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 threeparttable 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
    A           & B\tnote{a} \\
    C\tnote{b} & D           \\
  \end{longtable}
\end{ThreePartTable}
```

Caveat: As mentioned on `http://tex.stackexchange.com/q/149032/3929`, if you use `\fill` to spread out the columns in the table, the width `longtable` reports back (which we use to specify the width of the notes) will be wrong. It will be the natural width of the table not the actual width. The result is that the area for the notes will have the wrong width. A remedy is to tell it to use the full width, something similar to

```
\begin{ThreePartTable}
  \renewcommand\TPTminimum{\textwidth} %%% we want full width
  ...
```

will do.

Extending threeparttable

One thing missing in threeparttable 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 »referable« we will change a few three-parttable internals such that

(a) The manually specified note markers issued by `\item[...]` is refer-able, and

(b) `\tnotex{`⟨*label*⟩`}` will refer to the table note identified by ⟨*label*⟩. (We do not want to change `\tnote`). In case you are using hyperref, there is also a `\tnotex*` that does not make the tnote into a hyperlink.

(c) \setTableNoteFont{⟨*font commands*⟩} can be used to set the font inside tables notes. (default is empty)

(d) inside the *tablenotes* environment, the macros \note and \source can be used to specify general notes and a source reference for the table data. These are commonly used within the examples in The Chicago Manual of Style.

(e) The macros \TPTLnotename \TPTLsourcename holds the title names for \note and \source (default: »Note« and »Source«). Both are typeset using \TPTLnotesnamefontcommand which deaults to \textit.

Example

```
\begin{ThreePartTable}
  \begin{TableNotes}
  \item[a] \label{tn:a} test test test test test test test test
  \item[b] \label{tn:b} test2
  \source Made up by daleif
  \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 test
    \item[d] \label{tn:c} the reference to this is not a link
    \note Some general note
```

```
    \end{tablenotes}
  \end{threeparttable}
\end{center}
```

Resulting in:

Table 1: A long table

Coloum 1		Column 2
AAAA[a]	XXXXXXXX	BBBB
CC		DD[b]

[a] test test test test test test test test
[b] test2
Source: Made up by daleif

Table 2: A regular tabular

Coloum 1		Column 2
AAAA[c]	XXXXXXXX	BBBB
CC		DD[d]

[c] test test test test test test test test
[d] the reference to this is not a link
Note: Some general note