

Finnish 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 Finnish 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 redefining `\today`. The `datetime2` `userregional` 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 `userregional` setting.

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

I don't know if these settings are correct as I can't speak Finnish. In particular, I don't know if the `finnish` 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 can 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-finnish.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{finnish-utf8}[2015/03/30 v1.0]
```

`\DTMfinnishordinal`

```
2 \newcommand*{\DTMfinnishordinal}[1]{%  
3   \number#1.%  
4 }
```

`\DTMfinnishmonthname` Finnish month names.

```
5 \newcommand*{\DTMfinnishmonthname}[1]{%  
6   \ifcase#1  
7   \or  
8   tammikuuta%  
9   \or  
10  helmikuuta%  
11  \or  
12  maaliskuuta%  
13  \or  
14  huhtikuuta%  
15  \or  
16  toukokuuta%  
17  \or  
18  kesäkuuta%  
19  \or  
20  heinäkuuta%  
21  \or  
22  elokuuta%  
23  \or  
24  syyskuuta%  
25  \or  
26  lokakuuta%  
27  \or  
28  marraskuuta%  
29  \or  
30  joulukuuta%  
31  \fi  
32 }
```

`\DTMfinnishMonthname` As above but capitalize.

```
33 \newcommand*{\DTMfinnishMonthname}[1]{%  
34   \ifcase#1  
35   \or  
36   Tammikuuta%  
37   \or  
38   Helmikuuta%  
39   \or  
40   Maaliskuuta%  
41   \or  
42   Huhtikuuta%  
43   \or  
44   Toukokuuta%  
45   \or
```

```

46 Kesäkuuta%
47 \or
48 Heinäkuuta%
49 \or
50 Elokuuta%
51 \or
52 Syyskuuta%
53 \or
54 Lokakuuta%
55 \or
56 Marraskuuta%
57 \or
58 Joulukuuta%
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-finnish-utf8.lfd` file as the non-ASCII characters are made active in that situation and would need protecting against expansion. Identify module

```
61 \ProvidesDateTimeModule{finnish-ascii}[2015/03/30 v1.0]
```

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

`\DTMfinnishordinal`

```

62 \newcommand*{\DTMfinnishordinal}[1]{%
63   \number#1.%
64 }

```

`\DTMfinnishmonthname` Finnish month names.

```

65 \newcommand*{\DTMfinnishmonthname}[1]{%
66   \ifcase#1
67   \or
68   tammikuuta%
69   \or
70   helmikuuta%
71   \or
72   maaliskuuta%
73   \or
74   huhtikuuta%
75   \or
76   toukokuuta%
77   \or
78   kes\protect\"akuuta%

```

```

79 \or
80 hein\protect\"akuuta%
81 \or
82 elokuuta%
83 \or
84 syyskuuta%
85 \or
86 lokakuuta%
87 \or
88 marraskuuta%
89 \or
90 joulukuuta%
91 \fi
92 }

```

`\DTMfinnishMonthname` As above but capitalize.

```

93 \newcommand*{\DTMfinnishMonthname}[1]{%
94 \ifcase#1
95 \or
96 Tammikuuta%
97 \or
98 Helmikuuta%
99 \or
100 Maaliskuuta%
101 \or
102 Huhtikuuta%
103 \or
104 Toukokuuta%
105 \or
106 Kes\protect\"akuuta%
107 \or
108 Hein\protect\"akuuta%
109 \or
110 Elokuuta%
111 \or
112 Syyskuuta%
113 \or
114 Lokakuuta%
115 \or
116 Marraskuuta%
117 \or
118 Joulukuuta%
119 \fi
120 }

```

1.3 Main Finnish Module (datetime2-finnish.1df)

Identify Module

```

121 \ProvidesDateTimeModule{finnish}[2015/03/30 v1.0]

```

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

```
122 \RequirePackage{ifxetex,ifluatex}
```

XeTeX and LuaTeX natively support UTF-8, so load `finnish-utf8` if either of those engines are used otherwise load `finnish-ascii`.

```
123 \ifxetex
```

```
124 \RequireDateTimeModule{finnish-utf8}
```

```
125 \else
```

```
126 \ifluatex
```

```
127 \RequireDateTimeModule{finnish-utf8}
```

```
128 \else
```

```
129 \RequireDateTimeModule{finnish-ascii}
```

```
130 \fi
```

```
131 \fi
```

Define the `finnish` 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 `finnish` and `finnish-numeric` styles. This doesn't use the package wide separators such as `\dtm@datetimesep` in case other date formats are also required.

