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 \texttt{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 \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 index.

Environment \texttt{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 \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:

\begin{verbatim}
\usepackage{scrindex}
\end{verbatim}

It loads package \texttt{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 \texttt{\usepackage{index}} before or after \texttt{\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} \ldots \ EOL}
\makeindex
\begin{document}
\section{First Section}
\index{first}
\index{section}
\printindex
[default]
[Prologue of package \texttt{index} \ldots \ 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} \ldots \ EOL</td>
</tr>
<tr>
<td>Preamble of \texttt{scrartcl} \ldots \ 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 scrreprt
\usepackage{scrindex}
\setindexpreamble{Preamble of class \texttt{scrbook} \ldots \ EOL}
\makeindex
\begin{document}
\chapter{First Chapter}
\index{first}
\index{chapter}
\printindex
[default]
\end{document}
\end{verbatim}

\begin{verbatim}
\documentclass[openany]{scrbook}% or scrreprt
\usepackage{scrindex}
\setindexpreamble{Preamble of class \texttt{scrbook} \ldots \ EOL}
\makeindex
\begin{document}
\chapter{First Chapter}
\index{first}
\index{chapter}
\printindex
[default]
\end{document}
\end{verbatim}
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> .................................. EOL</td>
</tr>
<tr>
<td>Prologue of package <code>index</code> ................................. EOL</td>
</tr>
</tbody>
</table>

## 2 Implementation

```latex
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{scrindex}[2016/05/16 \hbox{v1.2 Package index with KOMA-Script classes (HO)}]
\RequirePackage{index}[2004/01/20]
\if@twocolumn
\@restonecolfalse
\else
\@restonecoltrue
\fi
\idx@heading
\thispagestyle{index}
\columnseprule\z@ \columnsep35\p@ \index@preamble\par\nobreak
\parindent\z@ \parskip\z@ \@plus.3\p@elax
\parfillskip\z@ \@plus.5\p@elax
\let\item@\@idxitem
\if@twocolumn
\twocolumn[\addsec{\indexname}
\ifx\index@prologue\@empty
\else
\index@prologue
\bigskip
\fi]
\@mkboth{\indexname}{\indexname}
\fi
\if@restonecol
\onecolumn
\else
\clearpage
\fi
\if@twocolumnwith{scrartcl}{idxtotoc}
\renewcommand*{\idx@heading}{\twocolumn[\addsec{\indexname}
\ifx\index@prologue\@empty
\else
\index@prologue
\bigskip
\fi]
\@mkboth{\indexname}{\indexname}}
\else
\onecolumn
\fi
\if@restonecol
\onecolumn
\else
\clearpage
\fi
\fi
```

\section*{Index}

Preamble of class `scrbook` .................................. EOL

Prologue of package `index` ................................. EOL

chapter, 1

first, 1
3 Installation

3.1 Download

Package. This package is available on CTAN:\(^1\)

- \texttt{CTAN:macros/latex/contrib/oberdiek/scrindex.dtx} The source file.

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.

- \texttt{CTAN:install/macros/latex/contrib/oberdiek.tds.zip}

\emph{TDS} refers to the standard “A Directory Structure for \TeX\ Files” (\texttt{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):

\begin{verbatim}
unzip oberdiek.tds.zip -d ~/texmf
\end{verbatim}

Script installation. Check the directory \texttt{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):

\begin{verbatim}
chmod +x scripts/oberdiek/pdfatfi.pl
cp scripts/oberdiek/pdfatfi.pl /usr/local/bin/
\end{verbatim}

3.3 Package installation

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

\begin{verbatim}
tex scrindex.dtx
\end{verbatim}

\(^1\)\texttt{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 `mktexlar`.

3.5 Some details for the interested

Unpacking with `l4TeX`. The `.dtx` chooses its action depending on the format:

- plain TeX: Run `docstrip` and extract the files.
- `l4TeX`: Generate the documentation.

If you insist on using `l4TeX` for `docstrip` (really, `docstrip` does not need `l4TeX`), 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 pdfl4TeX:

```
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`.

```
⟨catalogue⟩
<?xml version='1.0' encoding='us-ascii'?>
<!DOCTYPE entry SYSTEM 'catalogue.dtd'>
<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 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>`.

The package is part of the `<xref refid='oberdiek'>oberdiek</xref>` bundle.

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.

<table>
<thead>
<tr>
<th>Symbols</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>@empty</td>
<td>. . . . 62, 74, 119, 136, 181, 198</td>
</tr>
<tr>
<td>@idxitem</td>
<td>. . . . 50, 102, 164</td>
</tr>
<tr>
<td>@ifclassloaded</td>
<td>. . . . 32, 84, 146</td>
</tr>
<tr>
<td>@ifclasswith</td>
<td>. . . . 58, 110, 172</td>
</tr>
<tr>
<td>@indextype</td>
<td>. . . . 35, 87, 149</td>
</tr>
<tr>
<td>@mkboth</td>
<td>. . . . 68, 80, 125, 142, 187, 204</td>
</tr>
<tr>
<td>@nameuse</td>
<td>. . . . 35, 87, 149</td>
</tr>
<tr>
<td>@plus</td>
<td>. . . . 48, 49, 100, 101, 162, 163</td>
</tr>
<tr>
<td>@restonecolfalse</td>
<td>. . . . 38, 90, 152</td>
</tr>
<tr>
<td>@restonecoltrue</td>
<td>. . . . 40, 92, 154</td>
</tr>
<tr>
<td>\addchap</td>
<td>. . . . 118, 180</td>
</tr>
<tr>
<td>\addsec</td>
<td>. . . . 61</td>
</tr>
<tr>
<td>\begin</td>
<td>. . . . . . . . . . 6, 19</td>
</tr>
<tr>
<td>\bigskip</td>
<td>. . . . 65, 77, 122, 139, 184, 201</td>
</tr>
<tr>
<td>\chapter</td>
<td>. . . . 20, 135, 197</td>
</tr>
<tr>
<td>\cleardoublepage</td>
<td>. . . . 113, 130, 175, 192</td>
</tr>
<tr>
<td>\clearpage</td>
<td>. . . . 55, 107, 115, 132, 169, 177, 194</td>
</tr>
<tr>
<td>\columnsep</td>
<td>. . . . 45, 98, 160</td>
</tr>
<tr>
<td>\columnseprule</td>
<td>. . . . 44, 97, 159</td>
</tr>
<tr>
<td>\documentclass</td>
<td>. . . . 2, 15</td>
</tr>
<tr>
<td>\dotfill</td>
<td>. . . . 4, 11, 17, 24</td>
</tr>
</tbody>
</table>

\(^2\)Url: [http://groups.google.com/group/de.comp.text.tex/msg/3957b5e2f29be1e](http://groups.google.com/group/de.comp.text.tex/msg/3957b5e2f29be1e)