The \texttt{scrindex} package

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2016/05/16 v1.2

Abstract

This package redefines environment ‘\texttt{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.

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1 Documentation

Package \texttt{index}, written by David M. Jones, detects the standard classes \texttt{article}, \texttt{report}, and \texttt{book}. It redefines environment ‘\texttt{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.

\textsuperscript{*}Please report any issues at \url{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. \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 \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}
(*example1*)
\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}
(*example1*)
\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.

\begin{tabular}{|l|}
\hline
Index
\begin{itemize}
\item Prologue of package \texttt{index} \dotfill EOL
\item Preamble of \texttt{scrartcl} \dotfill EOL
\item first, 1
\item section, 1
\end{itemize}
\hline
\end{tabular}

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

\begin{verbatim}
(*example2*)
\documentclass[openany]{scrbook}% or \texttt{scrreprt}
\usepackage{scrindex}
\setindexpreamble{Preamble of class \texttt{scrbook}\dotfill EOL}
\makeindex
\begin{document}
\section{First Section}
\index{first}
\index{section}
\end{document}
(*example2*)
\end{verbatim}

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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>
<tr>
<td>chapter, 1</td>
</tr>
<tr>
<td>first, 1</td>
</tr>
</tbody>
</table>

## 2 Implementation

\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{scrindex}[2016/05/16 v1.2 Package index with KOMA-Script classes (HO)]
\RequirePackage{index}[2004/01/20]
@ifclassloaded{scrartcl}{%
  \edef\indexname{\the\@nameuse{idxtitle@\@indextype}}%
}
%
\ifx\index@prologue\@empty
else
   \index@prologue
   \bigskip
   \[
   \@mkboth{\indexname}{\indexname}\]
\fi
\]%
\@mkboth{\indexname}{\indexname}%
}
\renewcommand*{\idx@heading}{
  \twocolumn[%
   \section*{\indexname}
   \ifx\index@prologue\@empty
   \else
   \index@prologue
   \bigskip
   \[
   \fi
   \]%
   \@mkboth{\indexname}{\indexname}\]
\]%
\renewcommand*{\idx@heading}{
  \if@openright
  \cleardoublepage
  \else
  \clearpage
  \fi
  \twocolumn[%
  \addchap{\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@ \@plus .3\p@\relax
    \parskip\z@ \@plus .3\p@\relax
    \parfillskip\z@ \@plus 1fil\relax
    \let\item@idxitem
    \if@restonecol
      \onenormalpage
    \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}\]
   }{}}
3 Installation

3.1 Download

Package. This package is available on CTAN:\footnote{\url{CTAN:macros/latex/contrib/oberdiek/scrindex.dtx}}:


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 \texttt{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):

\begin{verbatim}
    unzip oberdiek.tds.zip -d ~\slash texmf
\end{verbatim}
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):

```
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 by in the right place, see the documentation of docstrip.

3.4 Refresh file name databases

If your TeX distribution (TeX Live, MiKTeX, ...) relies on file name databases, you must refresh these. For example, TeX Live 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:

```
l 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 pdf\LaTeX:

```
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 \texttt{de.comp.text.tex}:
  “Re: Zähler bei \texttt{index}”

[2008/08/11 v1.1]
- Code is not changed.
- 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.

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\footnote{Url: https://groups.google.com/group/de.comp.text.tex/msg/39575b5e2f29be1e}
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