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

```
132 \newcommand*{\DTMfinnishdaymonthsep}{%
```

```
133 \DTMtexorpdfstring{\protect~}{\space}}%
```

```
134 }
```

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

```
135 \newcommand*{\DTMfinnishmonthyearsep}{\space}
```

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

```
136 \newcommand*{\DTMfinnishdatetimesep}{\space}
```

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

```
137 \newcommand*{\DTMfinnishtimezonesep}{\space}
```

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

```
138 \newcommand*{\DTMfinnishdatesep}{.}
```

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

```
139 \newcommand*{\DTMfinnishtimesep}{.}
```

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

```
140 \DTMdefkey{finnish}{daymonthsep}{\renewcommand*{\DTMfinnishdaymonthsep}{#1}}
```

```
141 \DTMdefkey{finnish}{monthyearsep}{\renewcommand*{\DTMfinnishmonthyearsep}{#1}}
```

```
142 \DTMdefkey{finnish}{datetimesep}{\renewcommand*{\DTMfinnishdatetimesep}{#1}}
```

```
143 \DTMdefkey{finnish}{timezonesep}{\renewcommand*{\DTMfinnishtimezonesep}{#1}}
```

```
144 \DTMdefkey{finnish}{datesep}{\renewcommand*{\DTMfinnishdatesep}{#1}}
```

```
145 \DTMdefkey{finnish}{timesep}{\renewcommand*{\DTMfinnishtimesep}{#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.

```
146 \DTMdefboolkey{finnish}{mapzone}[true]{}
```

The default is to use mappings.

```
147 \DTMsetbool{finnish}{mapzone}{true}
```

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

```
148 \DTMdefboolkey{finnish}{showdayofmonth}[true]{}
```

The default is to show the day of month.

```
149 \DTMsetbool{finnish}{showdayofmonth}{true}
```

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

```
150 \DTMdefboolkey{finnish}{showyear}[true]{}
```

The default is to show the year.

```
151 \DTMsetbool{finnish}{showyear}{true}
```

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

