The \texttt{l3cctab} package

Experimental category code tables

The \LaTeX{} Project\textsuperscript{*}

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1 \texttt{l3cctab} documentation

A category code table enables rapid switching of all category codes in one operation. For \texttt{LuaLaTeX}, this is possible over the entire Unicode range. For other engines, only the 8-bit range (0-255) is covered by such tables.

1.1 Creating and initialising category code tables

\begin{verbatim}
\cctab_new:N \cctab_new:cn \cctab_new:c
\end{verbatim}

Creates a new \texttt{category code table} variable or raises an error if the name is already taken. The declaration is global. The \texttt{category code table} is initialised with the codes as used by \texttt{init\TeX{}}. \cctab_new:c

\begin{verbatim}
\cctab_const:Nn \cctab_const:cn \cctab_const:Nn \cctab_const:cn
\end{verbatim}

Creates a new \texttt{category code table} with the category code settings in force at the time the function is called, and applies the \texttt{category code set up} on top of prevailing settings, then saves as a constant table.

\begin{verbatim}
\cctab_gset:Nn \cctab_gset:cn \cctab_gset:Nn \cctab_gset:cn
\end{verbatim}

Sets the \texttt{category code table} to apply the category codes which apply when the prevailing régime is modified by the \texttt{category code set up}. Thus within a standard code block the starting point will be the code applied by \texttt{\_c\_code\_cctab}. The assignment of the table is global: the underlying primitive does not respect grouping.

1.2 Using category code tables

\begin{verbatim}
\cctab_begin:N \cctab_begin:cn \cctab_begin:N \cctab_begin:cn
\end{verbatim}

Switches the category codes in force to those stored in the \texttt{category code table}. The prevailing codes before the function is called are added to a stack, for use with \texttt{cctab\_end\_texp}. This function does not start a \TeX{} group.

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\cctab_end:

Ends the scope of a \textit{(category code table)} started using \texttt{\cctab_{begin}:N}, retuning the codes to those in force before the matching \texttt{\cctab_{begin}:N} was used.

\cctab_{select}:N

\cctab_{select}:N(\textit{category code table})

Selects the \textit{(category code table)} for the scope of the current group.

### 1.3 Category code table conditionals

\cctab_{if\_exist\_p:N} *  
\cctab_{if\_exist\_p:c}*
\cctab_{if\_exist}\texttt{NTF} * 
\cctab_{if\_exist}\texttt{cTF} *

Tests whether the \textit{(category code table)} is currently defined. This does not check that the \textit{(category code table)} really is a category code table.

### 1.4 Constant category code tables

\texttt{\c\_code\_cctab}

Category code table for the code environment. This does not include setting the behaviour of the line-end character, which is only altered by \texttt{\ExplSyntaxOn}.

\texttt{\c\_document\_cctab}

Category code table for a standard \LaTeX{} document. This does not include setting the behaviour of the line-end character, which is only altered by \texttt{\ExplSyntaxOff}.

\texttt{\c\_initex\_cctab}

Category code table as set up by \texttt{ini\TeX{}},

\texttt{\c\_other\_cctab}

Category code table where all characters have category code 12 \texttt{(other)}.

\texttt{\c\_str\_cctab}

Category code table where all characters have category code 12 \texttt{(other)} with the exception of spaces, which have category code 10 \texttt{(space)}.

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