The **bxcalcux** package

Takayuki YATO  (aka. “ZR”)

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1 Overview

This package allows one to create a new unit of length that can be used in length expressions of the `calc` package. For example,

\begin{verbatim}
\newcalcunit{thou}{0.07227pt}% thousandth of inch
\setlength{\lengthA}{10thou}
\end{verbatim}

will assign 0.72266 pt to \texttt{\lengthA}.\footnote{Using 0.001in instead of 0.07227pt will give rather inaccurate results, since 0.001in is evaluated to 0.7277 pt.}

**Supported format**  \LaTeX{}.

**Supported engine**  Any engine with \texttt{e-\LaTeX} extension.

**Prerequisite packages**  `calc`, `etoolbox`.

2 Package Loading

Use \texttt{\usepackage} as usual, with no options.

\begin{verbatim}
\usepackage{bxcalcux}
\end{verbatim}

3 Usage

- \texttt{\newcalcunit{⟨unit⟩}{⟨length⟩}}: Declares a new unit \texttt{⟨unit⟩} as equal to \texttt{⟨length⟩}. The unit name must consist only of alphabets. You can use relative units such as 0.5em in \texttt{⟨length⟩}, and such relative units are resolved when \texttt{calc} expressions are evaluated.

- \texttt{\DeclareCalcUnit{⟨unit⟩}{⟨text⟩}}: (for \texttt{\LaTeX}icians) Declares a new unit \texttt{⟨unit⟩} as equal to the unit expressed by a token list \texttt{⟨text⟩}, which must form a “unit of dimen” (in \texttt{\LaTeX} terminology). Here is an example.

\begin{verbatim}
\DeclareCalcUnit{ls}{\baselineskip}% current line skip
\end{verbatim}

4 Notices

- Usually unit names are treated as case-insensitive; but as exception, unit names with a single letter are case-sensitive.

- You must not create a unit name that coincides with a prefix of existing (built-in or created) units or any keywords that could be used in \texttt{calc} expressions (such as \texttt{plus}, \texttt{fil}, etc.); otherwise unexpected things would occur.