flowframe.sty: Creating Posters, Magazines or Brochures in \LaTeX

Nicola L. C. Talbot

http://www.dickinaw-books.com/

1 Introduction

The \texttt{flowframe} package is designed to enable you to create frames in a document such that the contents of the document environment flow from one frame to the next in the order that they were defined. This is useful for creating posters or magazines or any other form of document that does not conform to the standard one or two column layout.

2 Setting up Frames

The \texttt{flowframe} package provides three types of frame: flow frames, static frames and dynamic frames.

2.1 Flow Frames

The flow frame is the principle type of frame. The text of the document environment will flow from one frame to the next in order of definition. Each flow frame has an associated width, height, position on the page, and optionally a border. It is recommended that all the flow frames in a document have the same width, otherwise problems may occur when a paragraph spans to flow frames of unequal widths. This is because \TeX{}'s output routine does not register the change in \texttt{hsize} until it reaches a paragraph break. If it is absolutely necessary for flow frames to have unequal widths, judicious use of \texttt{framebreak} is required.

2.2 Static Frames

A static frame is a rectangular area in which text neither flows into, nor flows out of. The contents must be set explicitly and once set, the contents of the static frame will remain the same on each page except if it is explicitly changed. Thus, a static frame can be used, for example, to make a company logo appear on every page.

2.3 Dynamic Frames

A dynamic frame is similar to a static frame, but its contents are re-typeset on each page. (A static frame stores its contents in a savboy, whereas a dynamic frame stores its contents in a macro).

3 Frame Attributes

Once you have defined the flow frames, static frames and dynamic frames, their attributes can be changed. The three types of frame mostly have the same set of attributes, but some are specific to a certain type. The available attributes are as follows: \texttt{width} indicates the key is only available for flow frames, \texttt{height} indicates the key is only available for static frames and \texttt{border} indicates the key is only available for dynamic frames.

4 Miscellaneous

4.1 Page Layout

The \texttt{flowframe} package has the package option \texttt{draft} which will draw the bounding boxes for each frame defined. At the bottom right of each bounding box (except for the bounding box denoting the typetable), a marker will be shown to indicate the type of frame, its IDN and its IDL.

4.2 Frame Stacking Order

The material on each page is placed in the following order:

1. Each static frame defined for that page in ascending order of IDN.
2. Each flow frame defined for that page in ascending order of IDN.
3. Each dynamic frame defined for that page in ascending order of IDN.
4. Bounding boxes if the \texttt{draft} package option has been used.

This ordering can be used to determine if you want something to overlay or underlay everything else on the page.

4.3 Prematurely Ending a Flow Frame

You can force text to move immediately to the next defined flow frame using one of the \texttt{flowframe} page breaking commands which work in an analogous way to the way they work in standard two column mode.

The command \texttt{framebreak} is provided for situations where a paragraph spans two flow frames of different widths, as \TeX{}'s output routine does not adjust to the new value of \texttt{hsize} until the last paragraph of the previous frame has ended. As a result, the end of the paragraph at the beginning of the new flow frame retains the width of the previous flow frame.

If you want to start a new page, rather than simply move to the next frame, use the command \texttt{finishthispage}.

4.4 Floats

Since floats (such as figures and tables) can only go in flow frames, this package provides the additional environments \texttt{staticfig} and \texttt{statictable} which can be used in static frames and dynamic frames. Unlike their figure and table counterparts, they are fixed in place, and so do not take an optional placement specifier. The \texttt{\option} and \texttt{\label} commands can be used within \texttt{staticfig} and \texttt{statictable} as usual.

The standard \texttt{fig} and \texttt{table} commands will behave as usual in the flow frames, but their starred versions, \texttt{figure*} and \texttt{table*} behave no differently from figure and table.

Figure 1: The commands used to define the frames for this document

4.5 Global Values

The following macros can be changed using \texttt{\renewcommand}:

- \texttt{\setffdraftcolor}
  - This sets the colour of the bounding box when it is displayed in draft mode.
- \texttt{\setffdrafttypeblockcolor}
  - This sets the colour of the bounding box of the typetable when it is displayed in draft mode.
- \texttt{\setfflabelfont}
  - This sets the font size for the bounding box markers in draft mode.
- \texttt{\setffdraftstyles}
  - This is the distance from the right hand side of the bounding box at which to place the bounding box marker.
- \texttt{\setffframewidth}
  - This is the gap between the text of the frame and its border, for the standard border types.
- \texttt{\setffframerule}
  - This is the width of the frame's border, if using a border given by a frame making command that uses \texttt{\finishthispage} to set its border width.
- \texttt{\setffcolumnsep}
  - This is the horizontal distance between flow frames when using one of the \texttt{\column} type of commands.
- \texttt{\setffcolumnsep}
  - This is the vertical distance between the flow frames and the static or dynamic frame when using one of the \texttt{\column} type of commands.