A small extension to threeparttable – or bringing threeparttable to longtable

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Introduction

Because of the measuring nature of the original threeparttable environment, one cannot use it in combination with the longtable environment. This package makes up for this and brings threeparttable to longtable, at the small cost of having to do things a little different when adding table notes to longtable.

If asked for it, the pacakge will also enable the user to label and refer to table notes.

Prerequisites

The threeparttablex package requires the threeparttable and environ packages to be available on your system.

Basic usage

The interface for the regular three parttable system has not changed. We add the following:

ThreePartTable a very simple wrapper environment that should wrap around the entire longtable. (It actually does nothing else but enable the \tnote command).

TableNotes an environment taking the same options as the normal tablenotes environment, write the table notes in this environment. It needs to be placed *before* the longtable. It *cannot* be added inside longtable.

\insertTableNotes use this macro to insert the table notes inside the longtable. It is inserted via a special \multicolumn. If you add stuff after the table notes, e.g. a caption, you should remember to use \insertTableNotes\\.

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A longtable example could look like this:

```
\begin{ThreePartTable}
 \begin{TableNotes}
    \item[a] A note
    \item[b] Another note
 \end{TableNotes}
  \begin{longtable}{l l}
    \toprule
   Column 1 & Column 2 \\
   \midrule
   \endhead
   \cmidrule{2-2}
   \multicolumn{2}{r}{\textit{continued}}
    \endfoot
   \bottomrule
   \insertTableNotes
   \endlastfoot
   % the contents of the table
               & B\tnote{a} \\
   C\tnote{b} & D
 \end{longtable}
\end{ThreePartTable}
```

Extending threeparttable

One thing missing in three parttable is the ability to refer to individual table notes. And even let \tnote pickup the note marker via a label (reducing the error-40 factor).

By using the package option ${\tt "referable"}$ we will change a few three-parttable internals such that

- (a) The manually specified note markers issued by $\ilde{\mbox{ltem}[\dots]}$ is referable, and
- (b) $\t {\langle label \rangle}$ will refer to the table note identified by $\langle label \rangle$. (We do not want to change \t note). In case you are using hyperref, there is also a \t notex* that does not make the tnote into a hyperlink.
- (c) $\setTableNoteFont{\langle font\ commands \rangle}$ can be used to set the font inside tables notes. (default is empty)

Example

```
\begin{ThreePartTable}
  \begin{TableNotes}
  \item[a] \label{tn:a} test test test test test test
  \item[b] \label{tn:b} test2
  \end{TableNotes}

\begin{longtable}{l l l}
  \caption{A long table}\\
  \toprule
```

```
Coloum 1 & & Column 2 \\
  \midrule
  \endhead
  \cmidrule{3-3}
  \multicolumn{3}{r}{\textit{continued}}
  \endfoot
  \bottomrule
  \insertTableNotes\\
 \endlastfoot
 AAAA\tnotex{tn:a} & & BBBB \\
% \newpage
 CC &
                 & DD\tnotex{tn:b} \\
\end{longtable}
\end{ThreePartTable}
\begin{center}
 \begin{threeparttable}
    \caption{A regular tabular}
    \begin{tabular}{l l l}
      \toprule
      Coloum 1 & & Column 2 \
      \midrule
      AAAA\tnote\{c\} & & BBBB \\
      CC &
                     & DD\tnotex*{tn:c} \\
      \bottomrule
    \end{tabular}
    \begin{tablenotes}
      \footnotesize
    \item[c] test test test test test test test
    \item[d] \label{tn:c} the reference to this is not a link
    \end{tablenotes}
  \end{threeparttable}
\end{center}
```

Resulting in:

Table 1: A long table

Coloum 1		Column 2
AAAA ^a CC	XXXXXXX	$\begin{array}{c} BBBB \\ DD^b \end{array}$

 $^{^{\}mathrm{a}}$ test test test test test test test

Table 2: A regular tabular

Coloum 1		Column 2
AAAA ^c CC	XXXXXXXX	BBBB DD ^d

 $^{^{\}rm c}$ test test test test test test test

 $^{^{\}rm b}$ test2

^d the reference to this is not a link