

The `minibox` package

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1 Introduction

It's sometimes useful to be able to stack text over lines in a small box; this is similar to paragraph text broken over lines, but for small amounts of text when automatic line breaking is not required. In other words, I'm looking for an `\mbox` that allows manual line breaks.

abcd
efg
h

This sort of thing is a little awkward in plain $\text{T}_\text{E}\text{X}$ and $\text{L}^{\text{A}}\text{T}_\text{E}\text{X}$.

```
\vbox{\hbox{abcd}\hbox{efg}\hbox{h}}
```

2 The command `\minibox`

`\minibox` This package defines the `\minibox` command to write this more conveniently separately lines with `\\`. Various options are allowed to control the alignment and whether to frame the box, shown in Table 1.

2.1 Horizontal alignment of the text

Here's an example adjusting the horizontal alignment.

```
\def\x{abcd\\efg\\h}  
\minibox{\x}    \minibox[c]{\x}    \minibox[r]{\x}
```

abcd
efg
h

abcd
efg
h

abcd
efg
h

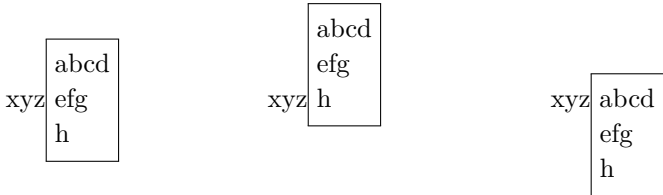
<code>frame(=true)</code>	Has a frame
<code>frame=false</code>	Has not a frame (default)
<code>rule=<dim></code>	Thickness of the rule (default 0.4pt)
<code>pad=<dim></code>	Space on the inside of the frame (default 3.0pt)
<code>l</code>	Left-aligned text (default)
<code>c</code>	Centred text
<code>r</code>	Right-aligned text
<code>b</code>	Align the box with the bottom line
<code>m</code>	Vertically centre the box (default)
<code>t</code>	Align the box with the top line

Table 1: Optional arguments for the `\minibox` command.

2.2 Vertical alignment of the box

Here's an example adjusting the vertical alignment.

```
\def\x{abcd\\efg\\h}
xyz\minibox{\x}   xyz\minibox[b]{\x}   xyz\minibox[t]{\x}
```



2.3 Framing your box

The boxes which are showed in these examples are not displayed by default; use the `frame` option to make them appear:

```
\def\x{abcd\\efg\\h}
\minibox{\x}   \minibox[frame]{\x}   \minibox[frame,rule=1pt,pad=0pt]{\x}
```



Negative values can be input for `pad`.

L^AT_EX experts: while these padding and rule options are internally controlled by `\fboxsep` and `\fboxrule`, changing these variables will have no effect on `\minibox`'s behaviour. Use `\miniboxsetup` as described next to change these options globally.

2.4 Setting options

Obviously, any combination of these options can be applied:

```
\def\x{abcd\\efg\\h}
x\minibox[frame]{\x}  x\minibox[frame,c,b]{\x}
```

x

abcd
efg
h

x

abcd
efg
h

`\miniboxsetup` You can change the defaults of `\minibox` using this command.

```
\def\x{abcd\\efg\\h}
\miniboxsetup{frame,r}
\minibox{\x}      \minibox{\x}
```

abcd
efg
h

abcd
efg
h

3 Licence

This package is freely modifiable and distributable under the terms and conditions of the L^AT_EX Project Public Licence, version 1.3c or greater (your choice). The latest version of this license is available at: <http://www.latex-project.org/lppl.txt>. This work is maintained by WILL ROBERTSON.

File I

Implementation

```
1 \RequirePackage{expl3}
2 \ProvidesExplPackage
3   {minibox}
4   {2013/06/21}
5   {0.2a}
6   {Another type of box.}

7 \bool_new:N \l_minibox_frame_bool
8 \keys_define:nn {minibox}
9 {
10   frame .choice: ,
11   frame / true .code:n = { \bool_set_true:N \l_minibox_frame_bool } ,
12   frame / false .code:n = { \bool_set_false:N \l_minibox_frame_bool } ,
13   frame .default:n = { true } ,
14
15   l .code:n = { \tl_set:Nn \l_minibox_tabular_preamble_tl {l} } ,
16   c .code:n = { \tl_set:Nn \l_minibox_tabular_preamble_tl {c} } ,
17   r .code:n = { \tl_set:Nn \l_minibox_tabular_preamble_tl {r} } ,
18
19   t .code:n = { \tl_set:Nn \l_minibox_tabular_valign_tl {t} } ,
20   m .code:n = { \tl_set:Nn \l_minibox_tabular_valign_tl {c} } ,
21   b .code:n = { \tl_set:Nn \l_minibox_tabular_valign_tl {b} } ,
22
23   rule .dim_set:N = \l_minibox_rule_dim ,
24   pad .dim_set:N = \l_minibox_pad_dim ,
25 }

26 \cs_new:Npn \miniboxsetup #1 { \keys_set:nn {minibox} {#1} }
27 \miniboxsetup {l,m,rule=\fboxrule,pad=\fboxsep}

28 \newcommand\minibox[2] []
29 {
30   \group_begin:
31   \keys_set:nn {minibox} {#1}
32   \bool_if:NTF \l_minibox_frame_bool
33     {
34       \setlength\fboxrule{\l_minibox_rule_dim}
35       \setlength\fboxsep{\l_minibox_pad_dim}
36       \fbox
37     }
38     { \use:n }
39     {
40       \use:x
```

```

41      {
42        \exp_not:N \begin{tabular}
43          [\l_minibox_tabular_valign_tl]
44          { @{} \l_minibox_tabular_preamble_tl @{} }
45          \exp_not:n {#2}
46        \exp_not:N \end{tabular}
47      }
48    }
49  \group_end:
50 }

```