SNOTEZ

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sidenote support for LaTeX 2 ε

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1 License and Requirements

Permission is granted to copy, distribute and/or modify this software under the terms of the LATEX Project Public License (LPPL), version 1.3c or later (http://www.latex-project.org/lppl.txt). The software has the status "maintained."

2 Motivation

This has just been an exercise on a lazy afternoon.¹ Well, in the beginning at least. Since there already is Andy Thomas' sidenotes package² there is probably no real need for **SNOTEZ**. Moreover, the tufte classes³ as well as memoir⁴ also provide corresponding mechanisms. Besides the fun I had my motivation was also based on the fact that I didn't like some things done by the sidenotes package such as inserting kerns and superscripted commas for multiple marks. I prefer to let my fnpct⁵ package handle these things. Anyways, here it is and it seems to be working as intended so I don't see a reason why it shouldn't be available for use.

By the way: the fnpct package vo.2k and later knows about **SNOTEZ** and automatically adapts the note commands!

- 1. https://www.youtube.com/
 watch?v=0U6EyXcFBxA
- 2. THOMAS and SCHEBAUM [TS20]
- 3. Godby, Kleb, and Wood [GKW10]
- 4. WILSON and MADSEN [WM21]
- 5. Niederberger [Nie22]

3 Introduction

The **SNOTEZ** package introduces a \sidenote command¹ that typesets sidenotes the same way \footnote typesets footnotes. It provides some options that allow formatting the appearance of the sidenotes.² As a default sidenotes are typeset in a \marginpar but there are possibilities using Markus Kohm's marginnote [Koh18] package as well.

As with footnotes it is possible to set mark and text separately using the equivalent commands \sidenotemark and \sidenotetext, respectively. Instead of lots of code examples this documentation will use the \sidenote macro itself extensively. It is assumend you know how to use \footnote and are able to transfer your knowledge.

- ¹ This is an example demonstrating the default appearance.
- 2. In all sidenotes in this document the mark is typeset on the baseline and the text is set ragged right.

4 Usage

The basic usage is the very same as with LaTeX's \footnote, \footnotemark and \footnotetext. Unsurprisingly the presented commands are these:

```
\sidenote[\langle mark \rangle] \{\langle text \rangle\}
```

The basic command. The syntax is the very same as for \footnote.

```
\ idenote(\langle offset \rangle)[\langle mark \rangle]{\langle text \rangle}
```

Actually I lied: \sidenote has a second option that smuggles itself before the $\langle mark \rangle$ option if you use it: an argument for a vertical offset that takes a length. An empty second option assumes you want the automatic mark. If you use this argument the note is set with the \marginnote command.³ Please see its documentation [Koh18] for the $\langle offset \rangle$ argument. SNOTEZ only passes the value on.

Actually, this is only part of the truth: while typing this documentation I repeatedly found myself shifting notes by multiples of \baselineskip so the argument accepts a shortcut for this. A star * followed by a (positive or negative) number denotes a multiple of \baselineskip. By the way: a positive value shifts the note down.

When you're using the $dblarg = \{true\}$ option the $\langle offset \rangle$ argument has square brackets instead of parentheses!

$\sidenotemark[\langle marg \rangle]$

This command has the same purpose as \footnotemark but for sidenotes.

$\sidenotetext[\langle mark \rangle] \{\langle text \rangle\}$

The same as \footnotetext but for sidenotes. Beware where you place it: it calls \marginpar or \marginnote and thus determines where the actual note is placed.

- 3. From the marginnote package
- For example with texdoc marginnote on your command line.

```
\sidenotetext(\langle offset \rangle) [\langle mark \rangle] \{\langle text \rangle\}
```

I lied again: \sidenotetext also has the second optional argument $\langle \mathit{offset} \rangle$ that again smuggles itself before the $\langle \mathit{mark} \rangle$ option if you use it. For details see the second description of the \sidenote command.

