

Esperanto Module for datetime2 Package

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This module is currently unmaintained and may be subject to change. If you want to volunteer to take over maintenance, contact me at <http://www.dickimaw-books.com/contact.html>

Abstract

This is the Esperanto language module for the datetime2 package. If you want to use the settings in this module you must install it in addition to installing datetime2. If you use babel or polyglossia, you will need this module to prevent them from re-defining \today. The datetime2 `useregional` setting must be set to `text` or `numeric` for the language styles to be set. Alternatively, you can set the style in the document using `\DTMsetstyle`, but this may be changed by `\date<language>` depending on the value of the `useregional` setting.

I've copied the date style from `babel-esperanto`'s `\today`.

I don't know if these settings are correct as I can't speak Esperanto. In particular, I don't know if the `esperanto` time style is correct. Currently this just uses the `default` time style. Please be aware that this may change. Whoever takes over maintenance of this module may change it as appropriate.

The new maintainer should add the line:

`The Current Maintainer of this work is Name.`

to the preamble part in `datetime2-esperanto.ins` where `Name` is the name of the maintainer(s) and replace the 'inactive' status to 'maintained'.

Currently there is only a regionless style.

1 The Code

1.1 UTF-8

This file contains the settings that use UTF-8 characters. This file is loaded if XeLaTeX or LuaLaTeX are used. Please make sure your text editor is set to UTF-8 if you want to view this code. Identify module

```
1 \ProvidesDateTimeModule{esperanto-utf8}[2018/04/06 v1.1]
```

```

\DTMesperantoordinal
2 \newcommand*{\DTMesperantoordinal}[1]{%
3   \number#1-a%
4 }

\DTMesperantomonthname Esperanto month names.
5 \newcommand*{\DTMesperantomonthname}[1]{%
6   \ifcase#1
7     \or
8     januaro%
9     \or
10    februaro%
11    \or
12    marto%
13    \or
14    aprilo%
15    \or
16    maj%o%
17    \or
18    junio%
19    \or
20    julio%
21    \or
22    a%ugusto%
23    \or
24    septembro%
25    \or
26    oktobro%
27    \or
28    novembro%
29    \or
30    decembro%
31    \fi
32 }

\DTMesperantoMonthname As above but capitalize.
33 \newcommand*{\DTMesperantoMonthname}[1]{%
34   \ifcase#1
35     \or
36     Januaro%
37     \or
38     Februaro%
39     \or
40     Marto%
41     \or
42     Aprilo%
43     \or
44     Majo%
45     \or

```

```

46 Junio%
47 \or
48 Julio%
49 \or
50 Aŭgusto%
51 \or
52 Septembro%
53 \or
54 Oktobro%
55 \or
56 Novembro%
57 \or
58 Decembro%
59 \fi
60 }

```

If abbreviated dates are supported, short month names should be likewise provided.

1.2 ASCII

This file contains the settings that use \LaTeX commands for non-ASCII characters. This should be input if neither XeLaTeX nor LuaLaTeX are used. Even if the user has loaded `inputenc` with `utf8`, this file should still be used not the `datetime2-esperanto-utf8.1df` file as the non-ASCII characters are made active in that situation and would need protecting against expansion. Identify module

```
61 \ProvidesDateTimeModule{esperanto-ascii}[2018/04/06 v1.1]
```

If abbreviated dates are supported, short month names should be likewise provided.

`\DTMesperantoordinal`

```

62 \newcommand*{\DTMesperantoordinal}[1]{%
63   \number#1--a%
64 }

```

`\DTMesperantomonthname` Esperanto month names.

```

65 \newcommand*{\DTMesperantomonthname}[1]{%
66   \ifcase#1
67   \or
68   januaro%
69   \or
70   februaro%
71   \or
72   marto%
73   \or
74   aprilo%
75   \or
76   majo%
77   \or
78   junio%

```

```

79  \or
80  julio%
81  \or
82  a\protect\u{u}gusto%
83  \or
84  septembro%
85  \or
86  oktobro%
87  \or
88  novembro%
89  \or
90  decembro%
91  \fi
92 }

\DTMesperantoMonthname As above but capitalize.
93 \newcommand*{\DTMesperantoMonthname}[1]{%
94   \ifcase#1
95     \or
96     Januaro%
97     \or
98     Februaro%
99     \or
100    Marto%
101    \or
102    Aprilo%
103    \or
104    Majo%
105    \or
106    Junio%
107    \or
108    Julio%
109    \or
110    A\protect\u{u}gusto%
111    \or
112    Septembro%
113    \or
114    Oktobro%
115    \or
116    Novembro%
117    \or
118    Decembro%
119    \fi
120 }

```

1.3 Main Esperanto Module (`datetime2-esperanto.ldf`)

Identify Module

```
121 \ProvidesDateTimeModule{esperanto}[2018/04/06 v1.1]
```

Need to find out if XeTeX or LuaTeX are being used.

```
122 \RequirePackage{ifxetex, ifluatex}
XeTeX and LuaTeX natively support UTF-8, so load esperanto-utf8 if either of
those engines are used otherwise load esperanto-ascii.
123 \ifxetex
124   \RequireDateTimeModule{esperanto-utf8}
125 \else
126   \ifluatex
127     \RequireDateTimeModule{esperanto-utf8}
128 \else
129   \RequireDateTimeModule{esperanto-ascii}
130 \fi
131 \fi
```

Define the `esperanto` style. The time style is the same as the `default` style provided by `datetime2`. This may need correcting. For example, if a 12 hour style similar to the `englishampm` (from the `english-base` module) is required.

