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 \texttt{tex}’s output routine does not register the change in \texttt{hspace} until it reaches a paragraph break. If it is absolutely necessary for flow frames to have unequal widths, judicious use of \texttt{framenumber} is required.

2.2 Static Frames

A static frame is a rectangular area in which text neither flows into, nor flows from the frame. A static frame can be used, for example, to make a company logo appear on each page. (A static frame stores its contents in a savbox, whereas a dynamic frame stores its contents in a macro).

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 savbox, 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}: The width of the frame.
- \texttt{height}: The height of the frame.
- \texttt{textcolor}: The text colour for that frame. Again, the colour can either be specified as, e.g. \texttt{green}, or including the colour model, e.g. \texttt{rgb}(0.5,0.1,0).
- \texttt{borderstyle}: The style of the border around the frame, this can take the values \texttt{none} (no border), \texttt{plain} (plain border) or the name of a \texttt{pgflinewidth} frame making command without the backslash. The value \texttt{false} is equivalent to \texttt{plain}.
- \texttt{offsets}: The border offset, if it is a user-defined border. The value is the distance from the outer edge of the left hand border to the left edge of the bounding box of the text inside the border. The \texttt{flowframe} package is able to compute the border for known frame making commands. If you define your own frame making command, you may need to specify the offset explicitly, or the frames may end up shifted to the right or left.
- \texttt{color}: The colour of the border if you are using a standard frame making command. The colour can either be specified as, e.g. \texttt{green}, or including the colour model, e.g. \texttt{rgb}(0.5,0.1,0).
- \texttt{texcolor}: The text colour for that frame. Again, the colour can either be specified as, e.g. \texttt{green}, or including the colour model, e.g. \texttt{rgb}(0.5,0.1,0).
- \texttt{pages}: The list of pages for which the frame should appear. This can either have the values \texttt{all}, \texttt{even}, \texttt{odd} or \texttt{none} (the latter removes the frame from that point on—useful if you have multiple pages with the same number), or it can be a comma-separated list of single pages, or page ranges.
- \texttt{margin}: The side of the flow frame that its corresponding margin should go on. This can take the values \texttt{left} or \texttt{right}.
- \texttt{clear}: This value is set, the static frame will be cleared at the start of the next page.
- \texttt{style}: This should be a name of a command without the preceding backslash, to be applied to the contents of the specified dynamic frame. The command may either be a declaration, for example \texttt{style=large} which will set the contents of all the dynamic frames in a large font, or it can be a command that takes a single argument, for example \texttt{style=textbf} which will make the text for all the dynamic frames come out in bold. To unset a style, do \texttt{style=none}.

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 typeblock), a marker will be shown to indicate the type of frame, its IDN and its IDL.

You can see the layout for the current page (irrespective of whether or not the \texttt{draft} option has been set) using the command:\texttt{\flowframeloadout}\texttt{x=c}\texttt{\pagestyle{pages}}

The headers and footers will appear as usual (but will not be shown in draft mode), according to the format given by \texttt{pagestyle}.

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 standard \texttt{tex} page breaking commands which work in an analogous way to the way they work in standard two column mode.

The command \texttt{finishthispage} is provided for situations where a paragraph spans two flow frames of different widths, as \texttt{tex}’s output routine does not adjust to the new value of \texttt{hspace} 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{\clearpage}.

4.4 Floats

Since floats (such as figures and tables) can only go in flow frames, this package provides the additional environments: \texttt{staticfigure} 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 any optional placement specifier. \texttt{Thechtex} and \texttt{\label} commands can be used within \texttt{staticfigure} and \texttt{statictable} as usual.

\begin{figure}[ht]
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{The commands used to define the frames for this document}
\end{figure}