

# SNOTEZ

VO.4 2013/11/21

sidenote support for L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub>

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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<sup>A</sup>T<sub>E</sub>X Project Public License (LPPL), version 1.3 or later (<http://www.latex-project.org/lppl.txt>). The software has the status “maintained.”

**SNOTEZ** needs and loads the packages `cnltx-base` (from the `cnltx` bundle),<sup>1</sup> `marginnote`<sup>2</sup> and `perpage`.<sup>3</sup>

1. Niederberger [Nie13a]
2. Kohm [Koh12]
3. Kastrup [Kas06]

## 2 Motivation

This has just been an exercise on a lazy afternoon.<sup>4</sup> Well, more or less at least. Since there already is Andy Thomas’ `sidenotes` package<sup>5</sup> there is probably no real need for **SNOTEZ**. Moreover, the `tuftes` classes<sup>6</sup> as well as `memoir`<sup>7</sup> also provide corresponding mechanisms. Besides the fun I had my motivation was also based on the fact that I didn’t like some smaller things (*not* bugs) done by the `sidenotes` package such as inserting kerns and superscripted commas for multiple marks. I prefer to let my `fnpct`<sup>8</sup> 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.

4. <http://www.youtube.com/watch?v=PPRiaYH1iTk>
5. Thomas and Schebaum [TS12]
6. Godby, Kleb, and Wood [GKW09]
7. Wilson and Madsen [WM11]
8. Niederberger [Nie13b]

By the way: the `fnpct` package `vo.2k` and later knows about `SNOTEZ` and automatically adapts the note commands. Please note that you need to enable the `dblarg` option (see page 4) when you're using `fnpct` together with `SNOTEZ`!

### 3 Introduction

The `SNOTEZ` package introduces a `\sidenote` command<sup>1</sup> that typesets sidenotes the same way `\footnote` typesets footnotes. It provides some options that allow formatting the appearance of the sidenotes.<sup>2</sup> As a default sidenotes are typeset in a `\marginpar` but there are possibilities using Markus Kohm's `marginnote` [Koh12] 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  $\text{\LaTeX}$ '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.<sup>3</sup> Please see its documentation<sup>4</sup> [Koh12] 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 = false` option the `⟨offset⟩` argument has parentheses instead of square brackets!

`\sidenotemark[⟨marg⟩]`

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

<sup>1</sup> This is an example demonstrating the default appearance.

<sup>2</sup> In all sidenotes in this document the mark is typeset on the baseline and the text is set ragged right.

<sup>3</sup> From the `marginnote` package

<sup>4</sup> 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=false):
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=false):
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=false):
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=false):
31 \sidenote(*2)[a]{A note}

```

## 5 Options

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

## 5 Options

`\setsidenotes{⟨options⟩}`

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

Available options are these:

`dblarg = true|false`

Default: `true`

*This option can only be used as a package option!* 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 `false` changes the `[⟨offset⟩]` argument syntax into `(⟨offset⟩)`.

If you're using `SNOTEZ` together with the `fnpct` package [Nie13b] you cannot set `dblarg` to `false`. Otherwise the `⟨offset⟩` argument gets lost!

`marginnote = true|false`

Default: `false`

Use `marginnote`'s `\marginnote` [Koh12] for all `\sidenotes`. In the default setting `\sidenote` uses `\marginpars` to set the sidenote unless you use the `⟨offset⟩` 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`.<sup>1</sup>

1. This document, for example, appends `raggedze`'s `\RaggedRight` [Scho9] to the sidenote's format.

`perpage = true|false`

Default: `false`

*This option can only be set in the preamble.* Make sidenotes counter per page. It uses package `perpage`'s [Kaso6] `\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` [Wil09] 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.<sup>2</sup> Please refer to the actual mark with `#1`.

2. This document uses Michael Sharpe's `superiors` package [Sha12] and redefines the mark formats to use its `\textsu` command.

## 6 Implementation

`footnote = true|false`

Default: false

*This option can only be used in the preamble.* Let<sup>1</sup> `\footnote` to be `\sidenote`, `\footnotemark` to be `\sidenotemark` and `\footnotetext` to be `\sidenotetext`. 1. In the sense of `\let`

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*{\superiors@spaced}#1},
4   text-format+=\RaggedRight,
5   perpage=true
6 }
```

