

SNOTEZ

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sidenote support for L^AT_EX 2_&

Clemens NIEDERBERGER

<https://bitbucket.org/cgnieder/snotez>

contact@mychemistry.eu

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1 License and Requirements

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

SNOTEZ needs and loads the packages etoolbox,¹ pgfplots,² marginnote³ and perpage.⁴

1. LEHMAN [Leh19]
2. WRIGHT [Wri14]
3. KOHM [Koh18]
4. KASTRUP [Kas14]

2 Motivation

This has just been an exercise on a lazy afternoon.⁵ Well, in the beginning at least. Since there already is Andy THOMAS’ sidenotes package⁶ there is probably no real need for **SNOTEZ**. Moreover, the tufte classes⁷ as well as memoir⁸ 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 fnpt⁹ package handle these things. Anyways,

5. <https://www.youtube.com/watch?v=0U6EyXcFBxA>
6. THOMAS and SCHEBAUM [TS16]
7. GODBY, KLEB, and WOOD [GKW10]
8. WILSON and MADSEN [WM18]
9. NIEDERBERGER [Nie20]

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 v0.2k and later knows about `SNOTEZ` and automatically adapts the note commands!

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 assumed you know how to use `\footnote` and are able to transfer your knowledge.

4 Usage

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

```
\sidenote[⟨mark⟩]{⟨text⟩}
```

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

```
\sidenote(⟨offset⟩)[⟨mark⟩]{⟨text⟩}
```

Actually I lied: `\sidenote` has a second option that smuggles itself before the `⟨mark⟩` 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 documentation⁴ [Koh18] for the `⟨offset⟩` 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 `⟨offset⟩` argument has square brackets instead of parentheses!

```
\sidenotemark[⟨marg⟩]
```

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

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.

³ From the `marginnote` package

⁴ For example with `texdoc marginnote` on your command line.

\sidenotetext[⟨mark⟩]{⟨text⟩}

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.

\sidenotetext(⟨offset⟩)[⟨mark⟩]{⟨text⟩}

I lied again: \sidenotetext also has the second optional argument ⟨offset⟩ that again smuggles itself before the ⟨mark⟩ 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}
4
5 % produces a sidenote with mark `a' in a
6 % \marginpar:
7 \sidenote[a]{A note}
8
9 % produces a sidenote with automatic number in a
10 % \marginnote:
11 \sidenote(){A note}
12 % alternative syntax (dblarg=true):
13 \sidenote[]{}{A note}
14
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}
20
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}
26
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** provides¹ 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<name>`. `\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.

¹ `\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:

`\setsidenotes{\langle options\rangle}`

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|falseDefault: **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 = {`<code>`}Default: `\normalfont\footnotesize`

The format of the sidenote text.

text-format+ = {`<code>`}

(initially empty)

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

perpage = true|falseDefault: **false**

This option can only be set in the preamble. Make sidenotes counter per page. It uses package `perpage`'s [Kas14] `\MakeSortedPerPage` macro for the task. Otherwise the macro `\MakeSorted` is used. In the default setting sidenotes are counted per chapter. If you want sidenotes counted document-wise together with a class that defines a counter `chapter` then use for example the package `chngcntr` [Wil18] and issue `\counterwithout{sidenote}{chapter}` after loading `SNOTEZ`. This documentation is an example for the use of the option.

note-mark-sep = {`<code>`}Default: `\space`

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

note-mark-format = {`<code>`} Default: `\@textsuperscript{\normalfont#1}`

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

text-mark-format = {`<code>`} Default: `\@textsuperscript{\normalfont#1}`

The format of the sidenote mark in the text.² Please refer to the actual mark with #1.

footnote = true|falseDefault: **false**

This option can only be used in the preamble. Let³ `\footnote` to be `\sidenote`, `\footnotemark` to be `\sidenotemark` and `\footnotetext` to be `\sidenotetext`.

