

The `l3cctab` package

Experimental category code tables

The L^AT_EX3 Project*

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1 `l3cctab` documentation

A category code table enables rapid switching of all category codes in one operation. For Lua_T_EX, 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

<code>\cctab_new:N</code>	<code>\cctab_new:N</code> \langle <i>category code table</i> \rangle
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<code>\cctab_new:c</code>	
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Creates a new \langle *category code table* \rangle variable or raises an error if the name is already taken. The declaration is global. The \langle *category code table* \rangle is initialised with the codes as used by `iniTEX`.

<code>\cctab_const:Nn</code>	<code>\cctab_const:Nn</code> \langle <i>category code table</i> \rangle $\{$ \langle <i>category code set up</i> \rangle $\}$
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<code>\cctab_const:cn</code>	
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Creates a new \langle *category code table* \rangle with the category code settings in force at the time the function is called, and applies the \langle *category code set up* \rangle on top of prevailing settings, then saves as a constant table.

<code>\cctab_gset:Nn</code>	<code>\cctab_gset:Nn</code> \langle <i>category code table</i> \rangle $\{$ \langle <i>category code set up</i> \rangle $\}$
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<code>\cctab_gset:cn</code>	
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Sets the \langle *category code table* \rangle to apply the category codes which apply when the prevailing régime is modified by the \langle *category code set up* \rangle . Thus within a standard code block the starting point will be the code applied by `\c_code_cctab`. The assignment of the table is global: the underlying primitive does not respect grouping.

1.2 Using category code tables

<code>\cctab_begin:N</code>	<code>\cctab_begin:N</code> \langle <i>category code table</i> \rangle
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<code>\cctab_begin:c</code>	
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Switches the category codes in force to those stored in the \langle *category code table* \rangle . The prevailing codes before the function is called are added to a stack, for use with `\cctab_end:`. This function does not start a _T_EX group.

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<hr/> <hr/>	<code>\cctab_end:</code>
	Ends the scope of a <i>category code table</i> started using <code>\cctab_begin:N</code> , retuning the codes to those in force before the matching <code>\cctab_begin:N</code> was used.
<hr/> <hr/>	<code>\cctab_select:N</code>
<hr/>	<code>\cctab_select:N</code> <i>category code table</i>
New: 2020-05-19	Selects the <i>category code table</i> for the scope of the current group.

1.3 Category code table conditionals

<hr/> <hr/>	<code>\cctab_if_exist_p:N</code> *	<code>\cctab_if_exist_p:N</code> <i>category code table</i>
	<code>\cctab_if_exist_p:c</code> *	<code>\cctab_if_exist:NTF</code> <i>category code table</i> <code>{true code}</code> <code>{false code}</code>
	<code>\cctab_if_exist:NTF</code> *	Tests whether the <i>category code table</i> is currently defined. This does not check that the
<hr/> <hr/>	<code>\cctab_if_exist:cTF</code> *	<i>category code table</i> really is a category code table.

1.4 Constant category code tables

<hr/> <hr/>	<code>\c_code_cctab</code>	Category code table for the code environment. This does not include setting the behaviour of the line-end character, which is only altered by <code>\ExplSyntaxOn</code> .
<hr/> <hr/>	<code>\c_document_cctab</code>	Category code table for a standard L ^A T _E X document. This does not include setting the behaviour of the line-end character, which is only altered by <code>\ExplSyntaxOff</code> .
<hr/> <hr/>	<code>\c_initex_cctab</code>	Category code table as set up by <code>iniT_EX</code> .
<hr/> <hr/>	<code>\c_other_cctab</code>	Category code table where all characters have category code 12 (other).
<hr/> <hr/>	<code>\c_str_cctab</code>	Category code table where all characters have category code 12 (other) with the exception of spaces, which have category code 10 (space).

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