## 6 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 \def\snotez@date{2013/11/21}
32 \def\snotez@version{v0.4}
33 \def\snotez@description{sidenote support for LaTeX 2e (CN)}
34
35 \NeedsTeXFormat{LaTeX2e}
36 \ProvidesPackage{snotez}[\snotez@date\space \snotez@version\space \snotez@description]
37
38 \RequirePackage{cnltx-base,marginnote}
39 \ifpackageloaded{zref-abspace}
40   {\RequirePackage{perpage}}
41   {\AtEndPreamble{\RequirePackage{perpage}}}
42
43 % -----
44 % message handling
45 \def\snotez@error@message{%
46   For details have a look at the 'snotez' manual.}
47 \cnltx@create@generic@message{snotez}{snotez}{Error}{\snotez@error@message}
48 \cnltx@create@generic@message{snotez}{snotez}{Warning}{\snotez@warning@message}
49 \cnltx@create@generic@message{snotez}{snotez}{WarningNoLine}{\snotez@warning@message}
50 \cnltx@create@generic@message{snotez}{snotez}{Info}{\snotez@info@message}
51
52 % -----
53 % package options:
54 \newbool{snotez@marginnote}
55 \newbool{snotez@perpage}
56 \newbool{snotez@footnote}
57 \newbool{snotez@dblarg}
58 \booltrue{snotez@dblarg}
59
60 \newcommand*\snotez@note@mark@sep{\space}
61 \newcommand*\snotez@note@mark@format[1]{\@textsuperscript{\normalfont#1}}
```

## 6 Implementation

```

62 \newcommand*\snotez@format{\normalfont\footnotesize}
63 \newcommand*\snotez@text@mark@format[1]{\@textsuperscript{\normalfont#1}}
64
65 \pgfkeys{
66   snotez/.cd,
67   % all sidenotes use \marginnote:
68   marginnote/.is if      = snotez@marginnote ,
69   text-format/.code      = \renewcommand*\snotez@format{#1} ,
70   text-format+/.code     =
71     \expandafter\renewcommand
72     \expandafter*%
73     \expandafter\snotez@format
74     \expandafter{\snotez@format#1} ,
75   % make sidenotes counted per page:
76   perpage/.is if        = snotez@perpage ,
77   note-mark-sep/.code   = \renewcommand*\snotez@note@mark@sep{#1} ,
78   note-mark-format/.code = \renewcommand*\snotez@note@mark@format[1]{#1} ,
79   text-mark-format/.code = \renewcommand*\snotez@text@mark@format[1]{#1} ,
80   % make all footnotes sidenotes:
81   footnote/.is if      = snotez@footnote ,
82   dblarg/.is if       = snotez@dblarg
83 }
84
85 \ProcessPgfoptions*
86
87 \newrobustcmd\setsidenotes[1]{\pgfqkeys{/snotez}{#1}}
88
89 % -----
90 % the \sidenote command
91 \ifbool{snotez@dblarg}{
92   \newrobustcmd*\sidenote{%
93     \snotez@sidenote@dblarg
94   }
95 }{
96   \newrobustcmd*\sidenote{%
97     \snotez@sidenote@nodblarg
98   }
99 }
100
101 % syntax:
102 % - \sidenote{text}
103 % - \sidenote[mark]{text}
104 % - \sidenote[offset][mark]{text}
105 \newrobustcmd*\snotez@sidenote@dblarg{%
106   \@ifnextchar[%
107     {\snotez@sidenote@dblarg@aux}
108     {\snotez@sidenote@aux{}}]{}% no option
109 }
110
111 \protected\def\snotez@sidenote@dblarg@aux[#1]{%
112   \@ifnextchar[%
113     {\snotez@sidenote@aux{#1}}]{}% two options
114     {\snotez@sidenote@aux{}}{#1}}]{}% one option
115 }

```

## 6 Implementation

