# Welcome to the beta test of fltpage<sup>\*</sup> package!

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#### Abstract

This package defines the new environments FPfigure and FPtable, analogous to figure and table. In twoside mode the caption will be set on the opposite page of a figure/table which needs a whole page. In oneside mode the caption will be set on the preceding or following page.

### 1 Introduction

In some cases, there is just enough space to place a figure or table on a page, unfortunately there is no space left for the caption below or above. Moreover, it is might be impossible to decrease the size (for example, due to a fixed scale of a map) or the use of longtable is inappropriate. In these (rare) cases it seems acceptable to place the caption on the opposite page in twoside mode or on the preceding/following page in oneside mode. For this purpose the package fltpage provides the new environments FPfigure and FPtable in the sense of 'generic markup'. The basic idea is to use two floats, which follow directly and contain the figure/table and the caption respectively. For correct positioning on odd or even pages in twoside mode at least two compilation runs are required.

## 2 Usage

To use this package just type in the preamble of your document \usepackage[(option)]{fltpage}.

The order of caption and figure/table are controlled one of the following options:

- closeFloats the float using the whole page is placed on the next page. When the current page is even the caption is placed on the bottom, when it is odd the caption is placed at the bottom of the page after the float. In any case the caption appears on opposite page in twoside mode of document or the page before in oneside mode.
- rightFloats, CaptionBefore the big float appears always on the right page and the caption afterwards.

<sup>\*</sup>Sorry for the crippled name fltpage! I just did not have a better and compelling idea. <sup>†</sup>e-mail: seppel@zedat.fu-berlin.de.

To distinguish the 'isolated' caption from the text a separator line:

noSeparatorLine With this option the the separator will be suppressed

To clarify the connection of caption to the float on an other page it might be helpful to give a hint like 'Fig. N (on the facing page):'. The following options control, how this is implemented:

german	So far only German is implemented as other language.		
varioref	Reference texts are already implemented for many languages in th		
	standard package varioref, which implements slightly different		
	expressions, too. With this option these texts will be used.		
noHints	When this option is used, any hint from the float caption to the		
	float is disabled.		

Moreover the following global options (probably declared with the document class) will be evaluated:

draft causes placing of margin notes, where in the running text the one of the new environments is inserted.

oneside, twoside just to decide mode of document...

FPfigure In your Document you simply use the new environments instead of the standard
FPtable environments table or figure with the usual \begin{} and \end{} commands:
 \begin{FPtable} ... \end{FPtable}

\begin{FPfable} ... \end{FPfable}
\begin{FPfigure} ... \end{FPfigure}

Be sure that there are not more than one or two 'small' pending floats, otherwise the results will become unpredictable. Moreover you should not use more than one of the new environment on a page. The contents of the second will probably overwrite the contents of the first!

**Example** The following example will produce a caption below and an almost empty facing page:

\usepackage[rightFloats]{fltpage}

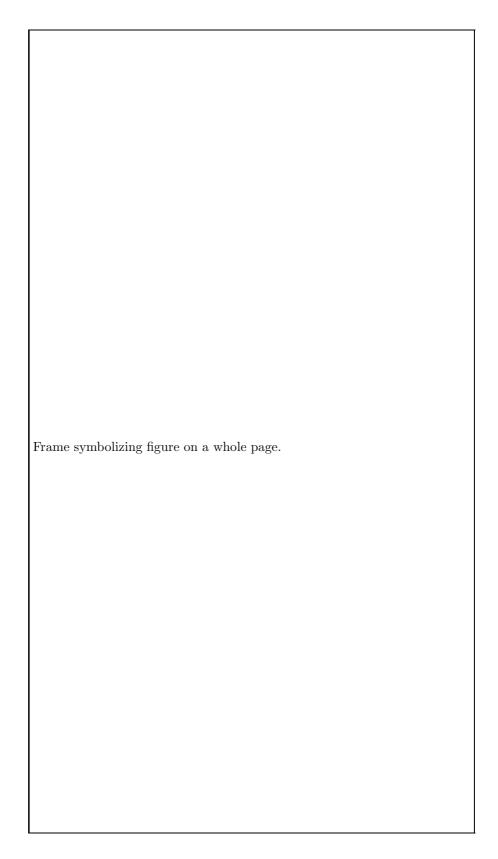
```
...
\begin{FPfigure}
  \caption{A caption alone ... figure without a caption!}
  \fbox{\rule[-10cm]{0pt}{\textheight}Frame ... page.\hspace{5cm}}
\end{FPfigure}
```

