \twocolumn[%
        \addsec{\indexname}%
        \ifx\index@prologue\@empty
        \else
          \index@prologue
          \bigskip
        \fi
      ]%
      \@mkboth{\indexname}{\indexname}%
    }%
  }{%
```

```
    \renewcommand*{\idx@heading}{%
      \twocolumn[%
        \section*{\indexname}%
        \ifx\index@prologue\@empty
        \else
          \index@prologue
          \bigskip
        \fi
      ]%
      \@mkboth{\indexname}{\indexname}%
    }%
  }%
}{}
\@ifclassloaded{scrreprt}{%
  \renewenvironment{theindex}{%
    \edef\indexname{%
      \the\@nameuse{idxtitle@\@indextype}%
    }%
    \if@twocolumn
      \@restonecolfalse
    \else
      \@restonecoltrue
    \fi
    \setchapterpreamble{\index@preamble}%
    \idx@heading
    \thispagestyle{\indexpagestyle}%
    \columnseprule\z@
    \columnsep 35\p@
    \parindent\z@
    \parskip\z@ \@plus .3\p@\relax
    \parfillskip\z@ \@plus 1fil\relax
    \let\item\@idxitem
  }{%
    \if@restonecol
      \onecolumn
    \else
      \clearpage
    \fi
  }%
  \@ifclasswith{scrreprt}{idxtotoc}{%
    \renewcommand*{\idx@heading}{%
      \if@openright
        \cleardoublepage
      \else
        \clearpage
      \fi
      \twocolumn[%
        \addchap{\indexname}%
        \ifx\index@prologue\@empty
        \else
          \index@prologue
          \bigskip
        \fi
      ]%
      \@mkboth{\indexname}{\indexname}%
    }%
  }{%
    \renewcommand*{\idx@heading}{%
      \if@openright
        \cleardoublepage
      \else
        \clearpage
```

```
    \fi
    \twocolumn[%
      \chapter*{\indexname}%
      \ifx\index@prologue\@empty
      \else
        \index@prologue
        \bigskip
      \fi
    ]%
    \@mkboth{\indexname}{\indexname}%
  }%
 }%
}{}
\@ifclassloaded{scrbook}{%
 \renewenvironment{theindex}{%
  \edef\indexname{%
    \the\@nameuse{idxtitle@\@indextype}%
  }%
  \if@twocolumn
    \@restonecolfalse
  \else
    \@restonecoltrue
  \fi
  \setchapterpreamble{\index@preamble}%
  \idx@heading
  \thispagestyle{\indexpagestyle}%
  \columnseprule\z@
  \columnsep 35\p@
  \parindent\z@
  \parskip\z@ \@plus .3\p@\relax
  \parfillskip\z@ \@plus 1fil\relax
  \let\item\@idxitem
 }{%
  \if@restonecol
    \onecolumn
  \else
    \clearpage
  \fi
 }%
 \@ifclasswith{scrbook}{idxtotoc}{%
  \renewcommand*{\idx@heading}{%
    \if@openright
      \cleardoublepage
    \else
      \clearpage
    \fi
    \twocolumn[%
      \addchap{\indexname}%
      \ifx\index@prologue\@empty
      \else
        \index@prologue
        \bigskip
      \fi
    ]%
    \@mkboth{\indexname}{\indexname}%
  }%
 }{%
  \renewcommand*{\idx@heading}{%
    \if@openright
      \cleardoublepage
    \else
      \clearpage
```

```
    \fi
    \twocolumn[%
      \chapter*{\indexname}%
      \ifx\index@prologue\@empty
      \else
        \index@prologue
        \bigskip
      \fi
    ]%
    \@mkboth{\indexname}{\indexname}%
  }%
 }%
}{}
```

⟨/package⟩

3 Installation

3.1 Download

Package. This package is available on CTAN[1]:

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
```

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
```

[1] http://ctan.org/pkg/scrindex

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 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 pdfLATEX:

```
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'/>
```

```
<version number='1.2'/>
<description>
  This package redefines environment `theindex' of package `index',
  if a class from <xref refid='koma-script'>KOMA-Script</xref> is loaded.
  Also option `idxtotoc' is supported. Index preambles can be given
  either by means of package `index' or via the interface provided
  by <xref refid='koma-script'>KOMA-Script</xref>.
  <p/>
  The package is part of the <xref refid='oberdiek'>oberdiek</xref>
  bundle.
</description>
<documentation details='Package documentation'
    href='ctan:/macros/latex/contrib/oberdiek/scrindex.pdf'/>
<ctan file='true' path='/macros/latex/contrib/oberdiek/scrindex.dtx'/>
<miktex location='oberdiek'/>
<texlive location='oberdiek'/>
<install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip'/>
</entry>
⟨/catalogue⟩
```

5 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.
- 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

A

\addchap 118, 180
\addsec 61

B

\begin 6, 19
\bigskip 65, 77, 122, 139, 184, 201

C

\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

D

\documentclass 2, 15
\dotfill 4, 11, 17, 24

E

\end 12, 25

[2] Url: http://groups.google.com/group/de.comp.text.tex/msg/39575b5e2f29be1e

I

\idx@heading 42, 59, 71, 95, 111, 128, 157, 173, 190
\if@openright 112, 129, 174, 191
\if@restonecol 52, 104, 166
\if@twocolumn 37, 89, 151
\ifx 62, 74, 119, 136, 181, 198
\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

M

\makeindex 5, 18

N

\NeedsTeXFormat 28
\nobreak 46

O

\onecolumn 53, 105, 167

P

\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

R

\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

Z

\z@ 44, 47, 48, 49, 97, 99, 100, 101, 159, 161, 162, 163