Here is one short example of the usage.

```
1 % produces a sidenote with automatic number in a
2 % \marginpar:
3 \sidenote{A note}
5 % produces a sidenote with mark `a' in a
6 % \marginpar:
7 \sidenote[a]{A note}
9 % produces a sidenote with automatic number in a
10 % \marginnote:
\sidenote(){A note}
12 % alternative syntax (dblarg=true):
\sidenote[][]{A note}
_{15} % produces a sidenote with automatic number in a
16 % \marginnote shifted down by \baselineskip:
17 \sidenote(*){A note}
18 % alternative syntax (dblarg=true):
19 \sidenote[*][]{A note}
21 % produces a sidenote with automatic number in a
22 % \marginnote shifted up by 2ex:
23 \sidenote(-2ex){A note}
24 % alternative syntax (dblarg=true):
25 \sidenote[-2ex][]{A note}
27 % produces a sidenote with mark `a' in a
28 % \marginnote shifted down by 2\baselineskip:
29 \sidenote(*2)[a]{A note}
30 % alternative syntax (dblarg=true):
31 \sidenote[*2][a]{A note}
```

5 Figures in the Margin

In the case of small figures or tables one might want to place them in the margin, too. Especially in a document with a larger margin than it is in the standard classes.

For these cases **SNOTEZ** provides ¹ these environments:

1. Introduced in version 0.5

\begin{sidefigure}

Places a figure in the margin within a \marginpar. \caption can be used in the usual way.

\begin{sidetable}

Places a table in the margin within a \marginpar. \caption can be used in the usual way.

In order to be able to place other floats in the margin, too, **SNOTEZ** provides the following command:

```
\newsnotezfloat[\langle code \rangle] \{\langle name \rangle\}
```

This defines a new environment $side\langle name\rangle$. $\langle code\rangle$ would be placed after the formatting from sidefloat-format but before the environment's contents.

Both existing environments have been defined with this command.

```
newsnotezfloat{figure}
```

2 \newsnotezfloat{table}

6 Options

Although all options can be used as package option you can also set all options (locally) with a setup command:

```
\strut \strut
```

Set options as a comma-separated list of key/value pairs.

Available options are these:

```
dblarg = true|false
```

Default: false

Prior to version 0.3 **SNOTEZ**' \sidenote and \sidenotetext had both their optional arguments with square brackets where the use of one argument referred to the mark but when both were used the first argument referred to the offset and the second to the mark. This syntax is kept with this option. Setting it to true changes the $(\langle offset \rangle)$ argument syntax into $[\langle offset \rangle]$.

```
marginnote = true|false
```

Default: false

Use marginnote's \marginnote [Koh18] for all \sidenotes. In the default setting \sidenote uses \marginpars to set the sidenote unless you use the $\langle offset \rangle$ argument. If you use this option *all* sidenotes are set with \marginnote. This option can only be used in the preamble.

```
text-format = \{\langle code \rangle\}
```

Default: \normalfont\footnotesize

The format of the sidenote text.

6 Options

text-format+ = $\{\langle code \rangle\}$

perpage = true|false

(initially empty)

Code to be appended to the format set with text-format.1

Default: false

This option can only be set in the preamble. Make sidenotes counter per page. It uses package zref-perpage's [Obe20] for the task. This documentation is an example for the use of the option.

1. This document, for example, appends raggedze's \RaggedRight [Sch21] to the sidenote's format.

perchapter = true | false

Default: false

This option can only be set in the preamble. ² If your document class has defined a counter chapter and if you set this to true the sidenote counter will be added to the reset list of the chapter counter.

2. Introduced in version 0.6

 $note-mark-sep = \{\langle code \rangle\}$

Default: \space

The separator between sidenote mark and sidenote text in the sidenote.

 $note-mark-format = \{\langle code \rangle\}$ Default: \@textsuperscript\normalfont#1}

The format of the sidenote mark in the sidenote. Please refer to the actual mark with #1.

