The rotfloat package*

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Abstract

The float package [1] provides commands to define new floats of various styles (plain, boxed, ruled, and userdefined ones); the rotating package [2] provides new environments (sidewaysfigure and sidewaystable) which are rotated by 90° or 270°. But what about new rotated floats, e.g. a rotated ruled one? This package makes this possible; it builds a bridge between both packages and extend the commands from the float package to define rotated versions of the new floats, too.

1 The user interface

To use this package just put the line

 $\ensuremath{\mathsf{usepackage}}[\langle options \rangle] \{\texttt{rotfloat}\}$

into the preamble of your document. The options are exactly the same as for the rotating package, because all options will be passed to the rotating package. (The rotfloat package hasn't got any own options at all).

\newfloat The commands \newfloat and \restylefloat from the float package (re)define \restylefloat the float type $\langle type \rangle$ and now additionally a rotated one called $\langle sidewaystype \rangle$:

```
\label{eq:product} \end{type} {\langle placement \rangle} {\langle ext \rangle} [\langle within \rangle] \\ \end{type} {\langle ext \rangle} [\langle within \rangle] \\ \end{type} {\langle type \rangle} {
```

E.g. the code

```
\floatstyle{ruled}
\floatname{program}{Program}
\newfloat{program}{tbp}{lop}[section]
```

defines the new floating environments program, program*, sidewaysprogram, and sidewaysprogram* which behave equivalent to figure, figure*, sidewaysfigure, and sidewaysfigure*. (Note that sidewaysfigure* has been introduced to version 2.10 of the rotating package, therefore you only get a sidewaysprogram* environment if you use this or a newer version of the rotating package.)

^{*}This package has version number 1.2, last revised 2004/01/04.

The code

\floatstyle{boxed}
\restylefloat{table}

will restyle the environments table, table*, sidewaystable, and sidewaystable*.

Please take a look at the float package for a complete description of these commands. Additionally an example file is provided with this package.

2 What has changed since version 1.0?

Version 1.0 of this package was a quick & dirty hack. The version 1.1 took it all more serious, it patched less code from the float package and especially it let the [H] code for the not-sideways floats intact. Furthermore it was adapted to the new version 1.3 of the float and 2.10 of the rotating package.

This version 1.2 is a further step in this direction. It was revised again to make it even more compatible to different versions of the float package. As an effect of this [H] for sideways floats is now fully supported (this could be desirable when used in cooperation with the afterpage package), furthermore a bug was fixed that caused problems if the rotfloat package was used together with the color package.

3 A final note

This package was tested with the versions 1.2, 1.2*c*, 1.2*d*, 1.2*e*, 1.3*c*, and 1.3*d* of the float package and version 2.6, 2.9, 2.10, 2.12, and 2.13 of the rotating package. You should *not* use this package together with older versions of them! Future versions of these packages may make some trouble, but I hope they will not. If they do please don't hesitate to send me a bug report including a simple non-working example and the log file produced by IATEX.

4 Further reading

I recommend the following documents for further reading:

- The TEX FAQ - Frequently asked questions about TEX and ${\rm I\!AT\!EX}$:

http://faq.tug.org/

• A French FAQ can be found at

http://www.grappa.univ-lille3.fr/FAQ-LaTeX/

• A German FAQ can be fount at

http://www.dante.de/faq/de-tex-faq/

• epslatex from Keith Reckdahl contains many tips around graphics in LATEX $2_{\mathcal{E}}$. You will find this document in the directory

ftp://ftp.ctan.org/pub/tex/info/

as <code>epslatex.ps</code> and <code>epslatex.pdf</code>.

There is also a french translation available at

ftp://ftp.ctan.org/pub/tex/info/fepslatex.ps

• "Gleitobjekte – die richtige Schmierung" from Axel Reichert is a German documentation about floating environments in general. You will find it here:

```
ftp://ftp.ctan.org/pub/tex/info/german/gleitobjekte/
```

5 Thanks

I would like to thank Katja Melzner, Anselm Lingnau, Sebastian Rahtz, and Wojciech Pietron.

References

- [1] Anselm Lingnau: An Improved Environment for Floats, 2001/11/08
- [2] Sebastian Rahtz and Leonor Barroca: A style option for rotated objects in $\underline{\mbox{\rm BT}_{\rm E}}{\rm X},\,1997/09/26$