sidefloat-format = {`<code>`}Default: `\raggedright`

The format of the contents of a sidefloat environment text.⁴

1. This document, for example, appends `ragged2e`'s `\RaggedRight` [Sch19] to the sidenote's format.

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

3. In the sense of `\let`

4. Introduced in version 0.5

5. 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 1–30 have been omitted. They only repeat the license statement which has already been mentioned in section 1.

```

31
32 \RequirePackage{etoolbox,pgfopts,marginnote}
33 \@ifpackageloaded{zref-abspage}
34   {\RequirePackage{perpage}}
35   {\AtEndPreamble{\RequirePackage{perpage}}}
36
37 % -----
38 % package options:
39 \newbool{snotez@marginnote}
40 \newbool{snotez@perpage}
41 \newbool{snotez@footnote}
42 \newbool{snotez@dblarg}
43
44 \newcommand*\snotez@note@mark@sep{\space}
45 \newcommand*\snotez@note@mark@format[1]{\textsuperscript{\normalfont#1}}
46 \newcommand*\snotez@format{\normalfont\footnotesize}
47 \newcommand*\snotez@text@mark@format[1]{\textsuperscript{\normalfont#1}}
48
49 \pgfkeys{
50   snotez/.cd,
51   % all sidenotes use \marginnote:
52   marginnote/.is if      = snotez@marginnote ,
53   % formatting of the note text:
54   text-format/.code     = \renewcommand*\snotez@format{\#1} ,
55   text-format+/.code    =
56     \expandafter\renewcommand
57     \expandafter*%
58     \expandafter\snotez@format
59     \expandafter{\snotez@format\#1} ,
60   % make sidenotes counted per page:
61   perpage/.is if        = snotez@perpage ,
62   % formatting of the note mark:
63   note-mark-sep/.code   = \renewcommand*\snotez@note@mark@sep{\#1} ,
64   note-mark-format/.code = \renewcommand*\snotez@note@mark@format[1]{\#1} ,
```

```

65   text-mark-format/.code = \renewcommand*\snotez@text@mark@format[1]{#1} ,
66   % make all footnotes sidenotes:
67   footnote/.is if      = snotez@footnote ,
68   % change optional argument input:
69   dblarg/.is if      = snotez@dblarg ,
70   % formmatting of the sidefloats' contents:
71   sidefloat-format/.code = \renewcommand*\snotez@sidefloat@format{#1} ,
72   sidefloat-format+.code =
73     \expandafter\renewcommand
74     \expandafter*%
75     \expandafter\snotez@sidefloat@format
76     \expandafter{\snotez@sidefloat@format#1}
77 }
78
79 \ProcessPgfOptions*
80
81 \newrobustcmd\setsidenotes[1]{\pgfqkeys{/snotez}{#1}}
82
83 % -----
84 % the \sidenote command
85 \ifboolexpr{ \snotez@dblarg }{
86   \newrobustcmd*\sidenote{%
87     \snotez@sidenote@dblarg
88   }
89 }{
90   \newrobustcmd*\sidenote{%
91     \snotez@sidenote@nodblarg
92   }
93 }
94
95 % syntax:
96 % - \sidenote{text}
97 % - \sidenote[mark]{text}
98 % - \sidenote[offset][mark]{text}
99 \newrobustcmd*\snotez@sidenote@dblarg{%
100   \@ifnextchar[%%
101     {\snotez@sidenote@dblarg@aux}
102     {\snotez@sidenote@aux{}[]}% no option
103 }
104
105 \protected\def\snotez@sidenote@dblarg@aux[#1]{%
106   \@ifnextchar[%%
107     {\snotez@sidenote@aux{#1}}% two options
108     {\snotez@sidenote@aux{}[{#1}]}% one option
109 }
110
111 % syntax:
112 % - \sidenote{text}
113 % - \sidenote[mark]{text}
114 % - \sidenote(offset){text}
115 % - \sidenote(offset)[mark]{text}
116 \newrobustcmd*\snotez@sidenote@nodblarg{%
117   \@ifnextchar(%%
118     {\snotez@sidenote@nodblarg@aux}% offset

```

```

119      {%
120      \@ifnextchar[
121          {\snotez@sidenote@aux{}% no offset but mark
122          {\snotez@sidenote@aux{}[]% no offset and no mark
123          }%
124      }%
125
126 \protected\def\snotez@sidenote@nodblarg@aux(#1){%
127     \@ifnextchar[%
128         {\snotez@sidenote@aux{#1}}% mark
129         {\snotez@sidenote@aux{#1}[]}% no mark
130     }%
131
132 % #1: offset
133 % #2: mark
134 % #3: text
135 \long\def\snotez@sidenote@aux#1[#2]#3{%
136     \snotez@mark{#2}%
137     \snotez@text{#1}{#3}%
138 }
139
140 % this one is very much \footnotemark from latex.ltx:
141 \newrobustcmd*\snotez@write@mark[1]{%
142     \leavevmode
143     \ifhmode\edef\x@sf{\the\spacefactor}\nobreak\fi
144     #1%
145     \ifhmode\spacefactor\x@sf\fi
146     \relax
147 }
148
149 \newrobustcmd*\snotez@mark[1]{%
150     \ifblank{#1}% or \ifstrempty?
151         {%
152             \refstepcounter{sidenote}%
153             \protected@xdef\@the@snotez@mark{\thesidenote}%
154         }%
155         {%
156             \protected@edef\@currentlabel{#1}%
157             \protected@xdef\@the@snotez@mark{#1}%
158         }%
159     \snotez@write@mark{%
160         \hbox{\snotez@text@mark@format{\@the@snotez@mark}}%
161     }
162
163 \ifltxcounter{chapter}
164     {\newcounter{sidenote}[chapter]}
165     {\newcounter{sidenote}}
166
167 % -----
168 % the \sidenotemark command
169 \newrobustcmd*\sidenotemark[1][]{\snotez@mark{#1}}
170
171 % -----
172 % the \sidenotetext command

