The \texttt{scrindex} package

Heiko Oberdiek*
\texttt{<heiko.oberdiek at googlemail.com>}
2016/05/16 v1.2

Abstract

This package redefines environment ‘theindex’ of package \texttt{index}, if a class from KOMA-Script is loaded. Also option \texttt{idxtotoc} is supported. Index preambles can be given either by means of package \texttt{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 \texttt{scrartcl} ................. 2
    1.2.2 Classes \texttt{scrreprt} and \texttt{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 \texttt{index}, written by David M. Jones, detects the standard classes \texttt{article}, \texttt{report}, and \texttt{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 \texttt{index}.

Environment \texttt{theindex} is redefined to support both package \texttt{index} and KOMA-Script’s classes. Thus both the prologue of package \texttt{index} and the preamble of KOMA-Script’s classes are available. Also class option \texttt{idxtotoc} of KOMA-Script is supported.

*Please report any issues at https://github.com/ho-tex/oberdiek/issues
1.1 Usage

The package \texttt{scrindex} is loaded without options:

\usepackage{scrindex}

It loads package \texttt{index} and requests version 2004/01/20 or later. L\TeX{}’s package interface allows multiple calls of the same package. The package is loaded at its first package loading command. At later times L\TeX{} 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 \texttt{theindex} is only redefined for a supported class:

- \texttt{scrartcl}
- \texttt{scrreprt}
- \texttt{scrbook}

1.2 Preambles

Both the prologue of package \texttt{index} and the preamble of KOMA-Script’s classes are supported. The position depends on the class.

1.2.1 Class \texttt{scrartcl}

\begin{verbatim}
\documentclass{scrartcl}
\usepackage{scrindex}
\setindexpreamble{Preamble of \texttt{scrartcl}\dotfill EOL}
\makeindex
\begin{document}
\section{First Section}
\index{first}
\index{section}
\printindex[default]%
\[Prologue of package \texttt{index}\dotfill EOL\%
\end{document}
\end{verbatim}

The prologue of package \texttt{index} is first set straight after the section title spanning both columns. Then the preamble of KOMA-Script follows in the first left column.

<table>
<thead>
<tr>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prologue of package \texttt{index} . . . . . . . . . . . . . . . . EOL</td>
</tr>
<tr>
<td>Preamble of \texttt{scrartcl} . . . EOL</td>
</tr>
<tr>
<td>first, 1</td>
</tr>
<tr>
<td>section, 1</td>
</tr>
</tbody>
</table>

1.2.2 Classes \texttt{scrreprt} and \texttt{scrbook}

\begin{verbatim}
\documentclass[openany]{scrbook}% or \texttt{scrreprt}
\usepackage{scrindex}
\setindexpreamble{Preamble of class \texttt{scrbook}\dotfill EOL}
\makeindex
\begin{document}
\chapter{First Chapter}
\index{first}
\index{chapter}
\printindex[default]%
\end{document}
\end{verbatim}

\begin{verbatim}
\documentclass[openany]{scrbook}% or \texttt{scrreprt}
\usepackage{scrindex}
\setindexpreamble{Preamble of class \texttt{scrbook}\dotfill EOL}
\makeindex
\begin{document}
\chapter{First Chapter}
\index{first}
\index{chapter}
\printindex[default]%
\end{document}
\end{verbatim}

2
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.

<table>
<thead>
<tr>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preamble of class <code>scrbook</code></td>
</tr>
<tr>
<td>Prologue of package <code>index</code></td>
</tr>
<tr>
<td>chapter, 1</td>
</tr>
<tr>
<td>first, 1</td>
</tr>
</tbody>
</table>

