

# Non-Floating Margin Notes with **marginnote** Package\*

Markus Kohm<sup>†</sup>

2016/10/21 v1.2a

## Abstract

In L<sup>A</sup>T<sub>E</sub>X the command `\marginpar[⟨left⟩]{⟨right⟩}` might be used to create a note in the margin. But there is a problem with this command: it creates a special kind of float. For this it cannot be used e.g. at floats or footnotes. Package *marginnote* supports another command `\marginnote` to create notes in the margin. This does not use a kind of float and for this does not have the disadvantage of `\marginpar`. But there might be other problems ...

## Contents

1 How to Use <b>marginnote</b> Package	1
2 Known Problems Using <b>marginnote</b>	3
3 Implementation	4

## 1 How to Use **marginnote** Package

First of all you have to load. You may use:

```
\usepackage{marginnote}
```

to do so. You may also use one of the following options for a global change of the behaviour of *marginnote*:

`fulladjust` adjusts the margin note at the height and depth of the current line.  
Note, that this may sometimes result in extra height and depth of the current line, but results in the best vertical alignment. This is the default.

---

\*This file has revision number 9, last revised 2016/10/21.

<sup>†</sup>Email: [komascript@gmx.info](mailto:komascript@gmx.info)

`heightadjust` adjusts the margin note at the height of the current line but not the depth. Note, that this may sometimes result in extra height of the current line and in vertical misplacement.

`depthadjust` adjusts the margin note at the depth of the current line but not height. Note, that this may sometimes result in extra depth of the current line and very often in vertical misplacement.

`noadjust` does not adjust the margin note at the height or depth of the current line. Note, that this often results in vertical misplacement but seldom in vertical extra space before or after the current line.

`\marginnote`

The command `\marginnote[<left>]{<right>}[(voffset)]` may be used to set a margin note using `\marginnote`. The first optional argument and the mandatory argument are same using `\marginpar` from the L<sup>A</sup>T<sub>E</sub>X kernel. Even `\reversemarginpar` will be considered. The note *<left>* or *<right>* will be put at the current vertical position. Second optional argument *<voffset>* may be used to adjust the vertical position of the margin note. Use a negative dimension to move it up or a positive dimension to move it down.

`\marginnoteleftadjust`  
`\marginnoterightadjust`

At some environments, e.g. `framed` from the `framed` package the horizontal placement of the margin notes are not correct. In this case you may redefine `\marginnoteleftadjust` and `\marginnoterightadjust` to fix this. Note that these are macros not lengths! So you have to use `\renewcommand`, `\def` or `\let` to change them. You may e.g. use

```
\begingroup
  \makeatletter
  \g@addto@macro\framed{%
    \let\marginnoteleftadjust\FrameSep
    \let\marginnoterightadjust\FrameSep
  }
\endgroup
```

at your preamble after loading package `framed` to fix the problem using `framed` environment.

NOTE: `\marginnoteleftadjust` and `\marginnoterightadjust` will be used only, if the correct horizontal position cannot be determined using PDFT<sub>E</sub>X features (`\pdfsavepos` and `\pdflastxpos`). So if you are using PDFL<sup>A</sup>T<sub>E</sub>X with PDF output or PDFL<sup>A</sup>T<sub>E</sub>X with PDFT<sub>E</sub>X-version since 1.40 or X<sub>E</sub>T<sub>E</sub>X you will not need to use the example code above, but you will need at least two L<sup>A</sup>T<sub>E</sub>X runs to get the correct horizontal positions of the margin notes.

`\marginnotetextwidth`

Package `marginnote` needs to know the real width of the type area to find the right margin. While some environments (e.g. thos of package `framed`) change `\textwidth`, `marginnote` defines it's own text width macro. If you change type area after `\begin{document}` you should add

```
\edef\marginnotetextwidth{\the\textwidth}
```

```
\marginnotevadjust  
\raggedleftmarginnote  
\raggedrightmarginnote
```

after changing the type area. Maybe you should do this globally using `\xdef` instead of `\edef`. Most users will never need to change `\marginnotetextwidth`.

