

1 The Esperanto language

The file `esperanto.dtx`¹ defines all the language-specific macros for the Esperanto language.

For this language the character `^` is made active. In table 1 an overview is given of its purpose.

<code>^c</code>	gives <code>ĉ</code> with hyphenation in the rest of the word allowed, this works for <code>c, C, g, G, H, J, s, S, z, Z</code>
<code>^h</code>	prevents <code>ĥ</code> from becoming too tall
<code>^j</code>	gives <code>ĵ</code>
<code>^u</code>	gives <code>ŭ</code> , with hyphenation in the rest of the word allowed
<code>^U</code>	gives <code>Ŭ</code> , with hyphenation in the rest of the word allowed
<code>^ </code>	inserts a <code>\discretionary{-}{-}{-}</code>

Table 1: The functions of the active character for Esperanto.

The macro `\LdfInit` takes care of preventing that this file is loaded more than once, checking the category code of the `@` sign, etc.

```
1 <*code>
2 \LdfInit{esperanto}\captionesperanto
```

When this file is read as an option, i.e. by the `\usepackage` command, `esperanto` will be an ‘unknown’ language in which case we have to make it known. So we check for the existence of `\l@esperanto` to see whether we have to do something here.

```
3 \ifx\l@esperanto\@undefined
4 \@nopatterns{Esperanto}
5 \adddialect\l@esperanto0\fi
```

The next step consists of defining commands to switch to the Esperanto language. The reason for this is that a user might want to switch back and forth between languages.

`\captionesperanto` The macro `\captionesperanto` defines all strings used in the four standard documentclasses provided with L^AT_EX.

```
6 \addto\captionesperanto{%
7 \def\prefacename{Anta\u{u}parolo}%
8 \def\refname{Cita\^j{oj}}%
9 \def\abstractname{Resumo}%
10 \def\bibname{Bibliografio}%
11 \def\chaptername{{\^C}apitro}%
12 \def\appendixname{Apendico}%
```

¹The file described in this section has version number v1.4t and was last revised on 2007/10/20. A contribution was made by Ruiz-Altaba Marti (`ruizaltb@cernvm.cern.ch`). Code from the file `esperant.sty` by Jörg Knappen (`knappen@vkpmzd.kph.uni-mainz.de`) was included.

```

13 \def\contentsname{Enhavo}%
14 \def\listfigurename{Listo de figuroj}%
15 \def\listtablename{Listo de tabeloj}%
16 \def\indexname{Indekso}%
17 \def\figurename{Figuro}%
18 \def\tablename{Tabelo}%
19 \def\partname{Parto}%
20 \def\enclname{Aldono(j)}%
21 \def\ccname{Kopie al}%
22 \def\headtoname{Al}%
23 \def\pagename{Pa^go}%
24 \def\subjectname{Temo}%
25 \def\seenname{vidu}% a^u: vd.
26 \def\alsoname{vidu anka\u{u}}% a^u vd. anka\u{u}
27 \def\proofname{Pruvo}%
28 \def\glossaryname{Glosaro}%
29 }

```

`\dateesperanto` The macro `\dateesperanto` redefines the command `\today` to produce Esperanto dates.

```

30 \def\dateesperanto{%
31 \def\today{\number\day{--a}~de~\ifcase\month\or
32 januaro\or februaro\or marto\or aprilo\or majo\or junio\or
33 julio\or a\u{u}gusto\or septembro\or oktobro\or novembro\or
34 decembro\fi,\space \number\year}}

```

`\extrasesperanto` The macro `\extrasesperanto` performs all the extra definitions needed for the Esperanto language. The macro `\noextrasesperanto` is used to cancel the actions of `\extrasesperanto`.

For Esperanto the `^` character is made active. This is done once, later on its definition may vary.

```

35 \initiate@active@char{^}

```

Because the character `^` is used in math mode with quite a different purpose we need to add an extra level of evaluation to the definition of the active `^`. It checks whether math mode is active; if so the shorthand mechanism is bypassed by a direct call of `\normal@char^`.

```

36 \addto\extrasesperanto{\languageshorthands{esperanto}}
37 \addto\extrasesperanto{\bbl@activate{^}}
38 \addto\noextrasesperanto{\bbl@deactivate{^}}

```

In order to prevent problems with the active `^` we add a shorthand on system level which expands to a `'normal ^`.

```

39 \declare@shorthand{system}{^}{\csname normal@char\string^ \endcsname}

```

And here are the uses of the active `^`:

```

40 \declare@shorthand{esperanto}{^c}{\^c\allowhyphens}
41 \declare@shorthand{esperanto}{^C}{\^C\allowhyphens}
42 \declare@shorthand{esperanto}{^g}{\^g\allowhyphens}

```

```

43 \declare@shorthand{esperanto}{^G}{\^G\allowhyphens}
44 \declare@shorthand{esperanto}{^h}{h\llap{\^}}\allowhyphens}
45 \declare@shorthand{esperanto}{^H}{\^H\allowhyphens}
46 \declare@shorthand{esperanto}{^j}{\^j\allowhyphens}
47 \declare@shorthand{esperanto}{^J}{\^J\allowhyphens}
48 \declare@shorthand{esperanto}{^s}{\^s\allowhyphens}
49 \declare@shorthand{esperanto}{^S}{\^S\allowhyphens}
50 \declare@shorthand{esperanto}{^u}{\u u\allowhyphens}
51 \declare@shorthand{esperanto}{^U}{\u U\allowhyphens}
52 \declare@shorthand{esperanto}{^|}{\discretionary{-}{-}\allowhyphens}

```

`\Esper` In `esperant.sty` Jörg Knappen provides the macros `\esper` and `\Esper` that can be used instead of `\alph` and `\Alph`. These macros are available in this file as well.

Their definition takes place in two steps. First the toplevel.

```

53 \def\esper#1{\@esper{\@nameuse{c@#1}}}
54 \def\Esper#1{\@Esper{\@nameuse{c@#1}}}

```

Then the second level.

```

55 \def\@esper#1{%
56   \ifcase#1\or a\or b\or c\or \^c\or d\or e\or f\or g\or \^g\or
57     h\or h\llap{\^}}\or i\or j\or \^j\or k\or l\or m\or n\or o\or
58     p\or r\or s\or \^s\or t\or u\or \u{u}\or v\or z\else\@ctrerr\fi}
59 \def\@Esper#1{%
60   \ifcase#1\or A\or B\or C\or \^C\or D\or E\or F\or G\or \^G\or
61     H\or \^H\or I\or J\or \^J\or K\or L\or M\or N\or O\or
62     P\or R\or S\or \^S\or T\or U\or \u{U}\or V\or Z\else\@ctrerr\fi}

```

`\hodiau` In `esperant.sty` Jörg Knappen provides two alternative macros for `\today`, `\hodiaun` and `\hodiaun`. The second macro produces an accusative version of the date in Esperanto.

```

63 \addto\dateesperanto{\def\hodiau{la \today}}
64 \def\hodiaun{la \number\day --an~de~\ifcase\month\or
65   januaro\or februaro\or marto\or aprilo\or majo\or junio\or
66   julio\or a\u{u}gusto\or septembro\or oktobro\or novembro\or
67   decembro\fi, \space \number\year}

```

The macro `\ldf@finish` takes care of looking for a configuration file, setting the main language to be switched on at `\begin{document}` and resetting the category code of `@` to its original value.

```

68 \ldf@finish{esperanto}
69 \code

```