1 Introduction

The efbox package defines the command efbox, which is an enhanced version of the fbox 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}

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 fbox 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 keyworkds are the same from the \efbox macro.

3 Examples

This is a demonstration of the \efbox macro.
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,
\pgfqkeys{/efbox}{
  leftline = true,
  rightline = true,
  topline = true,
  bottomline = true,
  linecolor = black,
  linewidth = \fboxrule,
  margin = \fboxsep,
}
\newif\if\efbox@hasframe
\efboxsetup
\def\efbox@global@options{}
\newcommand\efboxsetup[1]{%
  \def\efbox@global@options{#1}%
}%
\newcommand\mypgfqkeys@with@saved@options[3]{%
  % #1 => path
  % #2 => macro holding saved options
  % #3 => keys
  \def\@pgfqkeys@##1{\pgfqkeys{#1}{##1}}%
  \expandafter\@pgfqkeys\expandafter{#2,#3}%
}%
\efbox
\newcommand\efbox[2][{}]{%
  \begingroup
  \mypgfqkeys@with@saved@options{/efbox}{\efbox@global@options}{#1}%
  \ifdefined\efbox@font\efbox@font\fi
  \ifdefined\efbox@baselinestretch
    \def\baselinestretch{\efbox@baselinestretch}\fi
  \if\efbox@hasframefalse
    \if\efbox@hasframetrue\else\fi
  \else\efbox@baselinestretch
    \def\baselinestretch{\efbox@baselinestretch}\fi
  \fi
  \if\efbox@hasframetrue
    \ifdefined\efbox@backgroundcolor\else\def\efbox@backgroundcolor{white}\fi
    \def\fboxsep=\efbox@margin
    \def\fboxrule=\efbox@linewidth
    \def\fboxsep=\efbox@margin
    \def\fbox{\fcolorbox{\efbox@linecolor}{\efbox@backgroundcolor}{#2}}%
  \else
    \def\fbox{\efbox@body\{}%
\else
  \def\efbox@body{#2}\
\fi
\ifdefined\efbox@title
  \ifx\@empty\efbox@title
    \noindent\efbox@body
  \else
    \vbox{\nobreak\vskip\fboxsep\rlap{\frametitle{\efbox@title}}\nobreak\nointerlineskip\vskip-\baselineskip\vskip\fboxsep\noindent\efbox@body}
  \else
    \efbox@body
  \fi
\else
  \efbox@body
\fi
\endgroup
}\@my@frameb@x
\def\@my@frameb@x#1{\
  \@tempdima\fboxrule\advance\@tempdima\fboxsep\advance\@tempdima\dp\@tempboxa\hbox{\lower\@tempdima\hbox{\if@efbox@topline\hrule\@height\fboxrule\fi\vbox{\hbox{\if@efbox@leftline\vrule\@width\fboxrule\fi\#1\vbox{\vskip\fboxsep\box\@tempboxa\vskip\fboxsep}\#1\if@efbox@rightline\vrule\@width\fboxrule\fi\}}\vbox{\if@efbox@bottomline\hrule\@height\fboxrule\fi\}}\endinput
## Change History

<table>
<thead>
<tr>
<th>Version</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>v0.1</td>
<td>General: Converted to DTX file.</td>
<td>1</td>
</tr>
<tr>
<td>v1.0</td>
<td>General: Many changes in preparation for release.</td>
<td>1</td>
</tr>
</tbody>
</table>