At some environments the vertical adjustment of the margin note will be wrong, e.g. one base line to low. In this case you may use the additional optional argument of `\marginnote` at every usage of `\marginnote` or redefine `\marginnotevadjust` at the begin of the environment. The default definition is `0pt`.

These macros define how the margin note will be aligned. The defaults are:

- align margin notes at the left margin right to the margin,
- align margin notes at the right margin left to the margin.

You may change this using `\renewcommand`, e.g. use

```
\renewcommand*\{\raggedleftmarginnote\}{  
\renewcommand*\{\raggedrightmarginnote\}{\centering}
```

to get justified text at the left and centered text at the right margin.

This macro defines the font that will be used to set margin notes. The default is `\normalcolor`. You may use `\renewcommand` to change this, e.g. use

```
\renewcommand*\{\marginfont\}{\color{red}\sffamily}
```

to get red colored margin notes in sans serif font family. You need to load e.g. package `color` to use `\color`.

## 2 Known Problems Using `marginnote`

At double side layout (e.g. using class option `twoside`) `\marginnote` needs to know the number of the current page to decide whether the page is odd or even and so whether to use left or right margin. L<sup>A</sup>T<sub>E</sub>X uses an asynchronous output. Because of this counter `page` should not be used to get the number of the current page unless you are at page head or foot. To solve the problem `marginnote` uses a mechanism similar to labels. But this means, that the correct margin won't be known at this L<sup>A</sup>T<sub>E</sub>X run but only at the next. So after adding or deleting a margin note or after each change of page break you need two L<sup>A</sup>T<sub>E</sub>X runs to get all margins right.

The command `\marginnote` uses `\strut` and `\vadjust` to put the margin note at the correct position. But under some circumstances this may fail. You may adjust the vertical position of the margin note using the second optional argument of `\marginnote`. Sometimes even the text outside `\marginnote` will be moved because of using `\marginnote`. You may use one of the package options `fulladjust`, `heightadjust`, `depthadjust` or `noadjust` to change the global adjustment or a local redefinition of `\mn@strut` or `\mn@zbox`.

Note: The margin note will be placed at the current vertical line. This means, if you are using two `\marginnote` commands at the same line, they will be put on the same place. This is not a bug but a feature!

Since release 1.1b `\marginnote` between paragraphs (in vertical mode) will place the note between the paragraphs instead of the end of the previous paragraph.

You may use `\leavevmode` or the third optional argument of `\marginnote` to place it different.

No page break may occur inside a margin note created with `\marginnote`.

`\marginnote` somewhat different from `\marginpar` if used immediate after `\item`. This is not a bug, it's a feature!

With math `\marginnote` may work or may not depending on the math environment.

If you are using Xe<sup>T</sup>e<sub>X</sub>, PDF<sup>A</sup>T<sub>E</sub>X since version 1.40 or PD<sup>F</sup>L<sup>A</sup>T<sub>E</sub>X before version 1.40 with PDF output and the horizontal position of a margin note is wrong, do one more PD<sup>F</sup>L<sup>A</sup>T<sub>E</sub>X run.

Sometimes lines are stretched vertically using `\marginnote`, e.g. if you're using `\marginnote` at a list *and* upper case umlauts like “Ü” or if `\lineskiplimit>0pt`. In this case `\lineskiplimit=0pt` or `\lineskiplimit=-\maxdimen`, or one of the options may help.

You should not use `\marginnote` at the optional argument of `\item`.

### 3 Implementation

First test ε-T<sub>E</sub>X.

```

1 \begingroup
2  \def\@tempb{}%
3  \def\@tempa{}%
4  \PackageError{marginnote}{seems you are not running e-TeX\@tempb}{%
5    Since 2004 the LaTeX team recommends to use e-TeX.\MessageBreak
6    marginnote since version 1.1d uses e-TeX features.\MessageBreak
7    At actual systems 'latex' should already use e-TeX.\MessageBreak
8    At deprecated systems it may be called 'elatex'.\MessageBreak
9    Use either unsupported marginnote up to version 1.1c or\MessageBreak
10   ask you administrator for LaTeX using e-TeX\@tempb.\MessageBreak
11   Not using e-TeX\@tempb\space is a fatal error!\MessageBreak
12   Processing cannot be continued!}%
13 \endgroup
14 \batchmode \errmessage{} \csname @end\endcsname\end\relax
15 \csname endinput\endcsname
}%
17 \expandafter\ifx\csname eTeXversion\endcsname\relax\else
18 \ifnum\egtversion <2
19   \def\@tempb{ V 2}%
20 \else
21   \let\@tempa\endgroup
22 \fi
23 \fi
24 \@tempa

```

Next declare and process the options.