## 2 Implementation

```latex
\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{index}
\columnseprule\z@
\columnsep35\p@
\index@preamble
\par
\parindent\z@
\parskip\z@ \@plus .3\p@
\relax
\parfillskip\z@ \@plus .3\p@
\let\item@idxitem
\@ifclassloaded{scratccl}{{%
\renewenvironment{theindex}{%}
\edef\indexname{%
\the@nameuse{idxtitle@\@indextype}%
}%}
\if@twocolumn
\@restonecolfalse
\else
\@restonecoltrue
\fi
\idx@heading
\twocolumn[
\addsec{\indexname}
\if\@empty
\else
\index@prologue
\bigskip
\fi
\@mkboth{\indexname}{\indexname}
}%}
\else
\clearpage
\fi
\fi
}```
3 Installation

3.1 Download

Package. This package is available on CTAN:\footnote{http://ctan.org/pkg/scrindex}


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 \texttt{texmf} in their name are usually organized this way.

3.2 Bundle installation

Unpacking. Unpack the \texttt{oberdiek.tds.zip} in the TDS tree (also known as \texttt{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 \texttt{attachfile2} comes with the Perl script \texttt{pdfatfi.pl} that should be installed in such a way that it can be called as \texttt{pdfatfi}. Example (linux):

chmod +x scripts/oberdiek/pdfatfi.pl

cp scripts/oberdiek/pdfatfi.pl /usr/local/bin/

3.3 Package installation

Unpacking. The \texttt{.dtx} file is a self-extracting \texttt{docstrip} archive. The files are extracted by running the \texttt{.dtx} through plain \TeX{}:

\texttt{tex scrindex.dtx}
TDS. Now the different files must be moved into the different directories in your installation TDS tree (also known as \texttt{texmf} tree):

- \texttt{scrindex.sty} → \texttt{tex/latex/oberdiek/scrindex.sty}
- \texttt{scrindex.pdf} → \texttt{doc/latex/oberdiek/scrindex.pdf}
- \texttt{scrindex-example1.tex} → \texttt{doc/latex/oberdiek/scrindex-example1.tex}
- \texttt{scrindex-example2.tex} → \texttt{doc/latex/oberdiek/scrindex-example2.tex}
- \texttt{scrindex.dtx} → \texttt{source/latex/oberdiek/scrindex.dtx}

If you have a \texttt{docstrip.cfg} that configures and enables \texttt{docstrip}'s TDS installing feature, then some files can already be in the right place, see the documentation of \texttt{docstrip}.

3.4 Refresh file name databases
If your \TeX{} distribution (\texttt{te\TeX{}}, \texttt{mik\TeX{}}, \ldots{}) relies on file name databases, you must refresh these. For example, \texttt{te\TeX{}} users run \texttt{texhash} or \texttt{mktexlar}.

3.5 Some details for the interested
Unpacking with \LATEX{}. The .dtx chooses its action depending on the format:

plain \TeX: Run \texttt{docstrip} and extract the files.

\LATEX: Generate the documentation.

If you insist on using \LATEX{} for \texttt{docstrip} (really, \texttt{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 \texttt{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 pdff\TeX{}:

```
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 \texttt{caption} and \texttt{description} are imported from the original XML file from the Catalogue. The name of the XML file in the Catalogue is \texttt{scrindex.xml}.

```
<catalogue>
  <entry datestamp='$Date$' modifier='$Author$' id='scrindex'>
    <name>scrindex</name>
    <caption>Make index package work with Koma-script classes.</caption>
    <authorref id='auth:oberdiek'/>
    <copyright owner='Heiko Oberdiek' year='2008'/>
    <license type='lppl1.3'/>
</entry>
```

7
This package redefines environment `theindex' of package `index',
if a class from \xref{\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 \xref{\koma-script}.

The package is part of the \xref{\oberdiek} bundle.

The package is part of the \xref{\oberdiek} bundle.

\begin{description}
\item<version number='1.2'/>\end{description}

\begin{entry}
\\hhref{ctan:/macros/latex/contrib/oberdiek/scrindex.pdf}/
\\ctan{file='true' path='/macros/latex/contrib/oberdiek/scrindex.dtx'/}
\\miktex{location='oberdiek'/}
\\textlive{location='oberdiek'/}
\\\install{path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip'/}
\end{entry}

5 History

\[2008/07/07 v1.0\]
- First version, also published in newsgroup \texttt{de.comp.text.tex}:
  “Re: Zähler bei \index”\textsuperscript{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.

