The **eqlist** package*

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**Abstract**

With this package you can write lists with equal indentation. This package requires the `eqparbox` package.

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1 **Changes**

v2.1 (2013/11/26) Update email, add license. Date/version remains the same since only comments and documentation are modified.

v2.1 (2002/08/18) Added `\longitem` and the related `\eqlistauto` mechanism. The latter was suggested by Rolf Niepraschk *Rolf.Niepraschk@ptb.de*. Changed default of `\eqlistlabel` and gave some comments on spaces at the end of labels in the documentation. Documented special usage of `\makelabel`.

v1.2 (2001/08/17) Added the `{Eqlist}` and `{Eqlist*}` environments.


2 **Description**

This package provides a list environment which sets a description-like list but with the difference that the indentation corresponds to the longest item of the list. The usage is simply

\begin{eqlist}(optional modifications)\end{eqlist}

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and there is also the environment \{eqlist\*\} which is similar but has slightly different defaults (which make the list appear more compact). There is also the alternative call

\begin{Eqlist}\[\langle\text{optional modifications}\rangle\]{\langle\tag\rangle}Eqlist\end{Eqlist}

\begin{Eqlist}\[\langle\text{optional modifications}\rangle\]{\langle\tag\rangle}Eqlist\end{Eqlist}

\item[First item] Text
\item[Second item] Text
\longitem[A special very long item] Text
...
\end{eqlist}

\item[First item] Text
\item[Second item] Text
\longitem[A special very long item] Text
...
\end{eqlist}

and a corresponding \{Eqlist\*\} environment.

All texts within the list are indented by the length of the largest label (i.e. \item entry) plus \labelsep. For the Eqlist or Eqlist\* environment, all lists with the same \langle\tag\rangle are treated equally in the sense that the indentation of these lists is determined by the largest \item of all these lists. In this case, you may also use the \langle\tag\rangle for the eqparbox package to read or modify the length of the largest \item (which is internally treated as a \eqparbox).

\longitem is like \item, but the corresponding label is excluded from the calculation of the longest \item. The intention of \longitem is to allow exceptionally long labels to occur without forcing a corresponding extreme indentation of the whole list. If you want LATEX to decide automatically whether \longitem or \item should be used, you can use the \eqlistauto mechanism which is described later.

The \langle\text{optional modifications}\rangle are any commands which are used to initialize the list: You can modify here essentially the same variables as for any LATEX 2\varepsilon list. If this argument is not given, the default initializations \eqlistinit respectively \eqliststarinit (for \{eqlist\*\} and \{Eqlist\*\}) are used: You can just modify these definitions to change the defaults. If you have given the argument \langle\text{optional modifications}\rangle and additionally want to use the defaults, you have to include the command \eqlistinit respectively \eqliststarinit into the argument \langle\text{optional modifications}\rangle (see the examples below).

\eqlistinitpar

The macros \eqlistinit and \eqliststarinit both call \eqlistinitpar which sets the values for \parindent and \parskip to the values outside the list (this is not standard in LATEX 2\varepsilon, but I prefer this style; if you do not like this, use \let\eqlistinit\relax).

Currently, this is all which is done by \eqlistinit; for \eqliststarinit additionally the values of \topsep and \itemsep are set to 0. Note that currently \parttopsep is not changed from the LATEX 2\varepsilon default. Note that the latter is by default positive which means that if you are in vertical mode before the list (e.g. if you have a \par in front of the list), you get slightly more space above the list.
Before (optional modifications) (or \eqlistinit respectively \eqliststarinit) are expanded, the length of the largest label is already stored in \labelwidth and \leftmargin. After your modifications, \labelsep is added to the actual value of \leftmargin.