`\if@mn@verbose` Use verbose output mode by default. But you may change this using option `quiet`.  
25 `\newif\if@mn@verbose\@mn@verbosetrue`

```

26 \DeclareOption{verbose}{\@mn@verbosetrue}
27 \DeclareOption{quiet}{\@mn@verbosefalse}

\mn@strut The package needs to adjust the margin note at the current line. Sometimes this
provokes extra vertical line spacing. To avoid this you may redefine \mn@strut.
The default value is \strut.
28 \newcommand*\mn@strut{}}

\mn@zbox This macro is used to set a horizontal box without height, depth and width.
29 \newcommand{\mn@zbox}[1]{}}

The options do redefine both, \mn@strut and \mn@zbox.
30 \DeclareOption{fulladjust}{%
31   \renewcommand*\mn@strut{\strut}%
32   \renewcommand{\mn@zbox}[1]{%
33     \bgroup
34       \setbox\@tempboxa\vbox{\#1}%
35       \ht\@tempboxa\ht\strutbox
36       \dp\@tempboxa\dp\strutbox
37       \wd\@tempboxa\z@%
38       \box\@tempboxa
39     \egroup
40   }%
41 }
42 \DeclareOption{heightadjust}{%
43   \renewcommand*\mn@strut{\begingroup\dp\strutbox\z@\strut\endgroup}%
44   \renewcommand{\mn@zbox}[1]{%
45     \bgroup
46       \setbox\@tempboxa\vbox{\#1}%
47       \ht\@tempboxa\ht\strutbox
48       \dp\@tempboxa\dp\z@%
49       \wd\@tempboxa\z@%
50       \box\@tempboxa
51     \egroup
52   }%
53 }
54 \DeclareOption{depthadjust}{%
55   \renewcommand*\mn@strut{\begingroup\ht\strutbox\z@\strut\endgroup}%
56   \renewcommand{\mn@zbox}[1]{%
57     \bgroup
58       \setbox\@tempboxa\vbox{\#1}%
59       \ht\@tempboxa\ht\z@%
60       \dp\@tempboxa\dp\strutbox
61       \wd\@tempboxa\z@%
62       \box\@tempboxa
63     \egroup
64   }%
65 }
66 \DeclareOption{noadjust}{%

```

```

67  \renewcommand*{\mn@strut}{\relax}%
68  \renewcommand{\mn@zbox}[1]{%
69    \bgroup
70      \setbox\@tempboxa\vbox{\kern-\ht\strutbox #1}%
71      \ht\@tempboxa\ht\z@%
72      \dp\@tempboxa\dp\z@%
73      \wd\@tempboxa\z@%
74      \box\@tempboxa%
75    \egroup
76  }%
77 }

78 \ExecuteOptions{verbose,fulladjust}
79 \ProcessOptions\relax

\newmarginnote We need a macro to define a new note at the aux file. This will be done using the mechanism of LATEX that is used for \newlabel. But we use another prefix. This will result in the usual “Labels(s) may have changed. Rerun to get cross-references right.” if a margin note is new or have moved to another page.
80 \newcommand*{\newmarginnote}{\@newlabel{mn}}
```