Allow the user a way of configuring the `esperanto` and `esperanto-numeric` styles. This doesn't use the package wide separators such as `\dtm@datetimesep` in case other date formats are also required.

`\DTMesperantodaymonthsep` The separator between the day and month for the text format.

```
132 \newcommand*{\DTMesperantodaymonthsep}{%
133   \DTMtexorpdfstring{\protect\{}{\space}%
134   de%
135   \DTMtexorpdfstring{\protect\}}{\space}%
136 }
```

`\DTMesperantomonthyearsep` The separator between the month and year for the text format.

```
137 \newcommand*{\DTMesperantomonthyearsep}{, \space}
```

`\DTMesperantodatetimesep` The separator between the date and time blocks in the full format (either text or numeric).

```
138 \newcommand*{\DTMesperantodatetimesep}{\space}
```

`\DTMesperantotimezonesep` The separator between the time and zone blocks in the full format (either text or numeric).

```
139 \newcommand*{\DTMesperantotimezonesep}{\space}
```

`\DTMesperantodatesep` The separator for the numeric date format.

```
140 \newcommand*{\DTMesperantodatesep}{-}
```

`\DTMesperantotimesep` The separator for the numeric time format.

```
141 \newcommand*{\DTMesperantotimesep}{:}
```

Provide keys that can be used in `\DTMlangsetup` to set these separators.

```
142 \DTMdefkey{esperanto}{daymonthsep}{\renewcommand*{\DTMesperantodaymonthsep}{#1}}
143 \DTMdefkey{esperanto}{monthyearsep}{\renewcommand*{\DTMesperantomonthyearsep}{#1}}
144 \DTMdefkey{esperanto}{datetimesep}{\renewcommand*{\DTMesperantodatetimesep}{#1}}
145 \DTMdefkey{esperanto}{timezonesep}{\renewcommand*{\DTMesperantotimezonesep}{#1}}
146 \DTMdefkey{esperanto}{datesep}{\renewcommand*{\DTMesperantodatesep}{#1}}
147 \DTMdefkey{esperanto}{timesep}{\renewcommand*{\DTMesperantotimesep}{#1}}
```

TODO: provide a boolean key to switch between full and abbreviated formats if appropriate. (I don't know how the date should be abbreviated.)

Define a boolean key that determines if the time zone mappings should be used.

```
148 \DTMdefboolkey{esperanto}{mapzone}[true]{}
```

The default is to use mappings.

```
149 \DTMsetbool{esperanto}{mapzone}{true}
```

Define a boolean key that determines if the day of month should be displayed.

```
150 \DTMdefboolkey{esperanto}{showdayofmonth}[true]{}
```

The default is to show the day of month.

```
151 \DTMsetbool{esperanto}{showdayofmonth}{true}
```

Define a boolean key that determines if the year should be displayed.

```
152 \DTMdefboolkey{esperanto}{showyear}[true]{}
```

The default is to show the year.

```
153 \DTMsetbool{esperanto}{showyear}{true}
```