### 2.1 Requirements

The present version of fltpage (v.0.3) has been developed and tested with IATEX  $2_{\varepsilon}$  of 1998/06/01 using emTEX 4b running TEX 3.14159 under Windows 3.1, using

Figure 1 (following page): A caption alone on a page will belong to the following figure without a caption!

2 USAGE



the article document class. It requires the standard  $IAT_EX$  package ifthen vers. 1.0n of 1997/11/02 and tools package afterpage vers. 1.08 of 1995/10/27. Maybe it will work with older versions, maybe not...

With the option varioref the tools package varioref is needed, as well.

### 2.2 Compatibility

This package was developed and tested with following versions of the other packages:

package	version	date
sidecap	1.00	1997/05/08
caption	1.4b	1995/04/05
booktabs	1.00	1995/11/06

Again it may work with older versions or not...

### 3 Known problems and limitations

This package is rather a quick and dirty solution to a problem than a sophisticated mechanism for placing captions and floats. It should be regarded as an experiment, rather than a utility. It was written by Sebastian Gross not only for it utility value, but as part of the process of learning LaTeX. Therefore it is far from being perfect, and comments are welcome. Your remarks and ideas are welcome to improve the concept and implementation in future releases.

Probably most problems will arose from pending floats, which should be cleared with \clearpage. So far, no attempt is done!

When unpredicted suites of caption and floats result, you must *first* assure two compilations of your document. An unresolved problem happens for example when the current page is even and the caption should be placed on the bottom of the page, but there is not enough space for it. It will be moved to the next page (odd) and the long float will be on next even page, which means caption and float are separated! To inquire this problem the option draft is provided, which causes the a margin note, where the FPfloat was inserted in the text.

The simple design employed does not allow any floats on the odd text page following the big float before the caption is resolved.

Also there is no solution implemented, when two of the new environments occur within a short interval. This is especially dangerous when they are called on one page: The contents of the second will overwrite the contents of the first!

In some cases the capacity of  $T_EX$  might be exceeded (main memory). This happens for example, when the table itself is too big. It is assumed that tables included by files up to approximately 30 KB will fill one page, even with \tiny. Though, bigger tables may be included with the standard table environment...

This package does not work correctly with the showkeys package. Apparently the behaviour of the \isodd{} command of the standard ifthen package is disabled.

## 4 Acknowlegments

This package was partly based on the contributions to de.comp.text.tex, particulary of Hans Steffani, Heiko Oberdiek, Martin Schröder, Stefan Ulrich. I have to admit, the exploitation of Rolf Niepraschk's sidecap package, especially how to write a documented style file.

### 5 The documentation driver file

The next bit of code contains the documentation driver file for  $T_EX$  i.e., the file that will produce the documentation you are currently reading. It will be extracted from this file by the **docstrip** program.

```
1 (*driver)
2 \ (documentclass{ltxdoc})
3 \setlength\hfuzz{5pt}
                             % ignore small overfull boxes
4 \GetFileInfo{fltpage.sty}
5 %\CodelineIndex
6 %\EnableCrossrefs
                         % Will prepare and index
7 %\DisableCrossrefs
                         % Say \DisableCrossrefs if index is ready
8 %\OnlyDescription
                         % comment out for implementation details
9 %\RecordChanges
                         % Gather update information
10 \usepackage[rightFloats]{fltpage}
11 MakeShortVerb{|}
12 \begin{document}
13
     \DocInput{fltpage.dtx}
14 \end{document}
15 \langle / driver \rangle
```