```

```

173 \ifbool{snotez@dblarg}{
174   \newrobustcmd*\sidenotetext{%
175     \snotez@sidenotetext@dblarg
176   }
177 }{
178   \newrobustcmd*\sidenotetext{%
179     \snotez@sidenotetext@nodblarg
180   }
181 }
182
183 % syntax:
184 % - \sidenotetext{text}
185 % - \sidenotetext[mark]{text}
186 % - \sidenotetext[offset][mark]{text}
187 \newrobustcmd*\snotez@sidenotetext@dblarg{%
188   \@ifnextchar[%
189     {\snotez@sidenotetext@dblarg@aux}
190     {\snotez@sidenotetext@aux{}[]}% no option
191 }
192
193 \protected\def\snotez@sidenotetext@dblarg@aux[#1]{%
194   \@ifnextchar[%
195     {\snotez@sidenotetext@aux{}#1}% two options
196     {\snotez@sidenotetext@aux{}[#1]}% one option
197 }
198
199 % syntax:
200 % - \sidenotetext{text}
201 % - \sidenotetext[mark]{text}
202 % - \sidenotetext(offset){text}
203 % - \sidenotetext(offset)[mark]{text}
204 \newrobustcmd*\snotez@sidenotetext@nodblarg{%
205   \@ifnextchar(%
206     {\snotez@sidenotetext@nodblarg@aux}% offset
207     {%
208       \@ifnextchar[
209         {\snotez@sidenotetext@aux{} }% no offset nut mark
210         {\snotez@sidenotetext@aux{}[] }% no offset and no mark
211     }%
212 }
213
214 \protected\def\snotez@sidenotetext@nodblarg@aux(#1){%
215   \@ifnextchar[%
216     {\snotez@sidenotetext@aux{}#1}% mark
217     {\snotez@sidenotetext@aux{}#1[]}% no mark
218 }
219
220 % #1: offset
221 % #2: mark
222 % #3: text
223 \long\protected\def\snotez@sidenotetext@aux#1[#2]#3{%
224   \ifblank{#2}{}{\protected\xdef\@the@snotez@mark{#2}}%
225   \snotez@text{#1}{#3}%
226 }

```

```

227
228 % #1: offset
229 % #2: text
230 \newrobustcmd*\snotez@text[2]{%
231   \ifblank{#1}{%
232     {%
233       \snotez@marginpar{%
234         \snotez@format
235         \snotez@write@mark{\snotez@note@mark@format{@the@snotez@mark}}%
236         \snotez@note@mark@sep#2}%
237     }%
238   }%
239   \snotez@marginnote{%
240     \snotez@format
241     \snotez@write@mark{\snotez@note@mark@format{@the@snotez@mark}}%
242     \snotez@note@mark@sep#2}%
243   }[\snotez@if@nbskip{#1}]%
244 }%
245 }%
246
247 \newcommand*\snotez@if@nbskip[1]{%
248   % if #1 starts with * gobble it and add \baselineskip:
249   \expandafter\ifx\@car#1\@nil*%
250     \expandafter\@firstoftwo
251   \else
252     \expandafter\@secondoftwo
253   \fi
254   {\@cdr#1\@nil\baselineskip}%
255   {#1}%
256 }%
257
258 \let\snotez@marginpar\marginpar
259 \let\snotez@marginnote\marginnote
260
261 % -----
262 % margin floats with captions, based on an idea in tufte-latex
263 \newsavebox\snotez@sidefloat@box
264 \newcommand*\snotez@sidefloat@format{\raggedright}
265
266 \newenvironment{snotez@sidefloat}[2]
267   {%
268     \def\@capttype{#1}%
269     \begin{lrbox}{\snotez@sidefloat@box}%
270       \minipage{\marginparwidth}%
271       \snotez@sidefloat@format#2%
272     }%
273   {
274     \endminipage
275     \end{lrbox}%
276     \marginpar{\unhbox\snotez@sidefloat@box}%
277   }
278
279 \newrobustcmd*\snotez@new@sidefloat[2]{%
280   \newenvironment{side#1}{%