\if@mn@pdfmode @mn@mode@prefix We need to know, wether or not PDFT<sub>E</sub>X and which version of PDFT<sub>E</sub>X is used. With PDFT<sub>E</sub>X the horizontal output position may be detected using \pdfsavepos and \pdflastxpos. So the relative position of the margin may be calculated. Without PDFT<sub>E</sub>X only manual adjustment is available. While PDF mode or not may change before start of the document, setting up the switch is delayed.

```

81 \newif\if@mn@pdfmode\@mn@pdfmodefalse
82 \newcommand*{\@mn@mode@prefix}{pdf}
83 \AtBeginDocument{%
84   \begingroup\expandafter\expandafter\expandafter\endgroup
85   \expandafter\ifx\csname pdflastxpos\endcsname\relax
86     \begingroup\expandafter\expandafter\expandafter\endgroup
87     \expandafter\ifx\csname lastxpos\endcsname\relax\else
88       \@mn@pdfmodetrue
89       \renewcommand*{\@mn@mode@prefix}{}%
90     \fi
91   \else % bg or 1
92     \begingroup\expandafter\expandafter\expandafter\endgroup
93     \expandafter\ifx\csname pdfTeXversion\endcsname\relax % bg 2
94       \begingroup\expandafter\expandafter\expandafter\endgroup
95       \expandafter\ifx\csname pdfoutput\endcsname\relax % bg 3
96         \begingroup\expandafter\expandafter\expandafter\endgroup
97         \expandafter\ifx\csname XeTeXrevision\endcsname\relax\else % bg 4
98           \@mn@pdfmodetrue
99           \fi % ed 4
100         \else % or 3
101           \ifcase\pdfoutput\else\@mn@pdfmodetrue\fi % bg ed 4
102           \fi % ed 3
103         \else % or 2

```

```

104      \ifnum \pdfTeXversion<140 % bg 3
105          \begingroup\expandafter\expandafter\expandafter\endgroup
106          \expandafter\ifx\csname pdfoutput\endcsname\relax % bg 4
107          \else % or 4
108              \ifcase\pdfoutput\else\@mn@pdfmode true\fi % bg ed 5
109              \fi % ed 4
110          \else % or 3
111              \@mn@pdfmode true
112              \fi % ed 3
113          \fi % ed 2
114      \fi % ed 1
115      \if@mn@verbose
116          \if@mn@pdfmode
117              \PackageInfo{marginnote}{%
118                  \string\pdfoutput\space not 0 or unimportant and\MessageBreak
119                  \string\pdflastxpos\space or \string\lastxpos\space
120                  available.\MessageBreak
121                  Extended position detection mode activated\@gobble
122              }%
123          \else
124              \PackageInfo{marginnote}{%
125                  either \string\pdflastxpos\space or \string\pdfoutput\space not
126                  available\MessageBreak
127                  or \string\pdfoutput\space set to 0.\MessageBreak
128                  Extended position detection mode deactivated\@gobble
129              }%
130          \fi
131      \fi
132 }

```

\marginnotetextwidth Some environments change \textwidth. But at PDF mode we need to know the real text width to find the right margin. So we use our own text width macro. Sometimes it may be usefull if the user can set it up. Because of this it is a user command.

```

133 \newcommand*\marginnotetextwidth{}%
134 \let\marginnotetextwidth\textwidth
135 \AtBeginDocument{\if@mn@pdfmode\edef\marginnotetextwidth{\the\textwidth}\fi}

```

\@mn@margintest Macro \@mn@margintest does the complete test, which margin to use. The result may be found at \if@tempswa. To avoid changes on the last page if there is a new note on the first page, try to count the notes by page. We know that this can not be successfull, but never the less it may be a good try. \@mn@thispage saves the page number of the last usage of \@mn@margintest. \@mn@atthispage saves the number of margin note at this page. But we need to know the absolut page number to do this. So we increase the absolut page number mn@abspage at every \outputpage. \@mn@currpage is the page from the page label if found. \@mn@currxpos is somehow special. Using PDFTEX the real  $x$  position may be written with the page label and used to calculate the correct horizontal offset.

In this case `\marginnoteleftadjust` and `\marginnoterightadjust` will not be used!

```

136 \newcommand*{\@mn@thispage}{}
137 \newcommand*{\@mn@currpage}{}
138 \newcommand*{\@mn@currxpos}{}
139 \newcounter{mn@abspage}
140 \AtBeginDocument{\setcounter{mn@abspage}{1}%
141   \g@addto@macro{\outputpage{\stepcounter{mn@abspage}}}}
142 \newcommand*{\@mn@margintest}{%

