

The `desclist` package*

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The package implements the `desclist` environment and redefines the `description` environment to provide an optional parameter as a prototype for calculation the hang indent of the list.

1 User Interface

desclist The `desclist` environment is similar to the `description` environment but adds more control for typesetting list labels. The usage:

```
\begin{desclist}{\langle prefix \rangle}{\langle suffix \rangle}[\langle prototype \rangle]  
\item[\langle label \rangle] \langle text \rangle  
...  
\end{desclist}
```

The $\langle prefix \rangle$ is inserted before the label and the suffix is inserted after the label. The optional $\langle prototype \rangle$ parameter specifies a prototype for calculation the minimum width of a list label and for calculation the hang indent of a list text. If this parameter is omitted, the standard hang indent value is used and the minimum width of list labels is equal to zero.

A list label is generated in the `\item[\langle label \rangle]` command as follows:

```
\langle prefix \rangle \langle label \rangle {\langle suffix \rangle} \hfil
```

Therefore, you can finish the $\langle label \rangle$ with a command having a parameter to replace a suffix with something else. The `\hfil` command at the end of label adds necessary horizontal space if the label width is less than the minimum width of list label. Using a $\langle prototype \rangle$ together with the `\hfill` command in $\langle prefix \rangle$ and/or $\langle suffix \rangle$ parameters, you can align left, align right, or center narrow list labels.

The following example shows the benefits of the `desclist` environment:

M — an item with a narrow label;

MM — an item with a narrow label;

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Mark — an item with a normal label;

Long mark — an item with too wide label; and

A mark without dash. Here we skip the desclist suffix.

It was prepared as follows:

```
\begin{desclist}{\sf}{\rm\hfill---}[Mark]
\newcommand*\Skip[1]{}
\item[M] an item with a narrow label;
\item[MM] an item with a narrow label;
\item[Mark] an item with a normal label;
\item[Long mark] an item with too wide label; and
\item[A mark without dash.\Skip] Here we skip
the desclist suffix.
\end{desclist}
```

description The package also redefines the **description** environment to allow an optional parameter. In fact, the new implementation of **description** is equivalent to

```
\begin{desclist}{\normalfont\bfseries}{}[\langle prototype \rangle]
...
\end{desclist}
```

2 The Implementation

desclist The definition of the **desclist** environment is quite simple. If an optional parameter is omitted, pass an empty one to the internal command.

```
1 \langle *package \rangle
2 \newenvironment*{desclist}[2]{%
3   \@ifnextchar[{\NCC@dlist{#1}{#2}}{\NCC@dlist{#1}{#2}[]}%
4 }{%
5   \endlist
6 }
```

\NCC@dlist The internal definition of the **desclist** is based on the **\list**:

```
7 \def\NCC@dlist#1#2[#3]{%
8   \list{}{%
```

Specify just the same list parameters as in the **description** if the optional parameter is empty:

```
9     \def\@tempa{#3}\ifx\@tempa\@empty
10       \labelwidth\z@ \itemindent-\leftmargin
```

In other case, use the prototype to calculate the label width and margins:

```
11     \else
12       \settowidth\leftmargin{#1#3{#2}}%
13       \advance\leftmargin\labelsep
```

```

14      \labelwidth=\leftmargin
15      \itemindent\z@
16      \fi

```

Finally, define the `\makelabel` command adding the `desclist` prefix and suffix and finishing it with `\hfil` to allow left alignment for narrow labels. The suffix is enclosed in braces, to allow a trick with ignoring it in the label mark if necessary (see the example above):

```

17      \def\makelabel##1{\hspace\labelsep #1##1{#2}\hfil}%
18      }%
19  }

```

`description` Now we redefine the `description` environment. We do not test is it defined or not.

```

20 \def\description{\desclist{\normalfont\bfseries}{}}
21 \let\enddescription=\enddesclist
22 </package>

```