

The `efbox` package

José Romildo Malaquias
malaquias@gmail.com

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1 Introduction

The `efbox` package defines the command `efbox`, which is an enhanced version of the `fbbox` command. It creates a box just wide enough to hold the text created by its argument, allowing to draw a frame around the outside of the box at the chosen borders, and to set a background color for the box.

2 Usage

In order to use the package, just load it in the preamble of your document:

```
\usepackage{efbox}
```

`\efbox`

The macro `efbox` can be used to create a horizontal box just wide enough to hold the text created by its argument (like the `makebox` macro). Additionally a frame can be drawn around the outside of the box (like the `fbbox` macro) at the chosen borders. Also it can set a background color for the box.

```
\efbox[<keyword>=<value>...]{<text>}
```

The available keywords are:

leftline: This is a boolean, either true or false; the default is true. If true, a line is drawn in the left border of the box.

rightline: This is a boolean, either true or false; the default is true. If true, a line is drawn in the right border of the box.

topline: This is a boolean, either true or false; the default is true. If true, a line is drawn in the top border of the box.

bottomline: This is a boolean, either true or false; the default is true. If true, a line is drawn in the bottom border of the box.

hidealllines: This is a boolean, either true or false; the default is false. If true, no line is drawn in the borders of the box.

backgroundcolor=*(backgroundcolor)*: *(backgroundcolor)* is the color used as the background for the box. The default is the current background color.

linecolor=*(linecolor)*: *(linecolor)* is the color used for the border lines. The default is black.

linewidth=*(linewidth)*: *(linewidth)* is the width of the lines drawn at the borders of the box. The default is `\fboxrule`.

margin=*(margin)*: *(margin)* is the distance between the border lines and the box text. The default is `\fboxsep`.

font=*(font)*: *(font)* is the font used to typeset the text in the box. The default is the current font.

baselinestretch=*(baselinestretch)*: *(baselinestretch)* is the base line stretch. There is no default.

`\efboxsetup`

The macro `efboxsetup` can be used to set options used by `\efbox`.

```
\efboxsetup{<keyword>=<value>...}
```

The available keywords are the same from the `\efbox` macro.

3 Examples

This is a demonstration of the `efbox` macro.

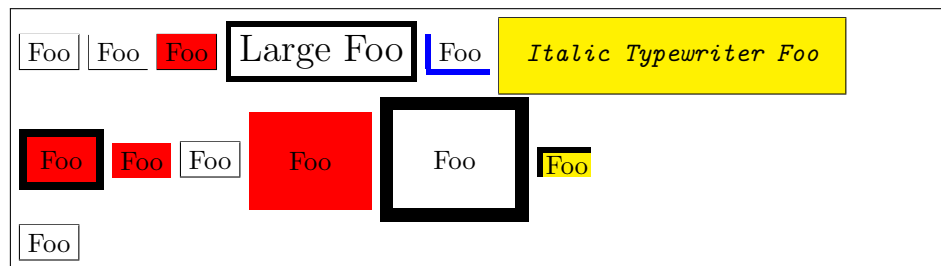
```

\efbox{Foo}
\efbox[rightline=false,topline=false]{Foo}
\efbox[topline,backgroundcolor=red]{Foo}
\efbox[linewidth=2pt,font=\Large]{Large Foo}
\efbox[rightline=false,topline=false,linecolor=blue,linewidth=2pt]{Foo}
\efbox[margin=10pt,backgroundcolor=yellow,font=\ttfamily\itshape]{Italic
  Typewriter Foo}

\efbox[linewidth=3pt,margin=5pt,backgroundcolor=red]{Foo}
\efbox[hidealllines,backgroundcolor=red]{Foo}
\efbox{Foo}
\efbox[hidealllines,backgroundcolor=red,margin=15pt]{Foo}
\efbox[margin=15pt,linewidth=5pt]{Foo}
\efbox[bottomline=false,rightline=false,linewidth=2pt,margin=1pt,
  backgroundcolor=yellow]{Foo}

\efbox{Foo}