```

Number of the next margin note at this page.

```

143   \expandafter\ifx\csname @mn@thispage\endcsname\empty
144     \gdef\@mn@atthispage{1}%
145   \else\expandafter\ifnum \@mn@thispage=\value{mn@abspage}%
146     \begingroup
147       \tempcnta\@mn@atthispage\advance\tempcnta by \one
148       \xdef\@mn@atthispage{\the\tempcnta}%
149     \endgroup
150   \else
151     \gdef\@mn@atthispage{1}%
152   \fi
153 \fi
154 \xdef\@mn@thispage{\themn@abspage}%

```

Use the number of the page and the number of the margin note at this page to save the real number of this page at the aux file. At PDF mode save the current *x* position too.

```

155 \let\@mn@currpage\relax
156 \let\@mn@currxpos\relax
157 \if@mn@pdfmode
158   \cnameuse{\@mn@mode@prefix savepos}%
159   \protected@write\auxout{\let\themn@abspage\relax}%
160   \string\newmarginnote{note.\@mn@thispage.\@mn@atthispage}%
161   {\themn@abspage}{\noexpand\number\cnameuse{\@mn@mode@prefix lastxpos}sp}%
162 }%
163 \else
164   \protected@write\auxout{\let\themn@abspage\relax}%
165   \string\newmarginnote{note.\@mn@thispage.\@mn@atthispage}%
166   {\themn@abspage}{}%
167 }%
168 \fi

```

If the margin note label was not defined, it seems to be new. In this case the absolute page number will be used for the test instead of the saved real page number.

```
169 \expandafter\ifx\csname mn@note.\@mn@thispage.\@mn@atthispage\endcsname\relax
```

If we are not in two side mode, we are on a odd page.

```

170 \if@twoside
171   \if@mn@verbose
172     \PackageInfo{marginnote}{Suggest that margin
173       note \@mn@thispage.\@mn@atthispage\space will be on\MessageBreak

```

```

174      absolute page \themn@abspage.\MessageBreak
175      This may be wrong}%
176      \fi
177      \ifodd\value{mn@abspage}\@tempswatrue\else\@tempswafalse\fi
178  \else
179      \if@mn@verbose
180          \PackageInfo{marginnote}{right page because not two side mode}%
181      \fi
182      \@tempswatrue
183  \fi
184  \else
185      \edef\@mn@currpage{\csname
186          mn@note.\@mn@thispage.\@mn@atthispage\endcsname}%
187      \edef\@mn@curr xpos{\expandafter\@secondoftwo\@mn@currpage}%

```

Ulrike Fischer suggested a simple change to take care of `\hoffset`, e.g., using package `crop`. We use this occasion to take care of `\pdforigin`, too. If `\@mn@curr xpos` is not empty here, it should be corrected by `\hoffset` and maybe by `\pdforigin`.

```

188  \ifx\@mn@curr xpos\empty\else
189      \edef\@mn@curr xpos{\the\dimexpr \@mn@curr xpos -\hoffset\relax}%
190      \begingroup\expandafter\expandafter\expandafter\endgroup
191      \expandafter\ifx\csname pdforigin\endcsname\relax\else
192          \begingroup\expandafter\expandafter\expandafter\endgroup
193          \expandafter\ifx\csname pdfoutput\endcsname\relax
194              \begingroup\expandafter\expandafter\expandafter\endgroup
195              \expandafter\ifx\csname outputmode\endcsname\relax\else
196                  \ifnum \outputmode=1 %
197                      \edef\@mn@curr xpos{\the\dimexpr \@mn@curr xpos -\pdforigin
198                          +1in\relax}%
199                  \fi
200              \fi
201          \else
202              \ifnum \pdfoutput=1 %
203                  \edef\@mn@curr xpos{\the\dimexpr \@mn@curr xpos -\pdforigin
204                      +1in\relax}%
205              \fi
206          \fi
207      \fi
208  \fi
209  \edef\@mn@currpage{\expandafter\@firstoftwo\@mn@currpage}%
210  \if@mn@verbose
211      \PackageInfo{marginnote}{Margin note \@mn@thispage.\@mn@atthispage\space
212          is on absolute page \@mn@currpage\MessageBreak}%
213  \fi
214  \if@twoside
215      \ifodd\@mn@currpage\relax
216          \@tempswatrue
217      \else
218          \@tempswafalse

