The tabls package

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The package modifies LaTeX's `array` and `tabular` environments to keep text from touching other text or hlines above or below.

1 New parameters, etc.

The behaviour of the package is controlled by a small set of parameters, which are all TeX `\dimen` registers (and so may be adjusted using LaTeX `\setlength` commands.

`\tablinesep` (or `\tablelineskip`): the minimum space between text on successive lines in a tabular environment. Negative distances are treated as zero. The default value is `1pt`. A value of `0pt` turns off checking for touching text. Text given in an `@{ }` specification (cf. the `array` package) is never checked for overlap.

`\arraylinesep` (or `\arraylineskip`) : like `\tablinesep`, but for arrays.

`\extrarulesep`: extra space to add above and below each `\hline` and `\cline`. There will be at least `\extrarulesep + 0.5\tablinesep` between an `\hline` and a line of text. Negative values can be used, but only until some text touches the line. The default value is `3pt`.
To ensure interline separations in tables but not arrays, declare

```
\setlength\arraylinesep{0pt}
```

The appearance of normal LaTeX tables can be had with

```
\setlength\tablinesep{0pt}
\setlength\arraylinesep{0pt}
\setlength\extrarulesep{0pt}
```

but it would be better to not use `tabls` in this situation.

The command `\hline[extra]` has gained an optional length argument (just like `\\`), which gives the space to insert below the line. This space is in addition to the `\extrarulesep` and linesep. A negative value will reduce the space until the line touches some text below, and will then have no further effect. For example, `\hline[-9cm]` draws a horizontal line while suppressing all the extra spacing.

(This `\hline` also fixes the notches that used to appear at the junction between horizontal and vertical lines.)

*Documentation derived from the package file by Robin Fairbairns

2 How it works

There are no struts in the preamble entries[1], rather, there are tests to measure the maximum height and depth of all entries on a line. The maximum values start at the size of LaTeX's `\@arstrut` minus the appropriate linesep. At the \\, a strut is inserted (in its own column) which is that maximum size plus the linesep plus any additional space for separation from `\hline`s.

3 The Downside

Building a table will be slower than before because the entries have to be boxed twice (by the package's `\@seesize` and by `\halign` itself) instead of just once. `\setlength\tablinesep{0pt}` will recover most of this speed, with `\extrarulesep` still partially in effect — extra space will still be added around `\hline`s, but it may be taken up by very tall or very deep table entries; thus text may still touch the lines. Because of the speed penalty, if your computer is slow, it is probably best to omit tabls until producing a final copy.

[1] The comments in the package say this is a lie...