```
116
117 % syntax:
118 % - \sidenote{text}
119 % - \sidenote[mark]{text}
120 % - \sidenote[offset]{text}
121 % - \sidenote[offset][mark]{text}
122 \newrobustcmd*\snotez@sidenote@nodblarg{%
123   \@ifnextchar{%
124     {\snotez@sidenote@nodblarg@aux}% offset
125     {%
126       \@ifnextchar[
127         {\snotez@sidenote@aux{}}% no offset but mark
128         {\snotez@sidenote@aux{[]}}% no offset and no mark
129       }%
130     }
131
132 \protected\def\snotez@sidenote@nodblarg@aux(#1){%
133   \@ifnextchar[%
134     {\snotez@sidenote@aux{#1}}% mark
135     {\snotez@sidenote@aux{#1}[]}% no mark
136   }
137
138 % #1: offset
139 % #2: mark
140 % #3: text
141 \long\def\snotez@sidenote@aux#1[#2]#3{%
142   \snotez@mark{#2}%
143   \snotez@text{#1}{#3}%
144 }
145
146 % this one is very much \@footnotemark from latex.ltx:
147 \newrobustcmd*\snotez@write@mark[1]{%
148   \leavevmode
149   \ifhmode\edef\@x@sf{\the\spacefactor}\nobreak\fi
150   #1%
151   \ifhmode\spacefactor\@x@sf\fi
152   \relax
153 }
154
155 \newrobustcmd*\snotez@mark[1]{%
156   \ifblank{#1}% or \ifstrempy?
157   {%
158     \refstepcounter{sidenote}%
159     \protected@xdef\@the@snotez@mark{\thesidenote}%
160   }
161   {%
162     \protected@edef\@currentlabel{#1}%
163     \protected@xdef\@the@snotez@mark{#1}%
164   }%
165   \snotez@write@mark{%
166     \hbox{\snotez@text@mark@format{\@the@snotez@mark}}}%
167 }
168
169 \ifltxcounter{chapter}
```

## 6 Implementation

```
170 {\newcounter{sidenote}[chapter]}
171 {\newcounter{sidenote}}
172
173 % -----
174 % the \sidenotemark command
175 \newrobustcmd*\sidenotemark[1][\snotez@mark{#1}]
176
177 % -----
178 % the \sidenotetext command
179 \ifbool{snotez@dblarg}{
180   \newrobustcmd*\sidenotetext{%
181     \snotez@sidenotetext@dblarg
182   }
183 }{
184   \newrobustcmd*\sidenotetext{%
185     \snotez@sidenotetext@nodblarg
186   }
187 }
188
189 % syntax:
190 % - \sidenotetext{text}
191 % - \sidenotetext[mark]{text}
192 % - \sidenotetext[offset][mark]{text}
193 \newrobustcmd*\snotez@sidenotetext@dblarg{%
194   \@ifnextchar[%
195     {\snotez@sidenotetext@dblarg@aux}
196     {\snotez@sidenotetext@aux{}}{}% no option
197 }
198
199 \protected\def\snotez@sidenotetext@dblarg@aux[#1]{%
200   \@ifnextchar[%
201     {\snotez@sidenotetext@aux{#1}}% two options
202     {\snotez@sidenotetext@aux{{#1}}}% one option
203 }
204
205 % syntax:
206 % - \sidenotetext{text}
207 % - \sidenotetext[mark]{text}
208 % - \sidenotetext(offset){text}
209 % - \sidenotetext(offset)[mark]{text}
210 \newrobustcmd*\snotez@sidenotetext@nodblarg{%
211   \@ifnextchar(%
212     {\snotez@sidenotetext@nodblarg@aux}% offset
213     {%
214       \@ifnextchar[
215         {\snotez@sidenotetext@aux{}}% no offset nut mark
216         {\snotez@sidenotetext@aux{}}{}% no offset and no mark
217       }%
218     }
219 }
220 \protected\def\snotez@sidenotetext@nodblarg@aux(#1){%
221   \@ifnextchar[%
222     {\snotez@sidenotetext@aux{#1}}% mark
223     {\snotez@sidenotetext@aux{#1}}{}% no mark
```



## 6 Implementation