```

```

219      \fi
220  \else
221      \if@mn@verbose
222          \PackageInfo{marginnote}{right page because not two side mode}%
223      \fi
224      \tempswattrue
225  \fi
226 \fi
227 }

\marginnote Command \marginnote is the main macro of the package. The others are helpers
\@mn@marginnote to manage the optional arguments.
\@mn@@marginnote 228 \newcommand*{\marginnote}{%
\@mn@@marginnote 229   \@dblarg\@mn@marginnote
230 }
231 \newcommand{\@mn@marginnote}[2][]{%
232   \ifhmode
233     \@bsphack
234     \begingroup
235     \ifdim\@savsk>\z@\else
236       \def\@xifnch\expandafter\def\@futurelet\@let@token\@ifnch}%
237     \fi
238   \else
239     \begingroup
240   \fi
241   \@ifnextchar [\{@mn@@marginnote[\#1]\#2}{\@mn@@marginnote[\#1]\#2[\z@]}%
242 }
243 \newcommand{\@mn@@marginnote}{}%
244 \long\def\@mn@@marginnote[#1]\#2[#3]{%
245   \endgroup

```

In horizontal mode the space hack of the L<sup>A</sup>T<sub>E</sub>X kernel will be used. In vertical mode this should not be used.

```

246   \ifhmode
247     \@mn@@marginnote[\#1]\#2[\#3]%
248     \@bsphack
249   \else
250     \@mn@@marginnote[\#1]\#2[\#3]%
251   \fi
252 }
253 \newcommand{\@mn@@marginnote}{}%
254 \long\def\@mn@@marginnote[#1]\#2[#3]{%

```

All changes (but change of counters that are global because of using the L<sup>A</sup>T<sub>E</sub>X commands to change them an \gdef and \xdef) should be local. In h-mode a \strut will be used to fix base line. The margin note will be put to vertical list using \vadjust. This also means that wie are one line to deep. This will be corrected later using negative kern. In v-mode wie use a special kind of vbox to simply set everything. Math mode should behave like v-mode. And if we are just after an item we have to leave v-mode first.

```

255  \begingroup
256    \ifmmode\mn@strut\let\@tempa\mn@vadjust\else
257      \ifinlabel\leavevmode\fi
258      \ifhmode\mn@strut\let\@tempa\mn@vadjust\else\let\@tempa\mn@vlap\fi
259    \fi
260  \@tempa{%

```

Everything will be put upwards using a vbox with zero height and depth and \vss. At this box the margin test will be done. If csreversemargin was used, the logic switchs. Then the note will be places to the margin.

```

261    \vbox to\z@{%
262      \vss
263      \c@mn@margintest
264      \if@reversemargin\if@tempswa
265        \c@tempswafalse
266      \else
267        \c@tempswatrue
268      \fi\fi
269      \if@tempswa
270        \rlap{%

```

If \c@mn@curr xpos is neither \relax nor empty it is the real current *x* position of the last PDF<sub>L</sub>T<sub>E</sub>X run and may be used to calculate the real horizontal offset.

```

271      \ifx\c@mn@curr xpos\relax
272        \kern\marginnoterightadjust
273        \if@mn@verbose
274          \PackageInfo{marginnote}{%
275            xpos not known,\MessageBreak
276            using \string\marginnoterightadjust}%
277        \fi
278      \else\ifx\c@mn@curr xpos\empty
279        \kern\marginnoterightadjust
280        \if@mn@verbose
281          \PackageInfo{marginnote}{%
282            xpos not known,\MessageBreak
283            using \string\marginnoterightadjust}%
284        \fi
285      \else
286        \if@mn@verbose
287          \PackageInfo{marginnote}{%
288            xpos seems to be \c@mn@curr xpos,\MessageBreak
289            \string\marginnoterightadjust
290            \space ignored}%
291        \fi
292      \begingroup
293        \setlength{\c@tempdima}{\c@mn@curr xpos}%
294        \kern-\c@tempdima
295        \if@twoside\ifodd\c@mn@curr page\relax
296          \kern\oddsidemargin
297        \else

