

# SNOTEZ

VO.3 2013/04/21

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

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English documentation

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## 1 License and Requirements

SNOTEZ is placed under the terms of the L<sup>A</sup>T<sub>E</sub>X Project Public License, version 1.3 or later (<http://www.latex-project.org/lppl.txt>). It has the status “maintained.”

SNOTEZ needs and loads the packages etoolbox,<sup>1</sup> pgfopts,<sup>2</sup> marginnote<sup>3</sup> and perpage.<sup>4</sup>

1. Lehman [Leh11]
2. Wright [Wri11]
3. Kohm [Koh12]
4. Kastrup [Kas06]

## 2 Motivation

This has just been an exercise on a lazy afternoon.<sup>5</sup> Well, more or less at least. Since there already is Andy Thomas’ sidenotes package<sup>6</sup> there is probably no real need for SNOTEZ. Moreover, the tufte classes<sup>7</sup> as well as memoir<sup>8</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>9</sup> package handle these things. Anyways, here it is and

5. <http://www.youtube.com/watch?v=PPRiaYH1iTk>
6. Thomas and Schebaum [TS12]
7. Godby, Kleb, and Wood [GKW09]
8. Madsen and Wilson [MW11]
9. Niederberger [Nie13]

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. 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 L<sup>A</sup>T<sub>E</sub>X'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 this second optional argument has parentheses instead of square brackets!

```
\sidenotemark[<text>]
```

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.

Introduced in version 0.3

`\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:

`\setsidenotes{<options>}`

## 5 Options

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>`).

Introduced in version 0.3

*If you're using `SNOTEZ` together with the `fnpct` package [Nie13] 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: `\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 `ragged2e`'s `\RaggedRight` [Scho9] to the sidenote's format.

`perpage` = `true|false` Default: `false`

Make sidenotes counter per page. *This option can only be set in the preamble.* 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` [WRo9] 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.

`footnote` = `true|false` Default: `false`

Let<sup>3</sup> `\footnote` to be `\sidenote`, `\footnotemark` to be `\sidenotemark` and `\footnotetext` to be `\sidenotetext`. *This option can only be used in the preamble.*

3. In the sense of `\let`

## References

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 }
```

## References

- [GKW09] Kevin Godby, Bil Kleb, and Bill Wood. *tufte-latex*. Version 3.5.0, Dec. 11, 2009. URL: <http://mirror.ctan.org/macros/latex/contrib/sidenotes>.
- [Kaso06] David Kastrup. *perpage*. Version 1.12, July 15, 2006. URL: <http://mirror.ctan.org/macros/latex/contrib/perpage>.
- [Koh12] Markus Kohm. *marginnote*. Version 1.1i, Mar. 29, 2012. URL: <http://mirror.ctan.org/macros/latex/contrib/marginnote>.
- [Leh11] Philipp Lehman. *etoolbox*. Version 2.1, Jan. 21, 2011. URL: <http://mirror.ctan.org/macros/latex/contrib/etoolbox>.
- [MW11] Lars Madsen and Peter Wilson. *memoir*. Version 3.6j patch 6.0g, Mar. 6, 2011. URL: <http://mirror.ctan.org/macros/latex/contrib/memoir>.
- [Nie13] Clemens Niederberger. *fnpct*. Version 0.2k, Apr. 7, 2013. URL: <http://mirror.ctan.org/macros/latex/contrib/fnpct>.
- [Scho9] Martin Schröder. *ragged2e*. Version 2.1, May 21, 2009. URL: <http://mirror.ctan.org/macros/latex/contrib/ragged2e>.
- [Sha12] Michael Sharpe. *superiors*. Version 1.02, Aug. 13, 2012. URL: <http://mirror.ctan.org/macros/latex/contrib/superiors>.
- [TS12] Andy Thomas and Oliver Schebaum. *sidenotes*. Version 0.92, Nov. 9, 2012. URL: <http://mirror.ctan.org/macros/latex/contrib/sidenotes>.
- [WR09] Peter Wilson and Will Robertson. *chngcntr*. Version 1.0a, Sept. 2, 2009. URL: <http://mirror.ctan.org/macros/latex/contrib/chngcntr>.
- [Wri11] Joseph Wright. *pgfopts*. Version 2.1, June 2, 2011. URL: <http://mirror.ctan.org/macros/latex/contrib/pgfopts>.

## 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.

## 6 Implementation

```
31 \def\snotez@date{2013/04/21}
32 \def\snotez@version{v0.3}
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{etoolbox,pgfopts,marginnote}
39 \ifpackageloaded{zref-abspage}
40   {\RequirePackage{perpage}}
41   {\AtEndPreamble{\RequirePackage{perpage}}}
42
43 % -----
44 % message handling
45 \def\snotez@create@message#1{%
46   \ifstrequal{#1}{Error}
47     {%
48       \lowercase{\csdef{snotez@#1}}##1##2{%
49         \csuse{Package#1}{snotez}{##1}{##2}}%
50     }{%
51       \lowercase{\csdef{snotez@#1}}##1{%
52         \csuse{Package#1}{snotez}{##1}}%
53     }}
54 \snotez@create@message{Error}
55 \snotez@create@message{Warning}
56 \snotez@create@message{WarningNoLine}
57 \snotez@create@message{Info}
58
59 % -----
60 % package options:
61 \newbool{snotez@marginnote}
62 \newbool{snotez@perpage}
63 \newbool{snotez@footnote}
64 \newbool{snotez@dblarg}
65 \booltrue{snotez@dblarg}
66
67 \def\snotez@note@mark@sep{\space}
68 \def\snotez@note@mark@format#1{\@textsuperscript{\normalfont#1}}
69 \def\snotez@format{\footnotesize}
70 \def\snotez@text@mark@format#1{\@textsuperscript{\normalfont#1}}
71
72 \pgfkeys{
73   snotez/.cd,
74   % all sidenotes use \marginnote:
75   marginnote/.is if      = snotez@marginnote ,
76   text-format/.code     = \def\snotez@format{#1} ,
77   text-format+/.code    =
```

## 6 Implementation