The format of the sidenote mark in the text.³ Please refer to the actual mark with #1.

3. This document uses
Bob Tennent's libertine package [Ten18] and redefines the
mark formats to use its \textsu
command.

footnote = true|false

Default: false

This option can only be used in the preamble. Let 4 \footnote to be \sidenote, \footnotemark to be \sidenotemark and \footnotetext to be \sidenotetext.

4. In the sense of **\let**

 $sidefloat-format = \{\langle code \rangle\}$

Default: \raggedright

The format of the contents of a sidefloat environment text.⁵

5. Introduced in version 0.5

 $sidefloat-format+ = \{\langle code \rangle\}$

Code to be appended to the format set with sidefloat-format.⁶

6. Introduced in version 0.5

As a short example this is how the sidenotes for this document are formatted:

```
1 \setsidenotes{
2   note-mark-format=#1.,
3   text-mark-format=\textsu{\hspace*{.04em}#1},
4   text-format+=\RaggedRight,
5   perpage=true
6 }
```

7 Implementation

In the following code the lines 1-24 have been omitted. They only repeat the license statement which has already been mentioned in section 1.

```
25 \def\snotez@date{2022/02/10}
26 \def\snotez@version{v0.6}
27 \def\snotez@description{sidenote support for LaTeX 2e (CN)}
29 \NeedsTeXFormat{LaTeX2e}
_{30} \ProvidesPackage{snotez}[\snotez@date\space \snotez@version\space \
    snotez@description]
32 \RequirePackage{etoolbox,pgfopts,marginnote}
33
34 % -----
35 % package options:
36 \newbool{snotez@marginnote}
37 \newbool{snotez@perpage}
38 \newbool{snotez@footnote}
39 \newbool{snotez@dblarg}
40 \newbool{snotez@perchapter}
42 \newcommand*\snotez@note@mark@sep{\space}
_{43} \rightarrow \text{mewcommand*}\ \newcommand*\snotez@note@mark@format[1]{\@textsuperscript{\normalfont#1}}
44 \newcommand*\snotez@format{\normalfont\footnotesize}
_{45} \newcommand*\snotez@text@mark@format[1]{\gtextsuperscript{\normalfont#1}}
47 \pgfkeys{
48
   snotez/.cd,
      % all sidenotes use \marginnote:
49
      marginnote/.is if = snotez@marginnote ,
50
      % formatting of the note text:
      text-format/.code
                             = \renewcommand*\snotez@format{#1} ,
      text-format+/.code
        \expandafter\renewcommand
        \expandafter*%
55
        \expandafter\snotez@format
        \expandafter{\snotez@format#1} ,
```

```
% make sidenotes counted per page:
58
      perpage/.is if = snotez@perpage ,
59
      \% count sidenotes per chapter:
      perchapter/.is if = snotez@perchapter ,
      % formatting of the note mark:
      note-mark-sep/.code = \renewcommand*\snotez@note@mark@sep{#1} ,
      64
      text-mark-format/.code = \renewcommand*\snotez@text@mark@format[1]{#1} ,
65
      % make all footnotes sidenotes:
66
      footnote/.is if
                           = snotez@footnote ,
67
      % change optional argument input:
68
      dblarg/.is if = snotez@dblarg ,
69
      % formmatting of the sidefloats' contents:
70
      sidefloat-format/.code = \renewcommand*\snotez@sidefloat@format{#1} ,
71
72
      sidefloat-format+/.code =
73
        \expandafter\renewcommand
74
        \expandafter*%
        \expandafter\snotez@sidefloat@format
75
        \expandafter{\snotez@sidefloat@format#1}
76
77 }
79 \ProcessPgfOptions*
{\tt 81} \verb| \newrobustcmd\setsidenotes[1]{\pgfqkeys{/snotez}{\#1}}}
8_4 % the \sidenote command
85 \AtBeginDocument{\%}
86 \ifbool{snotez@dblarg}
      {\newrobustcmd*\sidenote{\snotez@sidenote@dblarg}}
87
      {\newrobustcmd*\sidenote{\snotez@sidenote@nodblarg}}%
88
89 }
91 % syntax:
92 % - \sidenote{text}