```

```

298          \kern\evensidemargin
299          \fi
300      \else
301          \kern\oddsidemargin
302          \fi
303          \kern 1in
304          \endgroup
305          \fi
306      \fi
307      \kern\marginnotetextwidth\kern\marginparsep
308      \vbox to\z@{\kern\marginnoteadjust\kern #3
309          \vbox to\z@{%
310              \hsize\marginparwidth
311
312              \linewidth\hsize

```

Here's the correction of the vertical position. The remain is simple.

```

312          \kern-\parskip
313          \marginfont\raggedright\marginnote\strut\hspace{\z@}%
314          \ignorespaces#2\endgraf
315          \vss}%
316          \vss}%
317      }%
318      \else

```

Using the left margin.

```

319          \llap{%
320              \vbox to\z@{\kern\marginnoteadjust\kern #3
321                  \vbox to\z@{%
322                      \hsize\marginparwidth
323
324                      \linewidth\hsize

```

Same like above for left margins.

```

324          \kern-\parskip
325          \marginfont\raggedleft\marginnote\strut\hspace{\z@}%
326          \ignorespaces#1\endgraf
327          \vss}%
328          \vss}%
329          \ifx\@mn@curr xpos\relax
330              \kern\marginnoteleftadjust
331              \if@mn@verbose
332                  \PackageInfo{\marginnote}{%
333                      xpos not known, \MessageBreak
334                      using \string\marginnoteleftadjust}%
335              \fi
336          \else\ifx\@mn@curr xpos\@empty
337              \kern\marginnoteleftadjust
338              \if@mn@verbose
339                  \PackageInfo{\marginnote}{%
340                      xpos not known, \MessageBreak

```

```

341           using \string\marginnoteleftadjust}%
342           \fi
343           \else
344             \if@mn@verbose
345               \PackageInfo{marginnote}{%
346                 xpos seems to be \c@mn@currxpos,\MessageBreak
347                 \string\marginnoteleftadjust
348                 \space ignored}%
349             \fi
350           \begingroup
351             \kern\c@mn@currxpos
352             \if@twoside\ifodd\c@mn@currrpage\relax
353               \kern-\oddsidemargin
354             \else
355               \kern-\evensidemargin
356             \fi
357             \else
358               \kern-\oddsidemargin
359             \fi
360             \kern-1in
361           \endgroup
362           \fi
363           \fi
364           \kern\marginparsep
365         }%
366       \fi
367     }%
368   }%
369 \endgroup
370 }

```

**\marginnoterightadjust** These may be used to define an automatic horizontal adjust. The default is zero.  
**\marginnoteleftadjust** They will be used only if not PDFTeX or PDFTEX before version 1.40 in DVI mode is used, because in this case the save position features are not available.

```

371 \newcommand*{\marginnoterightadjust}{}
372 \newcommand*{\marginnoteleftadjust}{}
373 \let\marginnoterightadjust\z@
374 \let\marginnoteleftadjust\z@

```

**\marginnotevadjust** This may be used to define an automatic vertical adjust. The default is zero. Values greater than zero will move the margin note down, values less than zero will move the margin note up.

```

375 \newcommand*{\marginnotevadjust}{}
376 \let\marginnotevadjust\z@

```

**\mn@vlap** This macro is used to set a vertical box without size at vertical mode.

```

377 \newcommand{\mn@vlap}[1]{%
378   \setbox\@tempboxa\vbox to \ht\strutbox{\#1\vs}%
379   \box\@tempboxa\vs-\baselineskip
380 }

```

`\mn@vadjust` This macro is used to set a vertical box at horizontal mode.

```
381 \newcommand{\mn@vadjust}[1]{%
382   \mn@zbox{\kern-\parskip
383     \leavevmode\vadjust{#1}%
384     \kern\parskip
385   }%
386 }
```

`\marginfont` These are very simple. A class may also define `\marginfont`. Use this if available.