As usual, the layout of \item is done by the command \makelabel. If you want, you can change the default initialization of this command in the (optional modifications) argument. However, it is not admissible to redefine this macro within the list. If you really want to change the layout of \item in the middle of a list, you can initialize \makelabel to expand to another command whose definition you can change within the list instead of \makelabel (an example will be given later). The default value of \makelabel is the content of \eqlistlabel which in turn is by default defined with

```latex
\def\eqlistlabel#1{#1 }
```

In version 1.1 and 1.2 of this package, the default was different: A space was added at the end. This has been changed, because by a bug (or feature?) in \eqparbox spaces at the end of an \item are ignored anyway. If you want to force a space at the end which will not be ignored, you have to hide it in a box:

```latex
\def\eqlistlabel#1{\mbox{#1 }}
```

will force a space at the end of every \item.

There is a special mechanism provided which will automatically decide for an \item depending on the length of its label whether it is treated as normal or whether it should be treated like a \longitem: If you want to use this mechanism, you only have to insert the command

```latex
\eqlistauto{⟨maximal length⟩}
```

either inside the (optional modifications) argument or within the list. Here, ⟨maximal length⟩ must be in a format which can be used within \TeX’s internal \ifdim command. It describes the maximal length of the label such that the corresponding \item will be treated as usual—for longer labels the corresponding \item will be treated as a \longitem. If you want to switch off the \eqlistauto-mechanism again, you can use the command

```latex
\eqlistnoauto
```

The commands \eqlistauto and \eqlistnoauto need not occur in matching pairs, and they can also be used several times within the same list: Only the latest of the corresponding commands takes effect for a corresponding \item.

Unfortunately, the \eqlistauto mechanism has a disadvantage: As long as it is in effect, the corresponding \makelabels for the \items are always executed twice (once to calculate the length and once for the actual typesetting). This can cause problems if e.g. counters in \items are increased.

The \eqlistauto mechanism only effects the \item command, not \longitem: Even if the \eqlistauto mechanism is active, you can use \longitem which will
have its original meaning (independent of the length of the label). This means in particular that the \texttt{\makelabel} is executed only once by \texttt{\longitem}, no matter whether the \texttt{\eqlistauto} mechanism is active or not.

3 Examples

\begin{eqlist}
\eqliststarinit\def\makelabel#1{\bfseries#1:}\labelsep1em
\item[Short label] Descriptive text
\item[A longer label] Descriptive text
\longitem[An exceptionally long label] Descriptive text
\item[Short again] Descriptive text
\end{eqlist}

will produce an output like

\begin{verbatim}
Short label:       Descriptive text
A longer label:   Descriptive text
An exceptionally long label: Descriptive text
Short again:      Descriptive text
\end{verbatim}

The same output can be obtained using the \texttt{\eqlistauto} mechanism

\begin{verbatim}
\begin{eqlist}\eqliststarinit
    \def\makelabel#1{\bfseries#1:}\labelsep1em\eqlistauto{3cm}
    \item[Short label] Descriptive text
    \item[A longer label] Descriptive text
    \item[An exceptionally long label] Descriptive text
    \item[Short again] Descriptive text
\end{eqlist}
\end{verbatim}

or by using the \texttt{\eqlistauto} mechanism only locally:

\begin{verbatim}
\begin{eqlist}\eqliststarinit\def\makelabel#1{\bfseries#1:}\labelsep1em
    \item[Short label] Descriptive text
    \item[A longer label] Descriptive text
    \eqlistauto{0pt}
    \item[An exceptionally long label] Descriptive text
    \eqlistnoauto
    \item[Short again] Descriptive text
\end{eqlist}
\end{verbatim}

The next example demonstrates how one can change the layout of labels within the list. Recall that it is forbidden to redefine \texttt{\makelabel}.

\begin{verbatim}
\begin{eqlist}\eqliststarinit
    \def\mylabel#1{\bfseries#1:}\def\makelabel{\mylabel}\labelsep1em
    \item[First label] Descriptive text
    \item[Second label] Descriptive text
    \def\mylabel#1{\slshape#1:}
    \item[First new-style label] Descriptive text
    \longitem[Second new-style label which is long] Descriptive text
\end{eqlist}
\end{verbatim}
The above example will produce an output as follows.

**First label:** Descriptive text
**Second label:** Descriptive text

*First new-style label:* Descriptive text
*Second new-style label which is long:* Descriptive text