1 Documentation

The class \texttt{semproc} is derived from KOMA-Script’s class \texttt{scrreprt}. In addition to \texttt{scrreprt}’s many features, it provides \texttt{talk} as an alternative to the \texttt{chapter} command and some means to have a table of contents and a bibliography for each such \texttt{talk}. Currently, \texttt{semproc} supports German and English.

1.1 Macros

\texttt{\talk \{} \langle speaker={Speaker}, notes={Typist} \rangle \} \{ \langle title \rangle \} starts a new talk with title \langle title \rangle, speaker \langle Speaker \rangle and typist \langle Typist \rangle. The \texttt{talk} macro also starts a new \texttt{biblatex-refsection}.

\texttt{\globaltoc} typesets a global table of contents consisting of the various talks and its speakers.

\texttt{\localtoc} typesets a local table of contents consisting of the sections and subsections in the current talk.

\texttt{\localbib} typesets a bibliography for the current talk.

\texttt{\nonumchapter \{} \langle title \rangle \} starts a new unnumbered \texttt{chapter*} with \langle title \rangle but makes sure the chapter occurs in the global table of contents. More precisely, \texttt{\nonumchapter} is just a wrapper around \texttt{chapter*} and \texttt{etoctoccontentsline*}.

1.2 Environments

\texttt{\summary} The \texttt{summary} environment is a drop-in replacement for the \texttt{abstract} environment.

1.3 Customization

\texttt{semproc} allows for customization of the fonts used in the heading of a talk and in the local and global table of contents. The fonts may be customized with
<table>
<thead>
<tr>
<th>Font</th>
<th>Usage</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>talkhead</td>
<td>Font of the head of a talk heading, i.e. the line “Talk 3”.</td>
<td>\usekomafont {disposition}</td>
</tr>
<tr>
<td>talktitle</td>
<td>Font of the title of a talk</td>
<td>\usekomafont {disposition}</td>
</tr>
<tr>
<td>talkspeakers</td>
<td>Font of the speaker and typist of a talk</td>
<td>\usekomafont {disposition}</td>
</tr>
<tr>
<td>globaltoespeaker</td>
<td>Speaker in an entry in the global table of contents</td>
<td>\sffamily</td>
</tr>
<tr>
<td>globaltocnumber</td>
<td>Number of an entry in the global table of contents</td>
<td>\usekomafont {disposition}</td>
</tr>
<tr>
<td>globaltoctitle</td>
<td>Title of an entry in the global table of contents</td>
<td>\usekomafont {disposition}</td>
</tr>
<tr>
<td>globaltocpage</td>
<td>Page number of an entry in the global table of contents</td>
<td>\usekomafont {disposition}</td>
</tr>
<tr>
<td>localtocheading</td>
<td>Heading of the local table of contents typeset with \localtoc</td>
<td>\usekomafont {disposition}</td>
</tr>
<tr>
<td>localtocnumber</td>
<td>Number of an entry in the local table of contents</td>
<td>\sffamily</td>
</tr>
<tr>
<td>localtoctitle</td>
<td>Title of an entry in the local table of contents</td>
<td>\sffamily</td>
</tr>
<tr>
<td>localtocpage</td>
<td>Page number of an entry in the local table of contents</td>
<td>\sffamily</td>
</tr>
<tr>
<td>summaryheading</td>
<td>Font for the heading of a summary environment</td>
<td>\usekomafont {disposition}</td>
</tr>
</tbody>
</table>

Table 1: Fonts that can be customized.

\setkomafont or \addtokomafont as described in the documentation of KOMA-Script. All fonts are shown in table 1.

### 1.4 Packages

semproc loads the following packages: xkeyval, xcolor etoc, hyperref, bookmark, etoolbox, bibliography and csquotes. Moreover, it passes the option dvipsnames to the package xcolor, which is loaded automatically by hyperref. For the precise arguments to these packages, the reader is referred to the implementation.

Note however, that bibliographies should be typeset using bibliography as opposed to bibtex.
1.5 Example

An example can be found in the file example.tex.

2 Implementation

1 (*class)

\texttt{scrreprt} Load \texttt{scrreprt} and pass all options to \texttt{scrreprt}.

2 \texttt{\ DeclareOption*{\ PassOptionsToClass{\ CurrentOption}{scrreprt}}}  
3 \texttt{\ ProcessOptions\ relax}  
4 \texttt{\ LoadClass{scrreprt}}

\textbf{Packages} We load \texttt{xkeyval} for processing the names of the speaker/typist of each talk.

5 \texttt{\ RequirePackage{xkeyval}}

We load \texttt{xcolor} and pass option \texttt{dvipsnames} as we set \texttt{RoyalBlue} as default colour for all links.

6 \texttt{\ PassOptionsToPackage{dvipsnames}{xcolor}}  
7 \texttt{\ RequirePackage{xcolor}}

We load \texttt{etoc} for creating the macros for the local table of contents per talk and the global table of contents.