`\raggedleftmarginnote` I don't use `\let` for the definitions of the ragged macros, so the meaning may change loading e.g. package `ragged2e`.

```
387 \providecommand*\marginfont{}%
388 \newcommand*\raggedleftmarginnote{\raggedleft}
389 \newcommand*\raggedrightmarginnote{\raggedright}
```

## 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.

Symbols				
<code>\@mn@@@marginnote</code>	228	<code>\if@mn@verbose</code>	25	<code>\mn@strut</code> . . . . .
<code>\@mn@@@marginnote</code>	228			28
<code>\@mn@atthispage</code>	136	<b>M</b>		<code>\mn@vadjust</code> . . . . .
<code>\@mn@currpage</code>	136	<code>\marginfont</code> . . . . .	3, 387	381
<code>\@mn@currxpos</code>	136	<code>\marginnote</code> . . . . .	2, 228	<code>\mn@vlap</code> . . . . .
<code>\@mn@marginnote</code>	228	<code>\marginnoteleftadjust</code>		377
<code>\@mn@margintest</code>	136			<code>\mn@zbox</code> . . . . .
<code>\@mn@mode@prefix</code>	81	<code>\marginnotetextwidth</code>		29
<code>\@mn@thispage</code>	136			<b>N</b>
<code>\if@mn@pdfmode</code>	81	<code>\marginnoterightadjust</code>		<code>\newmarginnote</code> . . . . .
				80
<b>I</b>		<code>\marginnotevadjust</code> . . . . .	2, 133	<code>\raggedleftmarginnote</code>
				3, 387
				<code>\raggedrightmarginnote</code>
		<code>\mn@abspage</code> . . . . .	136	3, 387

## Change History

v1.0a

`\marginfont`: Use  
`\providecommand` to define it. 14 v1.1  
General: Example to macros  
`\raggedleftmarginnote` and  
`\raggedrightmarginnote` at  
documentation fixed [thanks to  
Susumu Tanimura]. . . . . 3

v1.0b

General: spelling fixes . . . . . 1  
`\@mn@@@marginnote`: new PDF  
mode feature . . . . . 10  
`\@mn@currpage`: new (internal) . . . 7  
`\@mn@currxpos`: new (internal) . . . 7  
`\@mn@margintest`: new PDF mode

feature .....	7	and <code>noadjust</code> .....	5
<code>\if@mn@pdfmode</code> : new switch .....	6	<code>v1.1f</code>	
<code>\marginnotetextwidth</code> : new macro .....	7	<code>\@mn@@@marginnote</code> : missing usage of <code>\marginnoteadjust</code> on left margin fixed .....	12
<code>v1.1a</code>		<code>v1.1g</code>	
<code>\if@mn@pdfmode</code> : PDFTeX since 1.40 allows <code>\pdfsavepos</code> in DVI mode too .....	6	<code>\@mn@@@marginnote</code> : missing <code>\long</code> added .....	10
<code>v1.1b</code>		set <code>\linewidth</code> .....	12
<code>\@mn@@@marginnote</code> : use <code>\mn@vadjust</code> instead of <code>\vadjust</code> .....	10	<code>\@mn@@@marginnote</code> : missing <code>\long</code> added .....	10
<code>\if@mn@pdfmode</code> : if level fixed .....	6	<code>v1.1i</code>	
<code>\mn@vadjust</code> : new (internal) .....	14	<code>\@mn@@@marginnote</code> :	
<code>\mn@zbox</code> : new (internal) .....	5	<code>\ignorespaces</code> added .....	12
<code>v1.1c</code>		<code>\strut</code> moved to fix hyphenation (thanks to Ulrike Fischer) .....	12
<code>\if@mn@pdfmode</code> : XeTeX has working <code>\pdflastxpos</code> .....	2	<code>v1.2</code>	
<code>v1.1d</code>		<code>\@mn@abspage</code> : (new (internal)) .....	6
<code>\mn@abspage</code> : take care of <code>\hoffset</code> .....	9	<code>\if@mn@pdfmode</code> : addition for luaTeX from 0.85 .....	6
take care of <code>\pdforigin</code> .....	9	<code>\mn@abspage</code> : addition for luaTeX from 0.85 .....	8
<code>v1.1e</code>		<code>v1.2a</code>	
<code>\@mn@@@marginnote</code> : use <code>\mn@strut</code> instead of <code>\strut</code> ..	10	<code>\mn@abspage</code> : redefine <code>\@mn@curr xpos</code> only if not empty .....	9
<code>\mn@strut</code> : new (semi internal) ..	5		
General: new options <code>fulladjust</code> , <code>heightadjust</code> , <code>depthadjust</code> ,			