The \texttt{scrindex} package

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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.

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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 `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.
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 \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:

\begin{itemize}
  \item \texttt{scrartcl}
  \item \texttt{scrreprt}
  \item \texttt{scrbook}
\end{itemize}

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.

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

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

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

1
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

\begin{verbatim}
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{scrindex}[2008/08/11 v1.1 Package index with scr* classes (HO)]
\RequirePackage{index}[2004/01/20]
\ifclassloaded{scartcl} {%
  \renewenvironment{theindex}{{
    \edef\indexname{\the\@nameuse{idxtitle@\@indextype}}%}
  \if@twocolumn
    \@restonecolfalse
  \else
    \@restonecoltrue
  \fi
  \idx@heading
  \thispagestyle{\indexpagestyle} %
  \columnseprule\z@
  \columnsep35\p@
  \index@preamble\par\nobreak
  \parindent\z@
  \parskip\z@\@plus.3\p@\relax
  \parfillskip\z@\@plus1fil\relax
  \let\item@\@idxitem
}{%}
\if@restonecol
  \onecolumn
\else
  \clearpage
\fi}
\@ifclasswith{scartcl}{idxtotoc} {%
  \renewcommand*{\idx@heading}{%}
  \twocolumn[{
    \addsec{\indexname}
    \ifx\index@prologue\@empty
    \else
    \index@prologue
    \bigskip
    \fi
  }]%}
  \@mkboth{\indexname}{\indexname}
\}%
\if@restonecol%
  \onecolumn
\else%
  \clearpage
\fi}
\@ifclasswith{scartcl}{idxtotoc} {%
  \renewcommand*{\idx@heading}{%}
  \twocolumn[{
    \addsec{\indexname}
    \ifx\index@prologue\@empty
    \else
    \index@prologue
    \bigskip
    \fi
  }]%}
  \@mkboth{\indexname}{\indexname}
\}%
\end{verbatim}


3 Installation

3.1 Download

Package. This package is available on CTAN:\footnote{ftp://ftp.cnt.org/tex-archive/}

\begin{itemize}
\item \texttt{CTAN:macros/latex/contrib/oberdiek/scrindex.dtx} The source file.
\item \texttt{CTAN:macros/latex/contrib/oberdiek/scrindex.pdf} Documentation.
\end{itemize}

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.

\begin{itemize}
\item \texttt{CTAN:install/macros/latex/contrib/oberdiek.tds.zip}
\end{itemize}

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}
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

**Attached source.** The PDF documentation on CTAN also includes the `.dtx` source file. It can be extracted by AcrobatReader 6 or higher. Another option is `pdftk`, e.g. unpack the file into the current directory:

```bash
pdftk scrindex.pdf unpack_files output .
```

**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
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:

```latex
\PassOptionsToClass{a4paper}{article}
```

An example follows how to generate the documentation with `pdflatex`:

```bash
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

^2Url: [http://groups.google.com/group/de.comp.text.tex/msg/39575b5e2f29be1e](http://groups.google.com/group/de.comp.text.tex/msg/39575b5e2f29be1e)
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; numbers in roman refer to the code lines where the entry is used.

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