8 \texttt{\ RequirePackage{etoc}}

We load \texttt{hyperref} for references. Option \texttt{hypertexnames} must be set to \texttt{false}, otherwise referencing the talks is buggy – at least the last time I tried.

9 \texttt{\ RequirePackage[]}  
10 \texttt{[unicode=true,colorlinks=true,hypertexnames=false]}  
11 \texttt{\ Hyperref{}}  
12 \texttt{\ RequirePackage{bookmark}}  
13 \texttt{\ hypersetup\ all\ colors={RoyalBlue}}

We load \texttt{etoolbox} for \texttt{\ifdefvoid} used in \texttt{\semproc@talk@head}.

14 \texttt{\ RequirePackage{etoolbox}}

We load \texttt{biblatex} for managing bibliographies per talk via refsections and \texttt{csquotes} as it is recommended by \texttt{biblatex}.

15 \texttt{\ RequirePackage{biblatex}}  
16 \texttt{\ RequirePackage{csquotes}}

\textbf{Internationalization} Using \texttt{\providecaptionname} of KOMA-Script, we define language dependent strings. Currently only German and English are supported.

We first define the german variants:

17 \texttt{\providecaptionname{german,ngerman}{}}  
18 \texttt{\ (\talkname{Vortrag}}}  
19 \texttt{\ provide\ caption\ name{german,ngerman}}}
Using KOMA-Script’s \newkomafont, we define various fonts that we use in this class. First, we define the fonts talkhead, talktitle and talkspeakers, which are used for the heading, i.e. the line “Talk 1”, title and speakers/typists of the respective talk.

Next, we define the fonts globaltocspeaker, globaltocnumber, globaltocpage and globaltoctitle, which are used for the speaker, number, page and title of the talk in the global table of contents.

Similarly, we define the fonts localtocnumber, localtocpage, localtoctitle for the local table of contents. Additionally, we define localtocheading, which is the font of the heading of the local table of contents.
Finally, we define the font \texttt{summaryheading}, which is the font of the heading of the \texttt{summary} environment also defined in this class.

\newkomafont{summaryheading}

\texttt{\nonumchapter} \texttt{\nonumchapter{⟨title⟩}} is a thin wrapper around \texttt{\chapter*} and \texttt{\etoctoccontentsline*}.

\texttt{\newcommand{\nonumchapter}[1][]{\chapter*{#1}}}
\texttt{\etoctoccontentsline*{chapter}{#1}{0}}

Talk counter A new counter for the talks.

\texttt{\newcounter{talk}}
\texttt{\setcounter{talk}{0}}

Compatibility with autoref.

\texttt{\def{\talkautorefname}{\talkname}}

We let sections be numbered within the talk, equations within the section and without referring to the chapter. The latter is achieved by redefining \texttt{\thesection} and \texttt{\theHsection} for hyperref.

\texttt{\@addtoreset{section}{talk}}
\texttt{\@addtoreset{equation}{section}}
\texttt{\renewcommand{\thesection}{\arabic{section}}}\texttt{\renewcommand{\theHsection}{\arabic{section}}}\texttt{\renewcommand{\theequation}{\thesection.\arabic{equation}}}

\texttt{\semproc@talk@head} The macro \texttt{\semproc@talk@head{⟨title⟩}} typesets the heading of the talk with the given title. The counter \texttt{talk} has to be incremented and the values of \texttt{\semproc@talk@speaker} and \texttt{\semproc@talk@notes} have to be set before calling \texttt{\semproc@talk@head}.

\texttt{\newcommand{\semproc@talk@head}[1][]{\noindent\usekomafont{talkhead}\talkname~\thetalk}}
\texttt{\par\nobreak\vskip2ex\usekomafont{talktitle}\noindent#1}}
\texttt{\hrulefill\vskip1ex}
\texttt{\usekomafont{talkspeakers}\noindent\semproc@talk@speaker%\ifdefvoid{\semproc@talk@notes}{}{\hfill\notesname~\semproc@talk@notes\hfill}}
The main macro of this class is \texttt{\textbackslash talk }\{\langle\texttt{speaker=Speaker, notes=Notes}\rangle\}\{\langle\texttt{title}\rangle\}\} intended to replace \texttt{\textbackslash chapter}. We first prepare the optional key/value options.

\begin{verbatim}
\define@key{talk}{speaker}\
{\def\semproc@talk@speaker{#1}}
\define@key{talk}{notes}\
{\def\semproc@talk@notes{#1}}
\end{verbatim}

The macro \texttt{\textbackslash talk} parses the key/value options, increments the counter \texttt{talk} and calls \texttt{\semproc@talk@head} for typesetting the heading. Finally, it starts a new \texttt{biblatex} reference and writes all the data to the .aux file via \texttt{etoc}'s \texttt{\etoccontentsline} macro. The \texttt{\@currentlabelname} is set for correct references.