```
152 \DTMnewstyle
```

```
153 {finnish}% label
```

```
154 {% date style
```

```
155   \renewcommand*\DTMdisplaydate[4]{%
```

```
156     \DTMifbool{finnish}{showdayofmonth}
```

```
157     {\DTMfinnishordinal{##3}\DTMfinnishdaymonthsep}%
```

```
158     }%
```

```
159     \DTMfinnishmonthname{##2}%
```

```
160     \DTMifbool{finnish}{showyear}%
```

```
161     {%
```

```
162       \DTMfinnishmonthyearsep
```

```
163       \number##1
```

```
164     }%
```

```
165   }%
```

```
166 }%
```

```
167 \renewcommand*\DTMdisplaydate[4]{%
```

```
168   \DTMifbool{finnish}{showdayofmonth}
```

```
169   {%
```

```
170     \DTMfinnishordinal{##3}\DTMfinnishdaymonthsep
```

```
171     \DTMfinnishmonthname{##2}%
```

```
172     }%
```

```
173     {%
```

```
174       \DTMfinnishMonthname{##2}%
```

```
175       }%
```

```
176     \DTMifbool{finnish}{showyear}%
```

```
177     {%
```

```
178       \DTMfinnishmonthyearsep
```

```
179       \number##1
```

```
180     }%
```

```
181   }%
```

```
182 }%
```

```

183 }%
184 {% time style (use default)
185   \DTMsettimestyle{default}%
186 }%
187 {% zone style
188   \DTMresetzones
189   \DTMfinnishzonemaps
190   \renewcommand*{\DTMdisplayzone}[2]{%
191     \DTMifbool{finnish}{mapzone}%
192     {\DTMusezonemapordefault{##1}{##2}}%
193     {%
194       \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
195       \ifDTMshowzoneminutes\DTMfinnishtimesep\DTMtwodigits{##2}\fi
196     }%
197   }%
198 }%
199 {% full style
200   \renewcommand*{\DTMdisplay}[9]{%
201     \ifDTMshowdate
202       \DTMdisplaydate{##1}{##2}{##3}{##4}%
203       \DTMfinnishdatetimesep
204       \fi
205       \DTMdisplaytime{##5}{##6}{##7}%
206       \ifDTMshowzone
207         \DTMfinnishtimezonesep
208         \DTMdisplayzone{##8}{##9}%
209       \fi
210     }%
211   \renewcommand*{\DTMDisplay}[9]{%
212     \ifDTMshowdate
213       \DTMDisplaydate{##1}{##2}{##3}{##4}%
214       \DTMfinnishdatetimesep
215       \fi
216       \DTMdisplaytime{##5}{##6}{##7}%
217       \ifDTMshowzone
218         \DTMfinnishtimezonesep
219         \DTMdisplayzone{##8}{##9}%
220       \fi
221     }%
222 }%
    Define numeric style.
223 \DTMnewstyle
224 {finnish-numeric}% label
225 {% date style
226   \renewcommand*\DTMdisplaydate[4]{%
227     \DTMifbool{finnish}{showdayofmonth}%
228     {%
229       \number##3 % space intended
230       \DTMfinnishdatesep

```

```

231     }%
232     {}%
233     \number##2 % space intended
234     \DTMifbool{finnish}{showyear}%
235     {%
236         \DTMfinnishdatesep
237         \number##1 % space intended
238     }%
239     {}%
240 }%
241 \renewcommand*\DTMdisplaydate{\DTMdisplaydate}%
242 }%
243 {% time style
244 \renewcommand*\DTMdisplaytime[3]{%
245     \number##1
246     \DTMfinnishtimesep\DTMtwodigits{##2}%
247     \ifDTMshowseconds\DTMfinnishtimesep\DTMtwodigits{##3}\fi
248 }%
249 }%
250 {% zone style
251 \DTMresetzones
252 \DTMfinnishzonemaps
253 \renewcommand*\DTMdisplayzone[2]{%
254     \DTMifbool{finnish}{mapzone}%
255     {\DTMusedzonemapordefault{##1}{##2}}%
256     {%
257         \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
258         \ifDTMshowzoneminutes\DTMfinnishtimesep\DTMtwodigits{##2}\fi
259     }%
260 }%
261 }%
262 {% full style
263 \renewcommand*\DTMdisplay[9]{%
264     \ifDTMshowdate
265         \DTMdisplaydate{##1}{##2}{##3}{##4}%
266         \DTMfinnishdatetimesep
267         \fi
268         \DTMdisplaytime{##5}{##6}{##7}%
269         \ifDTMshowzone
270             \DTMfinnishtimezonesep
271             \DTMdisplayzone{##8}{##9}%
272         \fi
273     }%
274 \renewcommand*\DTMdisplay{\DTMdisplay}%
275 }

```

`\DTMfinnishzonemaps` 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.

```

276 \newcommand*\DTMfinnishzonemaps{%

```



```

277 \DTMdefzonemap{02}{00}{EET}%
278 \DTMdefzonemap{03}{00}{EEST}%
279 }

```

Switch style according to the `useregional` setting.

```

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

```

Redefine `\datefinnish` (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\datefinnish
287   {% do nothing
288   }%
289   {%
290     \def\datefinnish{%
291       \DTMifcaseregional
292       }% do nothing
293       {\DTMsetstyle{finnish}}%
294       {\DTMsetstyle{finnish-numeric}}%
295     }%
296   }%
297 }%
298 {%
299   \csdef{date\CurrentTrackedDialect}{%
300     \DTMifcaseregional
301     }% do nothing
302     {\DTMsetstyle{finnish}}%
303     {\DTMsetstyle{finnish-numeric}}
304   }%
305 }%

```

Change History

1.0
General: Initial release 1, 3, 4

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