semproc — LaTeX class for seminar proceedings[*]

Tobias Columbus[†]

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1 Documentation

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

1.1 Macros

`\talk`   `\talk [`⟨*speaker={Speaker},notes={Typist}*⟩`] {`⟨*title*⟩`}` starts a new talk with title ⟨*title*⟩, speaker ⟨*Speaker*⟩ and typist ⟨*Typist*⟩. The `\talk` macro also starts a new `biblatex`-refsection.

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

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

`\localbib`   `\localbib` typesets a bibliography for the current talk.

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

1.2 Environments

`summary`   The `summary` environment is a drop-in replacement for the `abstract` environment.

1.3 Customization

`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

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[†]E-mail: tobias.columbus@kit.edu

Font	Usage	Default
talkhead	Font of the head of a talk heading, i.e. the line "Talk 3".	`\usekomafont {disposition}` `\usekomafont {section}`
talktitle	Font of the title of a talk	`\usekomafont {disposition}` `\usekomafont {chapter}`
talkspeakers	Font of the speaker and typist of a talk	`\usekomafont {disposition}`
globaltocspeaker	Speaker in an entry in the global table of contents	`\sffamily`
globaltocnumber	Number of an entry in the global table of contents	`\usekomafont {disposition}`
globaltoctitle	Title of an entry in the global table of contents	`\usekomafont {disposition}`
globaltocpage	Page number of an entry in the global table of contents	`\usekomafont {disposition}`
localtocheading	Heading of the local table of contents typeset with `\localtoc`	`\usekomafont {disposition}`
localtocnumber	Number of an entry in the local table of contents	`\sffamily`
localtoctitle	Title of an entry in the local table of contents	`\sffamily`
localtocpage	Page number of an entry in the local table of contents	`\sffamily`
summaryheading	Font for the heading of a `summary` environment	`\usekomafont {disposition}`

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`, `biblatex` 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 `biblatex` as opposed to `bibtex`.

1.5 Example

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

2 Implementation

1 ⟨*class⟩

scrreprt Load `scrreprt` and pass all options to `scrreprt`.

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

Packages We load `xkeyval` for processing the names of the speaker/typist of each talk.

```
5 \RequirePackage{xkeyval}
```

We load `xcolor` and pass option `dvipsnames` as we set `RoyalBlue` as default colour for all links.

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

We load `etoc` for creating the macros for the local table of contents per talk and the global table of contents.

```
8 \RequirePackage{etoc}
```

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

```
 9 \RequirePackage%
10   [unicode=true,colorlinks=true,hypertexnames=false]
11   {hyperref}
12 \RequirePackage{bookmark}
13 \hypersetup{allcolors={RoyalBlue}}
```

We load `etoolbox` for `\ifdefvoid` used in `\semproc@talk@head`.

```
14 \RequirePackage{etoolbox}
```

We load `biblatex` for managing bibliographies per talk via refsections and `csquotes` as it is recommended by `biblatex`.

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

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

We first define the german variants:

```
17 \providecaptionname{german,ngerman}%
18   {\talkname}{Vortrag}
19 \providecaptionname{german,ngerman}%
```

```
20    {\notesname}{Notizen von}
21 \providecaptionname{german,ngerman}%
22    {\nospeakername}{Kein Vortragender}
23 \providecaptionname{german,ngerman}%
24    {\localtocheadingname}{Inhalt}
25 \providecaptionname{german,ngerman}%
26    {\summaryname}{Zusammenfassung}
```

Next, we define the english variants:

```
27 \providecaptionname{USenglish,UKenglish,english}%
28    {\talkname}{Talk}
29 \providecaptionname{USenglish,UKenglish,english}%
30    {\notesname}{Notes by}
31 \providecaptionname{USenglish,UKenglish,english}%
32    {\nospeakername}{No speaker}
33 \providecaptionname{USenglish,UKenglish,english}%
34    {\localtocheadingname}{Contents}
35 \providecaptionname{USenglish,UKenglish,english}%
36    {\summaryname}{Abstract}
```