93 % - \sidenote[mark]{text}
_{94} % - \sidenote[offset][mark]{text}
95 \newrobustcmd*\snotez@sidenote@dblarg{%
   \@ifnextchar[%
      {\snotez@sidenote@dblarg@aux}
97
      {\snotez@sidenote@aux{}[]}% no option
98
99 }
100
101 \protected\def\snotez@sidenote@dblarg@aux[#1]{%
      {\snotez@sidenote@aux{#1}}% two options
103
      104
105 }
106
107 % syntax:
108 % - \sidenote{text}
109 % - \sidenote[mark]{text}
110 % - \sidenote(offset){text}
" % - \sidenote(offset)[mark]{text}
```

```
112 \newrobustcmd*\snotez@sidenote@nodblarg{%
113
      {\snotez@sidenote@nodblarg@aux}% offset
114
115
        \@ifnextchar[
          117
          118
      }%
119
120 }
121
122 \protected\def\snotez@sidenote@nodblarg@aux(#1){%
    \@ifnextchar[%
123
      {\snotez@sidenote@aux{#1}}% mark
124
125
      {\snotez@sidenote@aux{#1}[]}% no mark
126 }
127
128 % #1: offset
129 % #2: mark
130 % #3: text
131 \long\def\snotez@sidenote@aux#1[#2]#3{%
    \snotez@mark{#2}%
    \snotez@text{#1}{#3}%
133
134 }
135
  \% this one is very much \@footnotemark from latex.ltx:
136
_{137} \newrobustcmd*\snotez@write@mark[1]{%
    \leavevmode
    \ifhmode\edef\@x@sf{\the\spacefactor}\nobreak\fi
140
    \ifhmode\spacefactor\@x@sf\fi
141
    \relax
142
143 }
144
_{145} \newrobustcmd*\snotez@mark[1]{%}
    \ifblank{#1}% or \ifstrempty?
146
      {%
147
        \refstepcounter{sidenote}%
148
        \protected@xdef\@the@snotez@mark{\thesidenote}%
149
      }
150
      {%
151
        \protected@edef\@currentlabel{#1}%
152
        153
154
    \snotez@write@mark{%
155
      156
157 }
159 \newcounter{sidenote}
160 \AtBeginDocument{%
    \ifltxcounter{chapter}{%
161
      \ifbool{snotez@perchapter}{\counterwithin*{sidenote}{chapter}}{}%
162
163
164 }
165
```

```
166 % -----
167 % the \sidenotemark command
{\tt 168} \ \ \verb|\newrobustcmd*| sidenotemark[1][]{\notez@mark\{\#1\}}|
_{171} % the \sidenotetext command
_{172} \AtBeginDocument{
    \ifbool{snotez@dblarg}
       {\newrobustcmd*\sidenotetext{\snotez@sidenotetext@dblarg}}
174
       {\newrobustcmd*\sidenotetext{\snotez@sidenotetext@nodblarg}}
175
176 }
177
178 % syntax:
179 % - \sidenotetext{text}
_{180} % - \sidenotetext[mark]{text}
181 % - \sidenotetext[offset][mark]{text}
{\tt 182} \ \ \verb|\newrobustcmd*| snotez@sidenotetext@dblarg{\%}
     \@ifnextchar[%
       {\snotez@sidenotetext@dblarg@aux}
184
       {\snotez@sidenotetext@aux{}[]}% no option
185
186 }
187
{\tt 188} \verb|\protected\def\snotez@sidenotetext@dblarg@aux[\#1]{\%}
     \ensuremath{\mbox{\tt @ifnextchar}[\%]}
       {\snotez@sidenotetext@aux{#1}}% two options
190
       {\snotez@sidenotetext@aux{}[{#1}]}% one option
191
192 }
193
194 % syntax:
195 % - \sidenotetext{text}
196 % - \sidenotetext[mark]{text}
197 % - \sidenotetext(offset){text}
198 % - \sidenotetext(offset)[mark]{text}
199 \newrobustcmd*\snotez@sidenotetext@nodblarg{%
     \@ifnextchar(%
200
       {\snotez@sidenotetext@nodblarg@aux}% offset
201
         \@ifnextchar[
203
           {\snotez@sidenotetext@aux{}[]}% no offset and no mark
205
206
207 }
_{209} \protected\def\snotez@sidenotetext@nodblarg@aux(#1){%}
       {\snotez@sidenotetext@aux{#1}}% mark
       212
213 }
_{215} % #1: offset
216 % #2: mark
217 % #3: text
218 \long\protected\def\snotez@sidenotetext@aux#1[#2]#3{%
    \ifblank{#2}{}{\protected@xdef\@the@snotez@mark{#2}}%
```

```
\snotez@text{#1}{#3}%
220
221 }
<sub>223</sub> % #1: offset
224 % #2: text
_{225} \mbox{ } \mbox{\ensuremath{\text{newrobustcmd}}} \times \mbox{\ensuremath{\text{snotez@text[2]}}} \
     \ifblank{#1}
226
