The tblnotes package

Footnotes in tables as table notes or page footnotes

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https://github.com/munepi/tblnotes

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1 Introduction

A `\footnote` inside a `tabular` gives its mark, but its text is lost: the footnote insertion is trapped in the box of the table. `longtable` puts the texts at the bottom of the page. What a book usually wants is either

- *table notes*: the notes put right below the table, in the width of the table, marked a, b, ... and numbered afresh for each table; or
- *page footnotes*: the notes put at the bottom of the page, numbered along with the footnotes of the body text.

The tblnotes package does both, with the ordinary `\footnote` in the table: no special command for the mark, and no list of notes to write by hand. In the outermost `tabular`, `tabular*` or `longtable`, the footnote texts are collected, together with their marks, while the table is typeset, and are put below the table (`mode=table`, the default) or at the bottom of the page (`mode=page`).

Table 1: Table notes (`mode=table`)

Engine	Output	Note
pdfLaTeX	PDF	
XeLaTeX	XDV[a]	
LuaLaTeX	PDF	with LuaTeX-ja[b]
upLaTeX	DVI[c]	

[a] Converted to PDF by xdvipdfmx.
[b] For Japanese.
[c] Converted to PDF by dvipdfmx.

Table 2: Page footnotes (`mode=page`)

Mode	Notes
`table`	below the table[1]
`page`	at the bottom of the page[2]

Supported formats/engines pdfLaTeX, XeLaTeX, LuaLaTeX (with or without LuaTeX-ja), pLaTeX and upLaTeX (with dvipdfmx).

[1] In the width of the table.
[2] Numbered along with the footnotes of the body text.

2 Usage

```
\usepackage[<options>]{tblnotes}
\tblnotessetup{<options>}

\begin{tabular}{ll}
  Item\footnote{A table note.} & Value \\
\end{tabular}
```

The options are given as package options or with `\tblnotessetup`, which can also be used locally, e.g. inside a `table` environment before the table.

`mode=table` (default) The footnote texts are put below the table, in the width of the table, as the footnotes of a `minipage` (`\footnotesize`, `\@makefntext`). The marks are made with the counter given by `counter` and `\the`⟨*counter*⟩.

`mode=page` The footnote texts are put at the bottom of the page, as ordinary footnotes numbered with the `footnote` counter. For a `longtable`, this is what `longtable` does by itself.

`mode=off` The tables are left as they are.

`counter=`⟨***counter***⟩ The counter of the table notes (`mode=table`); the default is `mpfootnote`, as in a `minipage`. It must be defined by `\newcounter`. For example:

```
\newcounter{tblnote}
\renewcommand\thetblnote{\fnsymbol{tblnote}}
\tblnotessetup{counter=tblnote}
```

`reset=true` (default) The counter of the table notes is reset to zero at the beginning of each table. With `reset=false`, the numbering goes on from table to table.

`rule=false` (default) No `\footnoterule` above the table notes; `rule=true` puts it.

`width=`⟨***dimen***⟩ The width of the table notes (`mode=table`). By default (`width=` with an empty value), the width of the table is measured: the width of its box, which includes the `\tabcolsep` at both ends unless `@{}` removes it. The left edge of the notes is that of the table, and the table does not move: notes wider than the table stick out to the right. Give it locally before a table, e.g. `\tblnotessetup{width=\linewidth}`.

`skip=`⟨***glue***⟩ The space between the table and the table notes (it sets `\skip\@mpfootins` for them). By default the space of the footnotes of a `minipage` is used.

2.1 What is collected

- `\footnote`, `\footnote[`⟨*number*⟩`]`, `\footnotemark` and `\footnotetext` in the table, in any column type (including the `p` columns of `longtable`). With `mode=table`, `\footnotemark` uses the counter of the table notes.
- The footnotes of a table inside the table: the outermost table collects them.
- The footnotes in the head of a `longtable`: the text is collected once, and the mark is repeated on every page.

Inside a `minipage`, a tcolorbox and the like, where the footnotes are already those of the box, the tables are left as they are. Inside a tcolorbox with the key `page footnote` of the tcbpagefootnote package, both packages work together.

2.2 Where the notes go

`tabular`, `tabular*` (`mode=table`) The table and its notes are put into a `\vtop` whose baseline is that of the table: `[t]`, `[c]` and `[b]` and the table in a line of text work as before.

`longtable` (`mode=table`) The notes are put below the last row, at the place given by `\LTleft` and `\LTright`, in the width of the table (the column widths `longtable` saves in the `.aux` file: run LaTeX again when `longtable` asks for it). A page break between the last row and the notes is not allowed. With `\endfoot` or `\endlastfoot`, the notes are added below the last foot.

