The \texttt{l3docstrip} package

Code extraction and manipulation

The \LaTeX3 Project*

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1 Extending \texttt{DocStrip}

The \texttt{l3docstrip} module adds \LaTeX3 extensions to the \texttt{DocStrip} program for extracting code from .\texttt{dtx}. As such, this documentation should be read along with that for \texttt{DocStrip}.

2 Internal functions and variables

An important consideration for \LaTeX3 development is separating out public and internal functions. Functions and variables which are private to one module should not be used or modified by any other module. As \TeX{} does not have any formal namespacing system, this requires a convention for indicating which functions in a code-level module are public and which are private.

Using \texttt{l3docstrip} allows internal functions to be indicated using a “two part” system. Within the .\texttt{dtx} file, internal functions may be indicated using `\texttt{@@}` in place of the module name, for example

\begin{verbatim}
\cs_new_protected:Npn \@@_some_function:nn #1#2
{ % Some code here
  \tl_new:N \l_@@_internal_tl
\}
\end{verbatim}

To extract the code using \texttt{l3docstrip}, the “guard” concept used by \texttt{DocStrip} is extended by introduction of the syntax `\texttt{%<@@=(module)>}`. The \texttt{(module)} name then replaces the `\texttt{@@}` when the code is extracted, so that

\begin{verbatim}
\%<package>
\%@foo
\cs_new_protected:Npn \@@_some_function:nn #1#2
{ % Some code here
  \tl_new:N \l_@@_internal_tl
\}
\end{verbatim}

\texttt{%</package>}

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is extracted as

\cs_new_protected:Npn \__foo_some_function:nn #1#2
 \{
 \% Some code here
 \}
\tl_new:N \l__foo_internal_tl

where the \_\_ indicates that the functions and variables are internal to the foo module.

Use @@ to obtain @ in the output (@@@@ to get @@@). For longer pieces of code
the replacement can be completely suppressed by giving an empty module name, namely
using the syntax %<@@=>.