227
          \snotez@marginpar{%
228
            \snotez@format
229
             \snotez@write@mark{\snotez@note@mark@format{\@the@snotez@mark}}%
230
            \snotez@note@mark@sep#2}%
231
        }
232
        {%
233
          \snotez@marginnote{%
234
            \snotez@format
235
             \verb|\snotez@write@mark{\snotez@note@mark@format{\gthe@snotez@mark}}| \% |
             \snotez@note@mark@sep#2%
237
          }[\snotez@if@nblskip{#1}]%
238
        }%
239
240 }
241
_{242} \newcommand*\snotez@if@nblskip[1]{%
     \% if #1 starts with \ast gobble it and add \baselineskip:
243
     \verb|\expandafter\ifx@car#1\ensuremath{@nil*}|
244
        \expandafter\@firstoftwo
245
     \else
        \expandafter\@secondoftwo
247
     \fi
248
     {\@cdr#1\@nil\baselineskip}%
249
     {#1}%
250
251 }
252
253 \let\snotez@marginpar\marginpar
   \let\snotez@marginnote\marginnote
254
255
257 % margin floats with captions, based on an idea in tufte-latex
258 \newsavebox\snotez@sidefloat@box
   \newcommand*\snotez@sidefloat@format{\raggedright}
259
260
261 \newenvironment{snotez@sidefloat}[2]{%
     \def\@captype{#1}%
262
     \begin{lrbox}{\snotez@sidefloat@box}%
263
        \minipage{\marginparwidth}%
264
        \snotez@sidefloat@format#2%
265
266 }{%
        \endminipage
267
     \end{lrbox}%
268
     \marginpar{\unhbox\snotez@sidefloat@box}%
269
270 }
271
272 \newrobustcmd*\snotez@new@sidefloat[2]{%
     \newenvironment{side#1}
```

```
{\snotez@sidefloat{#1}{#2}}
274
                 {\endsnotez@sidefloat}%
275
276 }
277
_{278} \newrobustcmd*\newsnotezfloat[2][]{\snotez@new@sidefloat{#2}{#1}}
280 \newsnotezfloat{figure}
281 \newsnotezfloat{table}
282
283 %
284 % process preamble options:
285 \AtBeginDocument{
           % if option `footnote=true' let \footnote to \sidenote:
287
           \ifbool{snotez@footnote}
288
                    \let\footnote\sidenote
289
                    \let\footnotemark\sidenotemark
                    \let\footnotetext\sidenotetext
                    \ifdef\multfootnote{%
292
                         \let\multfootnote\multsidenote
293
                    }{}%
294
               }{}
295
           % if option `marginnote=true' use \marginnote for all notes:
296
           \ifbool{snotez@marginnote}
297
298
                    \let\snotez@marginpar\marginnote
299
300
                    \PackageInfo{snotez}
                         {All sidenotes are now using \string\marginnote^^J
301
                           instead of \string\marginpar}%
302
                }%
303
                {}
304
305 }
306
307 \AddToHook{begindocument/before}{%
           \ifbool{snotez@perpage}{%
                \RequirePackage{zref-perpage}%
309
                \zmakeperpage{sidenote}\%
                \verb|\def| \label{theH} $$ \end{figures/ageloaded for the H} $$ $$ \end{figures/ageloaded for the H} $$$ \end{figures/agel
          }}{}
          }{}%
312
313 }
314
315
316 \endinput
317
318 % -----
319 % HISTORY:
_{320} 2012/11/15 v0.1 - first version
_{3^{21}} 2013/04/03 v0.2 - documentation, removed erroneous `fnpct' adaption, other
                                                  minor changes
322
                                              - added update of \@currentlabel when a custom mark is used
323
_{
m 324} 2013/04/21 v0.3 - try to avoid conflict with package loading order of
                                                   `perpage' and `zref-abspage'
325
                                             - allow `*' syntax for offsets that are multiples of
326
```

