The hhline package*

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Abstract

\hhline produces a line like \hline, or a double line like \hline\hline, except for its interaction with vertical lines.

1 Introduction

The argument to \hhline is similar to the preamble of an array or tabular. It consists of a list of tokens with the following meanings:

- `=` A double hline the width of a column.
- `-` A single hline the width of a column.

- `~` A column with no hline.

- `|` A vline which 'cuts' through a double (or single) hline.
- `:` A vline which is broken by a double hline.

- `#` A double hline segment between two vlines.
- `t` The top half of a double hline segment.
- `b` The bottom half of a double hline segment.
- `*` *{3}{==#} expands to ==#==#==#, as in the *-form for the preamble.
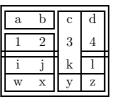
If a double vline is specified (|| or ::) then the hlines produced by \hhline are broken. To obtain the effect of an hline 'cutting through'the double vline, use a # or omit the vline specifiers, depending on whether or not you wish the double vline to break.

The tokens t and b must be used between two vertical rules. |tb| produces the same lines as #, but is much less efficient. The main use for these are to make constructions like |t: (top left corner) and :b| (bottom right corner).

If \hhline is used to make a single hline, then the argument should only contain the tokens -, ~ and | (and *-expressions).

An example using most of these features is:

```
\begin{tabular}{||cc||c|c||}
\hhline{|t:==:t:==:t|}
a&b&c&d\\
\hhline{|:==:|~|~||}
1&2&3&4\\
\hhline{#==#~|=#}
i&j&k&l\\
\hhline{||--||--||}
w&x&y&z\\
\hhline{|b:==:b:==:b|}
\end{tabular}
```

The lines produced by LaTeX's `\hline` consist of a single (TeX primitive) `\hrule`. The lines produced by `\hhline` are made up of lots of small line segments. TeX will place these very accurately in the `.dvi` file, but the program that you use to print the `.dvi` file may not line up these segments exactly. (A similar problem can occur with diagonal lines in the `picture` environment.)

If this effect causes a problem, you could try a different driver program, or if this is not possible, increasing `\arrayrulewidth` may help to reduce the effect.