Define the `esperanto` style. (TODO: implement day of week?)

```
154 \DTMnewstyle
155   {esperanto}%
156   {%
157     % date style
158     \renewcommand*\DTMdisplaydate[4]{%
159       \DTMifbool{esperanto}{showdayofmonth}{%
160         \DTMesperantoordinal{\#3}\DTMesperantodaymonthsep}%
161       {}%
162       \DTMesperantomonthname{\#2}%
163       \DTMifbool{esperanto}{showyear}{%
164         \DTMesperantomonthyearsep
165         \number##1
166       }%
167     }%
168   }%
169   \renewcommand*\DTMDisplaydate[4]{%
170     \DTMifbool{esperanto}{showdayofmonth}{%
171       \DTMesperantoordinal{\#3}\DTMesperantodaymonthsep
172       \DTMesperantomonthname{\#2}%
173     }%
174     {}%
175     \DTMesperantoMonthname{\#2}%
176   }%
177   \DTMifbool{esperanto}{showyear}{%
178     \DTMesperantomonthyearsep
179     \number##1
180   }%
181   {}%
182 }%
183 }%
184 }
```

```

185  }%
186  {%
187   \DTMsetimestyle{default}%
188  }%
189  {%
190   \DTMresetzones
191   \DTMesperantozonemaps
192   \renewcommand*{\DTMdisplayzone}[2]{%
193     \DTMifbool{esperanto}{mapzone}%
194     {\DTMusezonemapordefault{##1}{##2}}%
195     {%
196       \ifnum##1<0\else+\fi\DTMtowodigits{##1}%
197       \ifDTMshowzoneminutes\DTMesperantotimesep\DTMtowodigits{##2}\fi
198     }%
199   }%
200  }%
201  {%
202   \renewcommand*{\DTMdisplay}[9]{%
203     \ifDTMshowdate
204       \DTMdisplaydate{##1}{##2}{##3}{##4}%
205       \DTMesperantodatetimesep
206     \fi
207     \DTMdisplaytime{##5}{##6}{##7}%
208     \ifDTMshowzone
209       \DTMesperantotimezonesep
210       \DTMdisplayzone{##8}{##9}%
211     \fi
212   }%
213   \renewcommand*{\DTMDisplay}[9]{%
214     \ifDTMshowdate
215       \DTMDisplaydate{##1}{##2}{##3}{##4}%
216       \DTMesperantodatetimesep
217     \fi
218     \DTMdisplaytime{##5}{##6}{##7}%
219     \ifDTMshowzone
220       \DTMesperantotimezonesep
221       \DTMdisplayzone{##8}{##9}%
222     \fi
223   }%
224 }
225 Define numeric style.
226 \DTMnewstyle
227 {esperanto-numeric}%
228 {%
229   label
230   {%
231     \renewcommand*{\DTMdisplaydate}[4]{%
232       \DTMifbool{esperanto}{showdayofmonth}%
233       {%
234         \number##3 % space intended
235       \DTMesperantodatesep

```

```

233     }%
234     {}%
235     \number##2 % space intended
236     \DTMifbool{esperanto}{showyear}%
237     {%
238         \DTMesperantodatesep
239         \number##1 % space intended
240     }%
241     {}%
242   }%
243   \renewcommand*{\DTMDisplaydate}{\DTMdisplaydate}%
244 }%
245 {% time style
246   \renewcommand*\DTMdisplaytime[3]{%
247     \number##1
248     \DTMesperantotimesep\DTMtwodigits{##2}%
249     \ifDTMshowseconds\DTMesperantotimesep\DTMtwodigits{##3}\fi
250   }%
251 }%
252 {% zone style
253   \DTMresetzones
254   \DTMesperantozonemaps
255   \renewcommand*{\DTMdisplayzone}[2]{%
256     \DTMifbool{esperanto}{mapzone}%
257     {\DTMusezonemapordefault{##1}{##2}}%
258     {%
259       \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
260       \ifDTMshowzoneminutes\DTMesperantotimesep\DTMtwodigits{##2}\fi
261     }%
262   }%
263 }%
264 {% full style
265   \renewcommand*{\DTMdisplay}[9]{%
266     \ifDTMshowdate
267       \DTMdisplaydate{##1}{##2}{##3}{##4}%
268       \DTMesperantodateunesep
269     \fi
270     \DTMdisplaytime{##5}{##6}{##7}%
271     \ifDTMshowzone
272       \DTMesperantotimezonesep
273       \DTMdisplayzone{##8}{##9}%
274     \fi
275   }%
276   \renewcommand*{\DTMDisplay}{\DTMdisplay}%
277 }

```

\DTMesperantozonemaps The time zone mappings are set through this command, which can be redefined if extra mappings are required or mappings need to be removed. No default mappings are provided at the moment.

```
278 \newcommand*{\DTMesperantozonemaps}{%
```

```

279 }

      Switch style according to the useregional setting.

280 \DTMifcaseregional
281 {}% do nothing
282 {\DTMsetstyle{esperanto}}
283 {\DTMsetstyle{esperanto-numeric}}


      Redefine \dateesperanto (or \date{dialect}) to prevent babel from resetting
      \today. (For this to work, babel must already have been loaded if it's required.)

284 \ifcsundef{date\CurrentTrackedDialect}
285 {%
286   \ifundef{\dateesperanto}
287     {}% do nothing
288   }%
289   {%
290     \def\dateesperanto{%
291       \DTMifcaseregional
292       {}% do nothing
293       {\DTMsetstyle{esperanto}}%
294       {\DTMsetstyle{esperanto-numeric}}%
295     }%
296   }%
297 }%
298 {%
299   \csdef{date\CurrentTrackedDialect}{%
300     \DTMifcaseregional
301     {}% do nothing
302     {\DTMsetstyle{esperanto}}%
303     {\DTMsetstyle{esperanto-numeric}}%
304   }%
305 }%

```

Change History

1.0	1.1
General: Initial release	1, 3, 4
	General: removed spurious space
	9

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