\begin{verbatim}
\newcommand*{\talk}[2]\empty{\
\presetkeys{talk}{speaker,notes}{}\
\setkeys{talk}{#1}\
\refstepcounter{talk}\
\cleardoubleoddplainpage\
\thispagestyle{\chapterpagestyle}\
\semproc@talk@head{#2}\
\renewcommand\@currentlabelname{#2}\
\newrefsection\
\etoctoccontentsline*{talk}\{\protect\numberline{\thetalk}#2\}\{0\}\
\etoctoccontentsline{speaker}\{\protect\numberline{}\semproc@talk@speaker\}\{#2\}\
\renewcommand\@currentlabelname{#2}\
}
\end{verbatim}

Various lengths and a box

Lengths for typesetting the local and global tables of contents.

\begin{verbatim}
\newlength{\semproc@toc@skip}
\setlength{\semproc@toc@skip}{4em}
\newlength{\semproc@toc@calc}
\end{verbatim}

\texttt{\semproc@toc@skipafter} typesets \texttt{etocnumber} with the chosen \texttt{style} and then skips the difference of \texttt{\semproc@toc@skip} and the width of \texttt{etocnumber}.

\begin{verbatim}
\newcommand{\semproc@toc@skipafter}{\langle\texttt{style}\rangle}
\settowidth{\semproc@toc@calc}{\protect\numberline{\thetalk}\{0\}}
\setlength{\semproc@toc@calc}{#1-\etocnumber}\{#1\}
\addtolength{\semproc@toc@calc}{-\semproc@toc@skip}\{#1\}
\setlength{\semproc@toc@calc}{#1}\}
\end{verbatim}
\globaltoc  
\globaltoc prints out a global table of contents showing only the talks and the respective speakers/typists.

\newcommand{\globaltoc}{%
  \begingroup
  \etocsetnexttocdepth{1}
  \etocsetlevel{speaker}{1}
  \etocsetlevel{section}{2}
  \etocsetlevel{talk}{0}
  \etocsetlevel{chapter}{0}

  The speaker is written below the title of the talk with \semproc@toc@skip indentation and font \texttt{globaltocspeaker}.

  \etocsetstyle{speaker}{%
    %
    \hskip\semproc@toc@skip%
    \usekomafont{globaltocspeaker}\etocthename%
    \nobreak\hfill\nobreak\par%
  }

  Before each talk entry in the global table of contents, we have a vertical skip of 1ex. Then, the number of the talk is written left-aligned and the title of the talk is written on the same line with indentation \semproc@toc@skip.

  \etocsetstyle{talk}{%
    \vskip1ex\leavevmode\relax
    %
    \semproc@toc@skipafter{\usekomafont{globaltocnumber}}%
    %
    \usekomafont{globaltoctitle}\etocthe%
    \nobreak
    \leaders\hbox to .3cm{\hss.}\hfill
    \nobreak
    \makebox[1cm][r]{\usekomafont{globaltocpage}}%
    \hspace{\etocthepage}\
    \par%
  }

  \tableofcontents
\localtoc \localtoc prints out a local table of contents consisting only of the sections and subsections in the current talk.

Every section except the first one has a \vskip of 1ex before it is typeset. Then, sections are written with \semproc@toc@skip indentation.

Subsections are written with \semproc@toc@skip indentation and no additional vertical space.
Finally, we define the heading of the table of contents and typeset it.

\etocsettocstyle{%
  \centerline{%
    \usekomafont{localtocheading}\
    \localtocheadingname%
  }
\}
\localtableofcontents
\par
endgroup

\summary Instead of using the \texttt{abstract} environment, we define a \texttt{summary} environment to be used for each talk.

\newenvironment{summary}{% \centerline{% \usekomafont{summaryheading}% \summaryname% } \let\parindent@old\parindent \parindent0em%}{% \parindent\parindent@old\vskip3.5ex%}

\localbib
\newcommand{\localbib}{% \printbibliography[heading=subbibliography]%}

\end{class}
3 Change History

v0.1
General: First public release

4 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.

Symbols
\@addtoreset . . . . 68, 69
\@currentlabelname .
\etocsetnexttocdepth
\etocsetstyle
\addtolength
\arabic
\begingroup
\centerline
\chapter
\chapterpagestyle
\cleardoubleoddplainpage
\CurrentOption
\DeclareOption
\def
\define@key
\empty
\endgroup
\etocname
\etocnumber
\etocpage
\etocsetlevel
\etocsetcontentsline
\etocsetnexttocdepth
\etocsetstyle
\etoctoccontentsline
\fonts
\globaltoc
\hbox
\hfill
\hrulefill
\hskip
\hss
\Idealvoid
\ifthenelse
\Internationalization
\leaders
\leavevmode
\let
\LoadClass
\localbib
\localtableofcontents
\localtoc
\localtocheadingname
\localtoc
\let
\MakeBox
\makebox
\newcommand
\newcounter
\newenvironment
\newkomafont
\nobreak
\noindent
\nonumchapter
\nospeakername
\notesname
\numberline
\newenvironment
\nnewcommand
\newcounter
\newenvironment
\newkomafont
\newlength
\newrefsection
\notesname
\numberline
\notesname
\numberline
\Package

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