```

224 }
225
226 % #1: offset
227 % #2: mark
228 % #3: text
229 \long\protected\def\snotez@sidenotetext@aux#1[#2]#3{%
230   \ifblank{#2}{\protected@xdef\the@snotez@mark{#2}}%
231   \snotez@text{#1}{#3}%
232 }
233
234 % #1: offset
235 % #2: text
236 \newrobustcmd*\snotez@text[2]{%
237   \ifblank{#1}
238     {%
239       \snotez@marginpar{%
240         \snotez@format
241         \snotez@write@mark{\snotez@note@mark@format{\@the@snotez@mark}}%
242         \snotez@note@mark@sep#2}%
243     }
244     {%
245       \snotez@marginnote{%
246         \snotez@format
247         \snotez@write@mark{\snotez@note@mark@format{\@the@snotez@mark}}%
248         \snotez@note@mark@sep#2%
249       }[\snotez@if@nblskip{#1}{\@cdr#1\@nil\baselineskip}{#1}]%
250     }%
251 }
252
253 \newcommand*\snotez@if@nblskip[1]{%
254   \expandafter\ifx\@car#1\@nil*%
255     \expandafter\@firstoftwo
256   \else
257     \expandafter\@secondoftwo
258   \fi
259 }
260
261 \let\snotez@marginpar\marginpar
262 \let\snotez@marginnote\marginnote
263
264 % -----
265 % process preamble options:
266 \AtBeginDocument{
267   % if option 'footnote=true' let \footnote to \sidenote:
268   \ifbool{snotez@footnote}
269     {
270       \let\footnote\sidenote
271       \let\footnotemark\sidenotemark
272       \let\footnotetext\sidenotetext
273     }{}
274   % if option 'marginnote=true' use \marginnote for all notes:
275   \ifbool{snotez@marginnote}
276     {%
277       \let\snotez@marginpar\marginnote

```

## 6 Implementation

```
278 \snotez@info{All sidenotes are now using \string\marginnote^^J
279 instead of \string\marginpar}%
280 }%
281 {}
282 }
283
284 \AtEndPreamble{%
285 % if option 'perpage=true' count notes per page:
286 \ifbool{snotez@perpage}
287   {\MakeSortedPerPage{sidenote}}
288   {\MakeSorted{sidenote}}%
289 \@ifpackageloaded{fnpct}
290   {%
291     \ifbool{snotez@dblarg}
292     {}
293     {%
294       \snotez@error
295       {When you're using the 'fnpct' package together with^^J
296       'snotez' you need to enable the 'dblarg' option!}
297       {When you're using the 'fnpct' package together with^^J
298       'snotez' you need to enable the 'dblarg' option!}%
299     }%
300   }
301   {}%
302 }
303
304 \endinput
305
306 % -----
307 % HISTORY:
308 2012/11/15 v0.1 - first version
309 2013/04/03 v0.2 - documentation, removed erroneous 'fnpct' adaption, other
310                  minor changes
311                  - added update of \@currentlabel when a custom mark is used
312 2013/04/21 v0.3 - try to avoid conflict with package loading order of
313                  'perpage' and 'zref-abspage'
314                  - allow '*' syntax for offsets that are multiples of
315                    \baselineskip
316                  - syntax change in optional arguments; option 'dblarg'
317                    provides previous syntax >> this is the default
318 2013/06/13 v0.3a - better separation of definition of \sidenote and
319                  \sidenotetext commands and the internal commands
320 2013/11/21 v0.4 - robustify commands where appropriate
321                  - use cnltx-base
```

## References

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