The `bigfoot` package
version 1.25

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Purpose of this package is to provide a one-stop solution to almost all problems related to footnotes. You can use it as a drop-in replacement of the `manyfoot` package, but without many of its shortcomings, and quite a few features of its own. It uses the existing document class layouts for footnotes, so you can usually use it without having to worry about the looks.

Features are:

- You can specify and use multiple footnote apparatus. Footnotes for an apparatus lower on the page[a] can be anchored in an apparatus[1] that is higher on the page.
- The last footnote in each apparatus may be broken to the next page[2] Any subordinate footnote anchors that get moved to the next page will take the corresponding footnote with them.
- The order of footnotes in an apparatus is 'natural': it starts with any footnote that may have been broken from the next page, followed by footnotes from the current page in the order of the appearance of their footnote marks.[b] Where the order of appearance in the document differs from the order in the source code, you will usually want to use the `\MakeSorted` command from the `perpage` package to get the numbering fixed appropriately.
- Footnotes can be formatted in separate paragraphs, or be run into a single paragraph. The choice is made per footnote apparatus, but can be overrid-

*dak@gnu.org [1]The plural of "apparatus" is actually "apparatus"[c]

[2]This will probably be interesting for footnotes that contain stuff like math equations[d] or lists[e].

[a]like this one [b]This footnote appears above notes on notes.

[c]Well, actually "apparatūs" with a long "u", but that's just obvious in spoken Latin.

[d]Like

$$\sum_{k=1}^{\infty} \frac{1}{k^2} = \frac{\pi^2}{6} \tag{1}$$

[e]Like

- This, or
- this.

den for single footnotes.[3]

- If footnotes are run into one paragraph, a variety of criteria makes sure that this formatting is only chosen when it saves noticeable space and delivers visually attractive results.
- Parameters for footnote formatting can be specified globally, or separately for each footnote.
- The material in footnotes can contain `\verb`-like material without problems.[4]
- You can use color in footnotes. If a footnote gets broken across pages, the color at the point of the break will get resumed on the next page. Actually, the whole color stack will get reinstated.

As an example of how simple the usage can be, here is the documentation driver for this document:

```
⟨*driver⟩
\documentclass{ltxdoc}
\usepackage{bigfoot}
\usepackage{tabularx}
\usepackage{hyperref}
```

After loading the packages, we declare two footnote blocks. One is the default footnote block, another block is called `B` and is numbered with letters. The letters start new on each page. Both footnote blocks default to in-paragraph footnotes. Since the block `B` can get entries from both the main text as well as the default footnote block, the entries are not necessarily generated in page order. So we need to use a sorted counter to fix this (feel free to try what happens when using an unsorted counter).

```
\DeclareNewFootnote[para]{default}
\DeclareNewFootnote[para]{B}[alph]
\MakeSortedPerPage{footnoteB}
```

In addition, we add an alternate footnote sequence that can be interspersed with the normal footnotes by use of the `\footnote'` command which we effectively define here.

```
\newcounter{footalt}
\def\thefootalt{\fnsymbol{footalt}}
\MakeSortedPerPage[2]{footalt}
\WithSuffix\def\footnotedefault'{\refstepcounter{footalt}%
  \Footnotedefault{\thefootalt}}
```

Actually, that already was all. We can now start the document. The following makes sure that we get the full documentation only by compiling the separate driver file:

```
\begin{document}
```

[3] Footnotes containing material like display math[f] or list environments[g] have to be done in vertical mode.

[4] We wrote `|\verb|-like` above in the main text.[a]

[f] We had this already, right?

[g] And this looks familiar, too.

[a] Well, this is not so impressive. But we wrote `\verb+|\verb|-like+` in the footnote then.

```
\OnlyDescription
⟨driver⟩ \AlsoImplementation
\DocInput{bigfoot.dtx}
\end{document}
⟨/driver⟩
```

In order to be useful without additional hassle, the normal footnote level will be called `default`. If no such style has been defined at the start of the document, it will get defined and used for ordinary footnotes, fixing quite a few problems of LaTeX's own footnote placement algorithms.

Apart from that, usage is very much like that of `manyfoot`, so for the customization possibilities of `bigfoot` with regards to multiple footnote blocks and rules between them, refer to `manyfoot`'s documentation.

`bigfoot` contains a lot of bells and whistles for defining your footnote formats and can use different formats for different footnote blocks. Those expert options are not documented separately yet: look through the code sections to see them explained.