Fonts 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.

```
37 \newkomafont{talkhead}
38    {\usekomafont{disposition}\usekomafont{section}}
39 \newkomafont{talktitle}
40    {\usekomafont{disposition}\usekomafont{chapter}}
41 \newkomafont{talkspeakers}
42    {\usekomafont{disposition}}
```

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.

```
43 \newkomafont{globaltocspeaker}
44    {\sffamily}
45 \newkomafont{globaltocnumber}
46    {\usekomafont{disposition}}
47 \newkomafont{globaltocpage}
48    {\usekomafont{disposition}}
49 \newkomafont{globaltoctitle}
50    {\usekomafont{disposition}}
```

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.

```
51 \newkomafont{localtocheading}
52    {\usekomafont{disposition}}
53 \newkomafont{localtocnumber}
```

```
54   {\sffamily}
55 \newkomafont{localtocpage}
56   {\sffamily}
57 \newkomafont{localtoctitle}
58   {\sffamily}
```

Finally, we define the font `summaryheading`, which is the font of the heading of the `summary` environment also defined in this class.

```
59 \newkomafont{summaryheading}
60   {\usekomafont{disposition}}
```

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

```
61 \newcommand{\nonumchapter}[1]{%
62   \chapter*{#1}%
63   \etoctoccontentsline*{chapter}{#1}{0}%
64 }
```

`Talk counter`   A new counter for the talks.

```
65 \newcounter{talk}
66 \setcounter{talk}{0}
```

Compatibility with autoref.

```
67 \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 `\thesection` and `\theHsection` for hyperref.

```
68 \@addtoreset{section}{talk}
69 \@addtoreset{equation}{section}
70 \renewcommand\thesection{\arabic{section}}
71 \renewcommand\theHsection{\arabic{section}}
72 \renewcommand\theequation{\thesection.\arabic{equation}}
```

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

```
73 \newcommand{\semproc@talk@head}[1]{%
74   {\noindent\usekomafont{talkhead}\talkname~\thetalk}%
75   {\par\nobreak\vskip2ex}%
76   {\usekomafont{talktitle}\noindent#1}
77   \vskip1ex\noindent\hrulefill\vskip1ex
78   {
79     \usekomafont{talkspeakers}
80     \noindent\semproc@talk@speaker%
81     \ifdefvoid{\semproc@talk@notes}{}{%
82       \hfill{\notesname~\semproc@talk@notes}%
83     }
```

```
84      \par\nobreak%
85    }%
86    \vskip 3.5ex
87 }
```

\talk The main macro of this class is \talk [⟨*speaker=Speaker, notes=Notes*⟩] {⟨*title*⟩} intended to replace \chapter. We first prepare the optional key/value options.

```
88 \define@key{talk}{speaker}%
89    [\nospeakername]%
90    {\def\semproc@talk@speaker{#1}}
91 \define@key{talk}{notes}%
92    []%
93    {\def\semproc@talk@notes{#1}}
```

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

```
94 \newcommand*\talk[2][\empty]{%
95    \presetkeys{talk}{speaker,notes}{}%
96    \setkeys{talk}{#1}%
97    \refstepcounter{talk}%
98    \cleardoubleoddplainpage%
99    \thispagestyle{\chapterpagestyle}%
100   \semproc@talk@head{#2}
101   \renewcommand\@currentlabelname{#2}
102   \newrefsection%
103   \etoctoccontentsline*{talk}%
104     {\protect\numberline{\thetalk}#2}{0}
105   \etoctoccontentsline{speaker}%
106     {\protect\numberline{}\semproc@talk@speaker}
107   \renewcommand\@currentlabelname{#2}
108 }
```

Various lengths and a box Lengths for typesetting the local and global tables of contents.

```
109 \newlength{\semproc@toc@skip}
110 \setlength{\semproc@toc@skip}{4em}
111 \newlength{\semproc@toc@calc}
```

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

```
112 \newcommand\semproc@toc@skipafter[1]{%
113   \settowidth{\semproc@toc@calc}%
114     {#1\etocthenumber}%
115   \addtolength{\semproc@toc@calc}%
116     {-\semproc@toc@skip}%
117   \setlength{\semproc@toc@calc}%
```

```
118        {-\semproc@toc@calc}%
119      \noindent{#1\etocnumber}%
120      \hskip\semproc@toc@calc%
121 }
```

\globaltoc \globaltoc prints out a global table of contents showing only the talks and the respective speakers/typists.