```

78     \expandafter\def\expandafter\snotez@format\expandafter{\snotez@format
#1} ,
79     % make sidenotes counted per page:
80     perpage/.is if          = snotez@perpage ,
81     note-mark-sep/.code    = \def\snotez@note@mark@sep{#1} ,
82     note-mark-format/.code = \def\snotez@note@mark@format##1{#1} ,
83     text-mark-format/.code = \def\snotez@text@mark@format##1{#1} ,
84     % make all footnotes sidenotes:
85     footnote/.is if        = snotez@footnote ,
86     dblarg/.is if         = snotez@dblarg
87 }
88
89 \ProcessPgfoptions*
90
91 \newrobustcmd\setsidenotes[1]{\pgfqkeys{/snotez}{#1}}
92
93 % -----
94 % the \sidenote command
95 \ifbool{snotez@dblarg}{
96   % syntax:
97   % - \sidenote{text}
98   % - \sidenote[mark]{text}
99   % - \sidenote[offset][mark]{text}
100  \newrobustcmd*\sidenote{%
101    \@ifnextchar[%
102      {\snotez@sidenote@aux@i}
103      {\snotez@sidenote@aux@ii{}}]{}% no option
104  }
105
106  \def\snotez@sidenote@aux@i[#1]{%
107    \@ifnextchar[%
108      {\snotez@sidenote@aux@ii{#1}}% two options
109      {\snotez@sidenote@aux@ii{[#1]}}% one option
110  }
111 }{
112   % syntax:
113   % - \sidenote{text}
114   % - \sidenote[mark]{text}
115   % - \sidenote(offset){text}
116   % - \sidenote(offset)[mark]{text}
117  \newrobustcmd*\sidenote{%
118    \@ifnextchar(%
119      {\snotez@sidenote@aux@i}% offset
120      {%
121        \@ifnextchar[
122          {\snotez@sidenote@aux@ii{}}% no offset nut mark
123          {\snotez@sidenote@aux@ii{}}]{}% no offset and no mark
124        }%
125      }

```

## 6 Implementation

```

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

```



## 6 Implementation

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

```

## 6 Implementation

```

224     \snotez@note@mark@sep#2}%
225 }
226 {%
227     \snotez@marginnote{%
228         \snotez@format
229         \snotez@write@mark{\snotez@note@mark@format{\@the@snotez@mark}}%
230         \snotez@note@mark@sep#2%
231     }[\snotez@if@nblskip{#1}{\@cdr#1\@nil\baselineskip}{#1}]%
232 }%
233 }
234
235 \def\snotez@if@nblskip#1{%
236     \expandafter\ifx\@car#1\@nil*%
237     \expandafter\@firstoftwo
238     \else
239     \expandafter\@secondoftwo
240     \fi
241 }
242
243 \let\snotez@marginpar\marginpar
244 \let\snotez@marginnote\marginnote
245
246 % -----
247 % process preamble options:
248 \AtBeginDocument{
249     % if option 'footnote=true' let \footnote to \sidenote:
250     \ifbool{snotez@footnote}
251     {
252         \let\footnote\sidenote
253         \let\footnotemark\sidenotemark
254         \let\footnotetext\sidenotetext
255     }{}
256     % if option 'marginnote=true' use \marginnote for all notes:
257     \ifbool{snotez@marginnote}
258     {%
259         \let\snotez@marginpar\marginnote
260         \snotez@info{All sidenotes are now using \string\marginnote^^J
261             instead of \string\marginpar}%
262     }%
263     {}
264 }
265
266 \AtEndPreamble{%
267     % if option 'perpage=true' count notes per page:
268     \ifbool{snotez@perpage}
269     {\MakeSortedPerPage{sidenote}}
270     {\MakeSorted{sidenote}}}%
271 \@ifpackageloaded{fnpct}
272 {%

```

## 6 Implementation

```
273 \ifbool{snotez@dblarg}
274 {}
275 {%
276 \snotez@error
277 {When you're using the 'fnpct' package together with^^J
278 'snotez' you need to enable the 'dblarg' option!}
279 {When you're using the 'fnpct' package together with^^J
280 'snotez' you need to enable the 'dblarg' option!}%
281 }%
282 }
283 {}%
284 }
285
286 \endinput
287
288 % -----
289 % HISTORY:
290 2012/11/15 v0.1 - first version
291 2013/04/03 v0.2 - documentation, removed erroneous 'fnpct' adaption, other
292 minor changes
293 - added update of \@currentlabel when a custom mark is used
294 2013/04/21 v0.3 - try to avoid conflict with package loading order of
295 'perpage' and 'zref-abspage'
296 - allow '*' syntax for offsets that are multiples of
297 \baselineskip
298 - syntax change in optional arguments; option 'dblarg'
299 provides previous syntax
```

# Index

Section titles are indicated **bold**, packages sans serif, commands `\brown` and options `yellow`.

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