\begin{center}
\begin{tabular}{ll}
Symbols & \begin{tabular}{l}
\empty@ & 62, 74, 119, 136, 181, 198 \\
\idxitem@ & 50, 102, 164 \\
\ifclassloaded@ & 32, 84, 146 \\
\ifclasswith@ & 58, 110, 172 \\
\index@ & 35, 87, 149 \\
\ifmarkboth@ & 68, 90, 125, 142, 187, 204 \\
\ifnameuse@ & 35, 87, 149 \\
\ifcplus@ & 48, 49, 100, 101, 162, 163 \\
\ifacoltrue@ & 38, 90, 152 \\
\ifacolfalse@ & 40, 92, 154 \\
\end{tabular} & \begin{tabular}{l}
\begin@ & 6, 19 \\
\bigskip@ & 65, 77, 122, 139, 184, 201 \\
\end{tabular} \\
\begin{tabular}{l}
\chap@ & 20, 135, 197 \\
\cleardoublepage@ & 113, 130, 175, 192 \\
\clearpage@ & 55, 107, 115, 132, 169, 177, 194 \\
\columnsep@ & 45, 98, 160 \\
\columnseprule@ & 44, 97, 159 \\
\documentclass@ & 2, 15 \\
\dotfill@ & 4, 11, 17, 24 \\
\end{tabular} & \begin{tabular}{l}
\addchap@ & 118, 180 \\
\addsec@ & 61 \\
\end{tabular}
\end{tabular}
\end{center}

\textsuperscript{2}Url: \url{http://groups.google.com/group/de.comp.text.tex/msg/39575b5e2f29be1e}
<table>
<thead>
<tr>
<th>Index Command</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>\idx@heading</td>
<td>42, 59, 71, 95, 111, 128, 157, 173, 190</td>
</tr>
<tr>
<td>\if@openright</td>
<td>112, 129, 174, 191</td>
</tr>
<tr>
<td>\if@restonecol</td>
<td>52, 104, 166</td>
</tr>
<tr>
<td>\if@twocolumn</td>
<td>37, 89, 151</td>
</tr>
<tr>
<td>\index</td>
<td>62, 74, 119, 136, 181, 198</td>
</tr>
<tr>
<td>\index@preamble</td>
<td>8, 9, 21, 22</td>
</tr>
<tr>
<td>\index@prologue</td>
<td>62, 64, 74, 76, 119, 121, 136, 138, 181, 183, 198, 200</td>
</tr>
<tr>
<td>\indexname</td>
<td>34, 61, 68, 73, 80, 86, 118, 125, 135, 142, 148, 180, 187, 197, 204</td>
</tr>
<tr>
<td>\indexpagestyle</td>
<td>43, 96, 158</td>
</tr>
<tr>
<td>\item</td>
<td>50, 102, 164</td>
</tr>
<tr>
<td>\makeindex</td>
<td>5, 18</td>
</tr>
<tr>
<td>\NeedsTeXFormat</td>
<td>28</td>
</tr>
<tr>
<td>\nobreak</td>
<td>46</td>
</tr>
<tr>
<td>\onecolumn</td>
<td>53, 105, 167</td>
</tr>
<tr>
<td>\p@</td>
<td>45, 48, 98, 100, 160, 162</td>
</tr>
<tr>
<td>\par</td>
<td>46</td>
</tr>
<tr>
<td>\parfillskip</td>
<td>49, 101, 163</td>
</tr>
<tr>
<td>\parindent</td>
<td>47, 99, 161</td>
</tr>
<tr>
<td>\parskip</td>
<td>48, 100, 162</td>
</tr>
<tr>
<td>\ProvidesPackage</td>
<td>29</td>
</tr>
<tr>
<td>\renewcommand</td>
<td>59, 71, 111, 128, 173, 190</td>
</tr>
<tr>
<td>\renewenvironment</td>
<td>33, 85, 147</td>
</tr>
<tr>
<td>\RequirePackage</td>
<td>31</td>
</tr>
<tr>
<td>\section</td>
<td>7, 73</td>
</tr>
<tr>
<td>\setchapterpreamble</td>
<td>94, 156</td>
</tr>
<tr>
<td>\setindexpreamble</td>
<td>4, 17</td>
</tr>
<tr>
<td>\texttt</td>
<td>4, 11, 17, 24</td>
</tr>
<tr>
<td>\the</td>
<td>35, 87, 149</td>
</tr>
<tr>
<td>\thispagestyle</td>
<td>43, 96, 158</td>
</tr>
<tr>
<td>\twocolumn</td>
<td>60, 72, 117, 134, 179, 196</td>
</tr>
<tr>
<td>\usepackage</td>
<td>3, 16</td>
</tr>
<tr>
<td>\var@</td>
<td>44, 47, 48, 49, 97, 99, 100, 101, 159, 161, 162, 163</td>
</tr>
</tbody>
</table>