```
122 \newcommand{\globaltoc}{%
123    \begingroup
124      \etocsetnexttocdepth{1}
125      \etocsetlevel{speaker}{1}
126      \etocsetlevel{section}{2}
127      \etocsetlevel{talk}{0}
128      \etocsetlevel{chapter}{0}
```

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

```
129      \etocsetstyle{speaker}
130        {}
131        {}
132        {%
133          \hskip\semproc@toc@skip%
134          {\usekomafont{globaltocspeaker}\etocthename}%
135          \nobreak\hfill\nobreak\par%
136        }
137        {}
```

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.

```
138      \etocsetstyle{talk}
139        {}
140        {\vskip1ex\leavevmode\relax}
141        {%
142          \semproc@toc@skipafter{\usekomafont{globaltocnumber}}%
143          {%
144            \usekomafont{globaltoctitle}%
145            \etocname%
146          }%
147          \nobreak%
148          \leaders\hbox to .3cm{\hss.}\hfill%
149          \nobreak%
150          \makebox[1cm][r]{%
151            \usekomafont{globaltocpage}%
152            \hss\etocpage%
153          }\par%
154        }
155        {}
156      \tableofcontents
```

```
157    \endgroup
158 }
```

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

```
159 \newcommand{\localtoc}{%
160    \begingroup
161      \let\parskip@old%
162      \parskip\parskip0ex%
163      \etocsetnexttocdepth{2}
164      \etocsetlevel{section}{1}
165      \etocsetlevel{subsection}{2}
166      \etocsetlevel{talk}{-2}
167      \etocsetlevel{speaker}{-2}
168      \etocsetlevel{chapter}{-2}
```

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

```
169      \etocsetstyle{section}
170        {}
171        {%
172          \ifthenelse{\equal{\etocthenumber}{1}}%
173          {}%
174          {\vskip1ex}%
175        }
176        {%
177          \semproc@toc@skipafter{%
178            \usekomafont{localtocnumber}%
179          }%
180          {%
181            \usekomafont{localtoctitle}%
182            \etocname%
183          }%
184          \nobreak%
185          \leaders\hbox to .3cm{\hss.}\hfill%
186          \nobreak%
187          \makebox[1cm][r]{%
188            \usekomafont{localtocpage}%
189            \hss\etocpage%
190          }\vskip0.5ex%
191        }
192        {}
```

Subsections are written with \semproc@toc@skip indentation and no additional vertical space.

```
193      \etocsetstyle{subsection}
194        {}
195        {}
196        {%
```

```
197            \semproc@toc@skipafter{%
198              \usekomafont{localtocnumber}%
199            }%
200            {%
201              \usekomafont{localtoctitle}%
202              \etocname
203            }%
204            \nobreak%
205            \leaders\hbox to .3cm{\hss.}\hfill%
206            \nobreak%
207            \makebox[1cm][r]{%
208              \usekomafont{localtocpage}%
209              \hss\etocpage%
210            }\vskip0.5ex%
211          }
212          {}
```

Finally, we define the heading of the table of contents and typeset it.

```
213          \etocsettocstyle{%
214            \centerline{%
215              \usekomafont{localtocheading}%
216              \localtocheadingname%
217            }
218          }{}
219          \localtableofcontents
220          \parskip\parskip@old
221        \endgroup
222 }
```

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

```
223 \newenvironment{summary}
224   {%
225     \centerline{%
226       \usekomafont{summaryheading}%
227       \summaryname%
228     }%
229   \let\parindent@old\parindent\parindent0em%
230   }{%
231     \parindent\parindent@old\vskip3.5ex%
232   }
```

\localbib

```
233 \newcommand{\localbib}{%
234   \printbibliography[heading=subbibliography]%
235 }
```

```
236 ⟨/class⟩
```

9

3 Change History

v0.1

General: First public release 1

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.

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