```

```

281     {\snotez@sidefloat{\#1}{\#2}}
282     {\endsnotez@sidefloat}%
283 }
284
285 \newrobustcmd*\newsnotezfloat[2][]{\snotez@new@sidefloat{\#2}{\#1}}
286
287 \newsnotezfloat{figure}
288 \newsnotezfloat{table}
289
290 % -----
291 % process preamble options:
292 \AtBeginDocument{
293     % if option `footnote=true' let \footnote to \sidenote:
294     \ifbool{snotez@footnote}{%
295         {
296             \let\footnote\sidenote
297             \let\footnotemark\sidenotemark
298             \let\footnotetext\sidenotetext
299             \ifdef{\multfootnote}{%
300                 \let\multfootnote\multsidenote
301             }{}%
302         }{}%
303     % if option `marginnote=true' use \marginnote for all notes:
304     \ifbool{snotez@marginnote}{%
305         {
306             \let\snotez@marginpar\marginnote
307             \PackageInfo{snotez}{%
308                 {All sidenotes are now using \string\marginnote^}%
309                 instead of \string\marginpar}%
310         }%
311     }%
312 }
313
314 \AtEndPreamble{%
315     % if option `perpage=true' count notes per page:
316     \ifbool{snotez@perpage}{%
317         {\MakeSortedPerPage{sidenote}}
318         {\MakeSorted{sidenote}}%
319     }%
320
321 \endinput
322
323 % -----
324 % HISTORY:
325 2012/11/15 v0.1 - first version
326 2013/04/03 v0.2 - documentation, removed erroneous `fnpct' adaption, other
327               minor changes
328               - added update of \@currentlabel when a custom mark is used
329 2013/04/21 v0.3 - try to avoid conflict with package loading order of
330               `perpage' and `zref-abspage'
331               - allow '*' syntax for offsets that are multiples of
332                 \baselineskip
333               - syntax change in optional arguments; option `dblarg'
334                 provides previous syntax >> this is the default

```

References

335 2013/06/13 v0.3a - better separation of definition of \sidenote and
336 \sidenotetext commands and the internal commands
337 2013/11/21 v0.4 - robustify commands where appropriate
338 - use cnltx-base
339 2020/01/12 v0.5 - remove dependency on `cnltx-base'
340 2020/12/14 v0.5a - fix issue #1

References

- [GKW10] Kevin GODBY, Bil KLEB, and Bill WOOD.
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URL: <https://www.ctan.org/pkg/tufte-latex/>.
- [Kas14] David KASTRUP. perpage. version 2.0, Oct. 25, 2014 (or newer).
URL: <https://www.ctan.org/pkg/perpage/>.
- [Koh18] Markus KOHM. marginnote. version 1.4b, Aug. 9, 2018 (or newer).
URL: <https://www.ctan.org/pkg/marginnote/>.
- [Leh19] Philipp LEHMAN, current maintainer: Joseph WRIGHT.
etoolbox. version 2.5h, Sept. 21, 2019 (or newer).
URL: <https://www.ctan.org/pkg/etoolbox/>.
- [Nie20] Clemens NIEDERBERGER.
fnpct. version 0.5a, Jan. 2, 2020 (or newer).
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- [Sch19] Martin SCHRÖDER. ragged2e. version 2.2, July 28, 2019 (or newer).
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URL: <https://www.ctan.org/pkg/libertine/>.
- [TS16] Andy THOMAS and Oliver SCHEBAUM.
sidenotes. version 1.00, Apr. 21, 2016 (or newer).
URL: <https://www.ctan.org/pkg/sidenotes/>.
- [Wil18] Peter WILSON, current maintainer: Will ROBERTSON.
chngcntr. version 1.1a, Apr. 9, 2018 (or newer).
URL: <https://www.ctan.org/pkg/chngcntr/>.
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memoir. version 3.7h, Dec. 12, 2018 (or newer).
URL: <https://www.ctan.org/pkg/memoir/>.
- [Wri14] Joseph WRIGHT. pgfopts. version 2.1a, July 10, 2014 (or newer).
URL: <https://www.ctan.org/pkg/pgfopts/>.

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