

Form Letters

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The October TUGboat (vol. 7, no. 3) contained an enquiry, from John Lee, regarding merging a standard letter with a separate file containing addresses. I have written a few T_EX macros which enable addresses and *opening lines* (`\opening`) to be merged with a standard letter.

The style called *merge* is a substyle under LETTER.

A letter is set up as follows:

```
\documentstyle[merge]{letter}

\address{...}    % your address
\signature{...} % your signature

\begin{document}
\begin{merge}{myaddresses}
    % file MYADDRESSES.TEX
    % contains addresses + opening
With regard to ... % letter starts

\closing{...}    % closing
\ps{...}        % \ps, \encl, \cc, etc.

\end{merge}
\end{letter}
```

The file, MYADDRESSES.TEX, would contain:

```
{University of Otago, % address
  Dunedin,
  New Zealand}
{Dear Graeme,} % \opening
{...}          % next address
{...}          % next \opening
...           % etc.
```

Notes:

- Opening line-braces are not necessary if only 1 line.
- It is important to leave *no blank lines* at the end of the file.

Finally the macros:

```

\typeout{Merge substytle-release 6 October 1986 by Graeme McKinstry}

\newbox\store
\long\def\contents{\global\setbox\store=\vbox\bgroup} % store the contents
\long\def\endcontents{\egroup} % of the letter

\def\sendaddress{test}
\def\openingtext{test}
\newif\iffirsttime
\firsttimetrue

\newread\addrfile % allocate an input stream

\def\@openfile{\openin\addrfile=\mergef@le % open the address file
\ifeof\addrfile % i.e., didn't open successfully
\loop
\immediate\write16{Could not open file \mergef@le}
\closein\addrfile % close the input stream
\read16 to \mergef@le % get another file name
\openin\addrfile=\mergef@le % open up input stream
\ifeof\addrfile
\repeat % repeat until successfully opened
\fi}

\def\merge#1{\def\mergef@le{#1 } \@openfile\readfile \contents}

\def\readfile{\global\read\addrfile to\sendaddress % get the address
\ifeof\addrfile
\else
\global\read\addrfile to\openingtext % get the opening line
\iffirsttime
\else
\endmerge
\fi
\fi}

\newbox\l@tterbox
\def\endmerge{\iffirsttime\endcontents\global\firsttimefalse\fi %
% end contents if it is the first time
\begin{letter}{\sendaddress}
\opening{\openingtext\vskip2\parskip}
\setbox\l@tterbox=\copy\store % copy the contents of the letter
\unvbox\l@tterbox
\end{letter}
\ifeof\addrfile
\message{End of file}
\else
\readfile % loop round yet again
\fi}

```