References

```
\baselineskip
327
                      - syntax change in optional arguments; option `dblarg'
328
                        provides previous syntax >> this is the default
329
_{\rm 33^{\rm 0}} 2013/06/13 v0.3a - better separation of definition of \sidenote and
                        \sidenotetext commands and the internal commands
331
_{\rm 33^2} 2013/11/21 v0.4 \, - robustify commands where appropriate
                      - use cnltx-base
_{334} 2020/01/12 v0.5 \, - remove dependency on `cnltx-base'
<sub>335</sub> 2020/12/14 v0.5a - fix issue #1
_{336} 2022/02/10 v0.6 - fix issue #2
                      - add option `perchapter'
337
```

References

- [GKW10] Kevin GODBY, Bil KLEB, and Bill WOOD. tufte-latex. version 3.5.2, 2010 (or newer). URL: https://www.ctan.org/pkg/tufte-latex/.
- [Koh18] Markus Kohm. marginnote. version 1.4b, Aug. 9, 2018 (or newer).
 URL: https://www.ctan.org/pkg/marginnote/.
- [Nie22] Clemens NIEDERBERGER.
 fnpct. version 1.1, Feb. 3, 2022 (or newer).
 URL: https://www.ctan.org/pkg/fnpct/.
- [Obe20] Heiko OBERDIEK. zref. version 2.32, July 3, 2020 (or newer).
 URL: https://www.ctan.org/pkg/zref/.
- [Sch21] Martin SCHRÖDER.
 ragged2e. version 3.1, Dec. 15, 2021 (or newer).
 URL: https://www.ctan.org/pkg/ms/ragged2e/.
- [Ten18] Bob TENNENT. libertine. Oct. 1, 2018 (or newer). URL: https://www.ctan.org/pkg/libertine/.
- [TS20] Andy THOMAS and Oliver SCHEBAUM, current maintainer:
 Andy THOMAS. sidenotes. version 1.00a, Mar. 24, 2020 (or newer).
 URL: https://www.ctan.org/pkg/sidenotes/.
- [WM21] Peter WILSON and Lars MADSEN.
 memoir. version 3.7p, June 16, 2021 (or newer).
 URL: https://www.ctan.org/pkg/memoir/.

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Package names are indicated sans serif, commands \brown and options yellow.

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	text-mark-format5
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