The boxedminipage package*

Scott Pakin

scott+bmp@pakin.org

April 19, 2020

1 Introduction

This is a very simple package. It defines a single environment, boxedminipage that is essentially equivalent to \fbox{\begin{minipage}...\end{minipage}}. The difference is that the width of a boxedminipage includes the width of the frame, while the width of the \fbox + \minipage combination is wider than the width specified to the \minipage.

The following example exaggerates the effect by setting \fboxrule=8pt and \fboxsep=4pt and defining \minipages of width \linewidth:


This box was created by putting a \minipage within an \fbox. Notice how the frame is aligned with the left margin of the surrounding text but juts out into the right margin.

Suspendisse pulvinar vel elit at dapibus. Interdum et malen-suada fames ac ante ipsum primis in faucibus. Cras nibh orci, posuere quis viverra a, gravida nec velit. Præsent porta semper tellus, eu pulvinar ante mollis faucibus.

This box was created with the boxedminipage environment. Notice how the frame is aligned properly with both margins of the surrounding text.

Duis est neque, aliquet at augue a, auctor condimentum orci. Donec arcu magna, eleifend a consequat in, vehicula non elit. Sed id est sed ipsum interdum posuere.

*This document corresponds to boxedminipage v1.1, dated 2020/04/19.
Prior to boxedminipage v1.1 (April 2020), the package was known as boxedminipage2e to distinguish it from Mario Wolczko's boxedminipage package, developed for \LaTeX{} 2.09. Mario’s package, last updated in 1992, lacks support for the \LaTeX{} 2\epsilon{} minipage’s \langle{}height\rangle{} and \langle{}inner-pos\rangle{} arguments. In contrast, this package supports \texttt{minipage}\textprime{}s complete functionality.

At Frank Mittelbach’s suggestion and with Mario Wolczko’s consent, this boxedminipage replaces the \LaTeX{} 2.09 version. boxedminipage2e is now an alias for boxedminipage except that it issues a warning message that new documents should instead use boxedminipage.

## Usage

boxedminipage

The boxedminipage package defines a single environment, \texttt{boxedminipage}. It takes the same parameters as \LaTeX{} 2\epsilon{}’s \texttt{minipage} environment:

\begin{boxedminipage}{\langle{}width\rangle{}}\langle{}text\rangle\end{boxedminipage}

The semantic difference is that the values specified by the \langle{}height\rangle{} and \langle{}width\rangle{} arguments are reduced to accommodate the space needed by the surrounding frame.

## Implementation

Most readers can ignore this section. It presents an annotated version of boxedminipage’s source code. Section [3.1] describes the contents of boxedminipage.sty. Section [3.2] represents a separate stub file, boxedminipage2e.sty, which merely issues a warning message and instructs the author to load boxedminipage instead of boxedminipage2e.

### 3.1 boxedminipage

\texttt{\bmp@box}

The contents of the minipage are collected into \texttt{\bmp@box}.

1 \texttt{\newsavebox{\bmp@box}}

\texttt{\bmp@width} \texttt{\bmp@height}

The adjusted width and height of the minipage are stored in \texttt{\bmp@width} and \texttt{\bmp@height}, respectively.

2 \texttt{\newlength{\bmp@width}}

3 \texttt{\newlength{\bmp@height}}

\texttt{\bmp@relax}

We determine if the minipage’s \langle{}height\rangle{} argument contains only \texttt{\relax} by comparing it to \texttt{\bmp@relax}.

4 \texttt{\def{\bmp@relax}{\relax}}
boxedminipage

The boxedminipage environment is the only environment exposed by the boxedminipage package. It takes the same parameters as \LaTeX{2e}’s ordinary minipage environment:

- **Arguments**: \[⟨pos⟩] \[⟨height⟩] \[⟨inner-pos⟩] \[⟨width⟩]
- **Default values**: \(c\relax\ s\)

```
\newcommand{boxedminipage}[1][c]{%\[c\relax\ s\]
  \@ifnextchar[{minipage@i[#1]}{minipage@i[#1][\relax]}%}
```

boxedminipage2e

3.2 boxedminipage2e

Issue a warning if the user loaded boxedminipage2e instead of the newer name, boxedminipage. Then load boxedminipage.
The boxedminipage2e package has been renamed to boxedminipage. New documents should load boxedminipage instead of boxedminipage2e.

\RequirePackage{boxedminipage}

Change History

v1.0 General: Initial version ........ 1
v1.1 General: Renamed the package

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.

B \bminipage@i ........ 6, 8 \bminipage@ii ........ 9, 11 \bmp@box ....... 1, 16, 29 \bmp@height ...... 2, 20–23 \bmp@heighttext ......... 15, 17, 20 \bmp@relax ....... 4, 17 \bmp@width ......... 2, 12–14, 18, 23 \boxedminipage ...... 5 \boxedsep ....... 14, 22 \fboxrule ..... 13, 21 \usebox ....... 29

\PackageWarningNoLine{boxedminipage2e}{%
31 \PackageWarningNoLine{boxedminipage2e}{%
32 The boxedminipage2e package has been stripped
33 renamed to boxedminipage. New documents should
34 load boxedminipage instead of boxedminipage2e}
35 \RequirePackage{boxedminipage}