

The **colorframed** package

Release 0.9a of 2022/09/23

report issues at <https://github.com/jfbu/colorframed>

Jean-François Burnol

1 Description

This package fixes various colour leaks one encounters with the environments from Donald Arseneau's package `framed`. Typically, colour leaks occur if using `\color` (at top level) inside the environments, or more subtly also when using `\textcolor` with an argument ending up being split at a page break.

This latter type of colour leak (or colour disappearance) is the more challenging one as the fix requires modifications or replacements not only of some of the `framed.sty` macros (such as its `\CustomFBox`, which **colorframed** overwrites) but also to some \TeX 2 ϵ internals, as some environments of `framed.sty` rely on usage of `\fbox` or `\colorbox`. Rather than overwriting internal \TeX 2 ϵ macros such as `\@frameb@x` or `\color@b@x`, **colorframed** simply replaces `\fbox` and `\colorbox` in the `framed.sty` environments by appropriate substitutes.

I am aware `tcolorbox` package documentation explains at least one colour issue which looks similar to those fixed here in `framed` context, and that the fix overthere uses an extra colour stack, hence is not `xelatex` compatible currently.

The problems are solved here without involving an extra colour stack, hence the fixes work also with `xelatex`.

2 The environments from `framed`

A list of the environments from package `framed`

This list indicates which boxing macros are used in the original, and their replacement.

| | | |
|---------------------|------------------------------|--|
| framed | (<code>\fbox</code>) | Replaced by specialization of own <code>\CustomFBox</code> . |
| oframed | (<code>\CustomFBox</code>) | colorframed uses a redefined <code>\CustomFBox</code> . |
| titled-frame | (<code>\CustomFBox</code>) | <i>id.</i> |
| shaded | (<code>\colorbox</code>) | Replaced by <code>\colorframedcolorbox</code> . |
| shaded* | (<code>\colorbox</code>) | <i>id.</i> |

A list of the environments from package framed (cont)

| | | |
|-------------------|-------------|---|
| snugshade | (\colorbox) | <i>id.</i> |
| snugshade* | (\colorbox) | <i>id.</i> |
| leftbar | (none) | This one does not use any boxing macro. |

We refer the reader to framed documentation and provide here only a few additional details, particularly regarding the 'titled-frame' environment as it is described in framed documentation more as being a template than a user-level finalized environment. The above box gives an example of its use. It is an environment with one mandatory argument which provides the title of the frame, which is repeated after a page break with (cont) appended. The colours TFFrameColor and TFTitleColor must be defined by user. To customize further one will need to renew the environment definition, which is left untouched by **colorframed** (which modifies rather \TitleBarFrame and \CustomFBox). Here is how this environment is defined inside framed.sty: (code and comments by Donald Arseneau)

```
% A particular type of titled frame with continuation marks.
% Parameter #1 is the title, repeated on each page.
\newenvironment{titled-frame}[1]{%
  \def\FrameCommand{\fboxsep8pt\fboxrule2pt
    \TitleBarFrame{\textbf{#1}}}%
  \def\FirstFrameCommand{\fboxsep8pt\fboxrule2pt
    \TitleBarFrame[$\blacktriangleright$]{\textbf{#1}}}%
  \def\MidFrameCommand{\fboxsep8pt\fboxrule2pt
    \TitleBarFrame[$\blacktriangleright$]{\textbf{#1\ (cont)}}}%
  \def\LastFrameCommand{\fboxsep8pt\fboxrule2pt
    \TitleBarFrame{\textbf{#1\ (cont)}}}%
  \MakeFramed{\advance\hsize-20pt \FrameRestore}}%
% note: 8 + 2 + 8 + 2 = 20. Don't use \width because the frame title
% could interfere with the width measurement.
{\endMakeFramed}
```

Side note: this 'titled-frame' environment was in effect broken in recent \TeX which has modified how \smash behaves; **colorframed** fixes this infelicity in passing.

(the current box is an example of 'shaded*' environment, next one is with 'snugshade*', both use a shade color which must be defined by user)

One does not need to dive into the details of the macros used above to understand intuitively how they are supposed to influence the final output. To modify this output, simply redefine this environment with suitable changes.

Notice in particular that \blacktriangleright (which produces ► and acquires thus a colour despite its name) requires to the best of my knowledge loading amssymb or some other math symbols package and it is up to user to do it, if its usage is kept. The original environment gives to this continua-

tion label the same colour as the frame. **colorframed** adds the possibility to customize this colour via suitably defining a macro, like this for example:

```
\renewcommand\colorframedTFconlabcolorcommand{\color{purple}}
```

This is an example of usage of the environment `\framed`.

This environment allows customization of the border width and of the separation with contents, via `\FrameRule` and `\FrameSep`, but not of the colour of the border. The **colorframed** version adds this possibility: it is simply a matter of redefining the `\colorframedbordercolorcommand` macro, which defaults to `\normalcolor`.

(`\color{blue}` in source) So the current frame was configured using:

```
\setlength{\FrameRule}{5pt}
\setlength{\FrameSep}{9pt}
\renewcommand\colorframedbordercolorcommand{\color{red!20}}
```

The length `\FrameSep` influences also `\oframed`, `\shaded`, and `\shaded*`, but `\snugshade` and `\snugshade*` employ `\fboxsep` rather.

As per `\FrameRule`, it influences `\framed` and `\oframed` but not `\titled-frame` which simply uses `\fboxrule` for its border width.

The text colour induced from a `\color{blue}` will not leak out to the frame or to the text following this environment, even in case of a pagebreak.

The aim of **colorframed** regarding framed existing code base is strictly limited to fixing the colour leak issues, there is not intent to extend the existing environments of framed with additional capabilities and customizability: we have mentioned already the two sole customization additions.

3 TODO

The author has developed based upon usage of `pict2e` breakable boxes with round corners, background colour, optional shadow (possibly inset), and other goodies and is planning on incorporating this environment into the package. Of course, it will remain limited in comparison to the fully customizable boxes provided by package `tcolorbox` but our testing showed significant speed-up in build time, which may matter for long documents.

After initial release made it to CTAN on 2022/09/22 I became aware of `longfbox` which provides already such `pict2e` breakable boxes with rounded corners (even elliptical arcs), and furthermore with a CSS-like interface which is exactly what I had done on my side too... I need to check more `longfbox` before a decision is made here! Perhaps it will be better to keep **colorframed** as it is currently and produce another package for extras such as `pict2e`-based boxes or a key-value interface to `\inline` or `\display` box macros and environments.

documentation ends here