

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 `TEX` and `LATEX`.

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

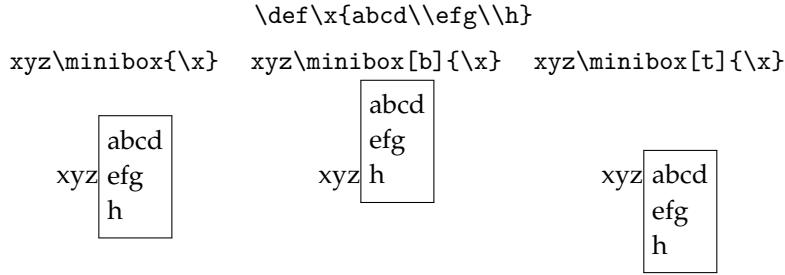
<code>\minibox[x]</code>	<code>\minibox[c]</code>	<code>\minibox[r]</code>
<pre>abcd efg h</pre>	<pre>abcd efg h</pre>	<pre>abcd efg h</pre>

<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.

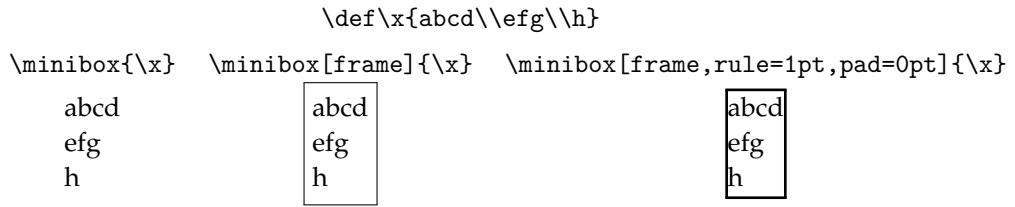
2.2 Vertical alignment of the box

Here's an example adjusting the vertical alignment.



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:



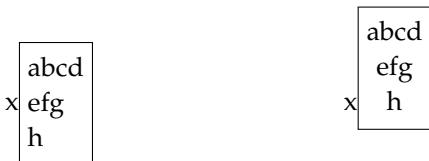
Negative values can be input for `pad`.

LATEX 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

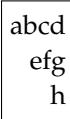
Obviously, any combination of these options can be applied:

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



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

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



2.5 Cautionary note, perhaps

If you look at the source you'll see that the way `\minibox` command is implemented lends itself to begin mis-used to input generic tabular material; this is not the intention of the command, however, and any such usage may break in future versions of this package.

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   {2013/04/20}
5   {0.2}
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     \begin{tabular}
```

```
41      [\\l_minibox_tabular_valign_t1]
42      { @{} \\l_minibox_tabular_preamble_tl @{} }
43      #2
44      \\end{tabular}
45      }
46      \\group_end:
47 }
```