`tabular`, `tabular*` (`mode=page`) The footnotes are put right after the table, in the paragraph. For a table in a float, see section 4.

2.3 hyperref

With hyperref, each footnote mark links to its own footnote text: the anchor of each mark is collected with the text. The anchor and the mark of the last footnote are restored after the texts are put, so that a `\footnotetext` after the table for a `\footnotemark` in it gets the right anchor. The anchors are not duplicated, since the tables are not typeset twice.

2.4 Tagged PDF

With `\DocumentMetadata{tagging=on}` (LuaLaTeX and pdfLaTeX), the footnote marks and texts are tagged by LaTeX (as `Lbl` and `FENote`), and each mark and its text refer to each other, in the table notes as well as in the page footnotes.

- The table notes of a `tabular` are tagged as a `minipage` (`Div`) right after the table.
- The table notes of a `longtable` are put right after the table (after the last foot, if any) in a paragraph of their own, at the place of `\LTpost`: inside the table, they would be tagged as a part of the table (or as an artifact, in the foot). An empty box takes their place in the table, so that the table and its notes are kept on the same page, as without tagging. Its height is that of the notes on the previous run, saved in the `.aux` file, as `longtable` saves its column widths: run LaTeX again when tblnotes asks for it.
- Inside a `minipage`, where `\@footnotetext` is not `\@mpfootnotetext` with tagging, the tables are left as they are as well.

3 Errors and warnings

`Package '<package>' cannot be used with tblnotes.` The packages threeparttable (also loaded by threeparttablex) and tablefootnote do the same job by other means: they cannot be loaded with tblnotes, before or after it. Write `\footnote` in the table as usual instead.

`Counter '<counter>' is not defined.` The value of `counter` is not a counter; `mpfootnote` is used.

`The footnotes of a table in this '<float>' are put ...` (warning) See section 4.

`The height of the table notes of longtable ...` (warning, tagged PDF) Run LaTeX again: see section 2.4.

4 Limitations

- `mode=page`: the footnote insertions in a float are lost, so the footnotes of a table in a float are put right after the float environment, in the text. If the float moves to another page, they are not on the page of the float, and the package warns. No warning is issued for `[H]` of the float package.
- The table notes of a `longtable` are a single block: they are not broken across pages. When they are added to a last foot that does not fit on the last page, `longtable` puts the foot on a new page.
- The notes are set in the width of the table: those of a very narrow table are narrow, too (use `width`).
- `\footnotetext` outside the table for a `\footnotemark` in the table works with `mode=page` only.
- Only `tabular`, `tabular*` and `longtable` are supported. `tabularx`, `xltabular`, `tabulary` (which typeset the table more than once), tabularray and nicematrix (which have their own notes) are not.
- Vertical writing (tate) is outside the scope of this version.
- Tagged PDF: the height of the table notes of a `longtable` is saved in the `.aux` file; run LaTeX again when tblnotes asks for it (see section 2.4).

5 Tests

`make test` compiles the test files twice with pdfLaTeX, XeLaTeX, LuaLaTeX, pLaTeX and upLaTeX (+ dvipdfmx) and checks the log. For every footnote, `test-common.tex` records in the `.aux` file at shipout the page and the mark of both the footnote mark and the footnote text, where the text is set (in the table notes, in the full `\columnwidth` of the page, or in a box), its width and, with hyperref, the anchors; when the `.aux` file is read back at `\end{document}`, it checks that every text is typeset exactly once, with its own mark and anchor, where it is expected (`TN-RESULT OK`).

Test	What it covers
`test-basic.tex`	`mode=table`: `tabular`, `tabular*`, nesting, counters, `width`
`test-page.tex`	`mode=page`: in the text, in floats, the warning
`test-longtable.tex`	`longtable` over pages, head and foot, both modes
`test-minipage.tex`	`minipage`, tcolorbox, tcbpagefootnote
`test-hyperref.tex`	the tests above with hyperref
`test-japanese.tex`	Japanese classes (ltjbook, jbook, ujbook)
`test-errors.tex`	the error messages
`test-tagging.tex`	tagged PDF: the structure tree (`show-pdf-tags`)

6 History

v1.1 (2026/11/16) Tagged PDF (`tagging=on` of `\DocumentMetadata`): the table notes of a `longtable` are put after the table, so that each footnote mark and its text refer to each other; the tables in a `minipage` are left as they are (see section 2.4).

v1.0 (2026/11/14) First public release.

7 License

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