```



4 Implementation

```

1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{efbox}[2014/03/19 v1.0 An enhanced fbox command]
3 \RequirePackage{color}
4 \RequirePackage{pgfkeys}
5 \newif\if@efbox@leftline
6 \newif\if@efbox@rightline
7 \newif\if@efbox@topline
8 \newif\if@efbox@bottomline
9 \pgfkeys{
10 /efbox/.cd,
11 leftline/.is if           = @efbox@leftline,
12 rightline/.is if          = @efbox@rightline,
13 topline/.is if            = @efbox@topline,
14 bottomline/.is if         = @efbox@bottomline,
15 hidealllines/.style       = {leftline=false,rightline=false,topline=false,bottomline=false},
16 backgroundcolor/.store in = \efbox@backgroundcolor,
17 linecolor/.store in       = \efbox@linecolor,
18 linewidth/.store in       = \efbox@linewidth,
19 margin/.store in          = \efbox@margin,

```

```

20 font/.store in = \efbox@font,
21 baselinestretch/.store in = \efbox@baselinestretch,
22 }
23 \pgfqkeys{/efbox}{
24 leftline = true,
25 rightline = true,
26 topline = true,
27 bottomline = true,
28 linecolor = black,
29 linewidth = \fboxrule,
30 margin = \fboxsep,
31 }
32 \newif\if@efbox@hasframe

\efboxsetup
33 \def\efbox@global@options{}
34 \newcommand\efboxsetup[1]{%
35 \def\efbox@global@options{#1}%
36 }%
37 \newcommand*\mypgfqkeys@with@saved@options[3]{%
38 % #1 => path
39 % #2 => macro holding saved options
40 % #3 => keys
41 \def\@pgfqkeys@##1{\pgfqkeys{#1}{##1}}%
42 \expandafter\@pgfqkeys@\expandafter{#2,#3}%
43 }%

\efbox
44 \newcommand\efbox[2][ ]{%
45 \begingroup%
46 \mypgfqkeys@with@saved@options{/efbox}{\efbox@global@options}{#1}%
47 \expandafter\pgfqkeys\expandafter{/efbox}\expandafter{\efbox@global@options,#1}%
48 \ifdefined\efbox@font\efbox@font\fi
49 \ifdefined\efbox@baselinestretch
50 \def\baselinestretch{\efbox@baselinestretch}%
51 \fi
52 \@efbox@hasframefalse
53 \if@efbox@topline\@efbox@hasframetrue\else\fi
54 \if@efbox@bottomline\@efbox@hasframetrue\else\fi
55 \if@efbox@leftline\@efbox@hasframetrue\else\fi
56 \if@efbox@rightline\@efbox@hasframetrue\else\fi
57 \ifdefined\efbox@backgroundcolor\@efbox@hasframetrue\else\fi
58 \if@efbox@hasframe
59 \ifdefined\efbox@backgroundcolor\else\def\efbox@backgroundcolor{white}\fi
60 \fboxsep=\efbox@margin
61 \fboxrule=\efbox@linewidth
62 \let\@frameb@x\@my@frameb@x
63 \fboxsep=\efbox@margin
64 \def\efbox@body{\fcolorbox{\efbox@linecolor}{\efbox@backgroundcolor}{#2}}%

```

```

65 \else
66 \def\efbox@body{#2}%
67 \fi
68 \ifdefined\efbox@title
69 \ifx\@empty\efbox@title
70 \noindent\efbox@body
71 \else
72 \vbox{%
73 \nobreak\vskip\fbboxsep
74 \rlap{\frametitle{\efbox@title}}%
75 \nobreak\nointerlineskip
76 \vskip-\baselineskip
77 \vskip \fbboxsep
78 \noindent\efbox@body
79 }%
80 \fi
81 \else
82 \efbox@body
83 \fi
84 \endgroup
85 }

```

\@my@frameb@x

```

86 \def\@my@frameb@x#1{%
87 \@tempdima\fbboxrule
88 \advance\@tempdima\fbboxsep
89 \advance\@tempdima\dp\@tempboxa
90 \hbox{%
91 \lower\@tempdima\hbox{%
92 \vbox{%
93 \if@efbox@topline\hrule\@height\fbboxrule\fi
94 \hbox{%
95 \if@efbox@leftline\vrule\@width\fbboxrule\fi
96 #1%
97 \vbox{%
98 \vskip\fbboxsep
99 \box\@tempboxa
100 \vskip\fbboxsep}%
101 #1%
102 \if@efbox@rightline\vrule\@width\fbboxrule\fi
103 }%
104 \if@efbox@bottomline\hrule\@height\fbboxrule\fi
105 }%
106 }%
107 }%
108 }%
109 \endinput

```

Change History

v0.1	v1.0
General: Converted to DTX file. . . 1	General: Many changes in preparation for release. 1