

Ukrainian 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 Ukrainian 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 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-ukrainian`'s `\today`.

I don't know if these settings are correct as I can't speak Ukrainian. In particular, I don't know if the `ukrainian` 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-ukrainian.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{ukrainian-utf8}[2015/04/01 v1.0]
```

`\DTMukrainianordinal`

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

`\DTMukrainianyear`

```
5 \newcommand*{\DTMukrainianyear}[1]{%
6   \number#1
7   \DTMtexorpdfstring{\protect~}{\space}p.%
8 }
```

`\DTMukrainianmonthname` Ukrainian month names.

```
9 \newcommand*{\DTMukrainianmonthname}[1]{%
10  \ifcase#1
11  \or
12  січня%
13  \or
14  лютого%
15  \or
16  березня%
17  \or
18  квітня%
19  \or
20  травня%
21  \or
22  червня%
23  \or
24  липня%
25  \or
26  серпня%
27  \or
28  вересня%
29  \or
30  жовтня%
31  \or
32  листопада%
33  \or
34  грудня%
35  \fi
36 }
```

`\DTMukrainianMonthname` As above but capitalize.

```
37 \newcommand*{\DTMukrainianMonthname}[1]{%
38  \ifcase#1
39  \or
40  Січня%
41  \or
42  Лютого%
43  \or
```

```

44 Березня%
45 \or
46 Квітня%
47 \or
48 Травня%
49 \or
50 Червня%
51 \or
52 Липня%
53 \or
54 Серпня%
55 \or
56 Вересня%
57 \or
58 Жовтня%
59 \or
60 Листопада%
61 \or
62 Грудня%
63 \fi
64 }

```

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 Xe \LaTeX nor Lua \LaTeX are used. Even if the user has loaded inputenc with `utf8`, this file should still be used not the `datetime2-ukrainian-utf8.1df` file as the non-ASCII characters are made active in that situation and would need protecting against expansion. Identify module

```
65 \ProvidesDateTimeModule{ukrainian-ascii}[2015/04/01 v1.0]
```

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

`\DTMukrainianordinal`

```

66 \newcommand*{\DTMukrainianordinal}[1]{%
67   \number#1
68 }

```

`\DTMukrainianyear`

```

69 \newcommand*{\DTMukrainianyear}[1]{%
70   \number#1
71   \DTMtexpdfstring{\protect~}{\space}\protect\cyrr.%
72 }

```

`\DTMukrainianmonthname` Ukrainian month names.

```

73 \newcommand*{\DTMukrainianmonthname}[1]{%
74   \ifcase#1
75   \or
76   \protect\cyrs\protect\cyrii\protect\cyrch\protect\cyrn\protect\cyrya
77   \or
78   \protect\cyrl\protect\cyryu\protect\cyrt\protect\cyro\protect\cyrg
79   \protect\cyro
80   \or
81   \protect\cyrb\protect\cyre\protect\cyrr\protect\cyre\protect\cyrz
82   \protect\cyrn\protect\cyrya
83   \or
84   \protect\cyrk\protect\cyrv\protect\cyrii\protect\cyrt\protect\cyrn
85   \protect\cyrya
86   \or
87   \protect\cyrt\protect\cyrr\protect\cyra\protect\cyrv\protect\cyrn
88   \protect\cyrya
89   \or
90   \protect\cyrch\protect\cyre\protect\cyrr\protect\cyrv\protect\cyrn
91   \protect\cyrya
92   \or
93   \protect\cyrl\protect\cyri\protect\cyrp\protect\cyrn\protect\cyrya
94   \or
95   \protect\cyrs\protect\cyre\protect\cyrr\protect\cyrp\protect\cyrn
96   \protect\cyrya
97   \or
98   \protect\cyrv\protect\cyre\protect\cyrr\protect\cyre\protect\cyrs
99   \protect\cyrn\protect\cyrya
100  \or
101  \protect\cyrzh\protect\cyro\protect\cyrv\protect\cyrt\protect\cyrn
102  \protect\cyrya
103  \or
104  \protect\cyrl\protect\cyri\protect\cyrs\protect\cyrt\protect\cyro
105  \protect\cyrp\protect\cyra\protect\cyrd\protect\cyra
106  \or
107  \protect\cyrg\protect\cyrr\protect\cyru\protect\cyrd\protect\cyrn
108  \protect\cyrya
109  \fi
110 }

```

\DTMukrainianMonthname As above but start with a capital.

```

111 \newcommand*{\DTMukrainianMonthname}[1]{%
112   \ifcase#1
113   \or
114   \protect\CYRS\protect\cyrii\protect\cyrch\protect\cyrn\protect\cyrya
115   \or
116   \protect\CYRL\protect\cyryu\protect\cyrt\protect\cyro\protect\cyrg
117   \protect\cyro
118   \or
119   \protect\CYRB\protect\cyre\protect\cyrr\protect\cyre\protect\cyrz
120   \protect\cyrn\protect\cyrya

```

```

121 \or
122   \protect\CYRK\protect\cyrv\protect\cyrii\protect\cyrt\protect\cyrn
123   \protect\cyrya
124 \or
125   \protect\CYRT\protect\cyrr\protect\cyra\protect\cyrv\protect\cyrn
126   \protect\cyrya
127 \or
128   \protect\CYRCH\protect\cyre\protect\cyrr\protect\cyrv\protect\cyrn
129   \protect\cyrya
130 \or
131   \protect\CYRL\protect\cyri\protect\cyrp\protect\cyrn\protect\cyrya
132 \or
133   \protect\CYRS\protect\cyre\protect\cyrr\protect\cyrp\protect\cyrn
134   \protect\cyrya
135 \or
136   \protect\CYRV\protect\cyre\protect\cyrr\protect\cyre\protect\cyrn
137   \protect\cyrya
138 \or
139   \protect\CYRZH\protect\cyro\protect\cyrv\protect\cyrt\protect\cyrn
140   \protect\cyrya
141 \or
142   \protect\CYRL\protect\cyri\protect\cyrp\protect\cyrt\protect\cyro
143   \protect\cyrp\protect\cyra\protect\cyrd\protect\cyra
144 \or
145   \protect\CYRG\protect\cyrr\protect\cyru\protect\cyrd\protect\cyrn
146   \protect\cyrya
147 \fi
148 }

```

1.3 Main Ukrainian Module (**datetime2-ukrainian.ldf**)

Identify Module

```

149 \ProvidesDateTimeModule{ukrainian}[2015/04/01 v1.0]
    Need to find out if XeTeX or LuaTeX are being used.
150 \RequirePackage{ifxetex,ifluatex}
    XeTeX and LuaTeX natively support UTF-8, so load ukrainian-utf8 if either
    of those engines are used otherwise load ukrainian-ascii.
151 \ifxetex
152   \RequireDateTimeModule{ukrainian-utf8}
153 \else
154   \ifluatex
155     \RequireDateTimeModule{ukrainian-utf8}
156   \else
157     \RequireDateTimeModule{ukrainian-ascii}
158 \fi
159 \fi

```

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

`\DTMukrainiandaymonthsep` The separator between the day and month for the text format.
160 `\newcommand*{\DTMukrainiandaymonthsep}{%`
161 `\DTMtexorpdfstring{\protect~}{\space}}`

`\DTMukrainianmonthyearsep` The separator between the month and year for the text format.
162 `\newcommand*{\DTMukrainianmonthyearsep}{\space}`

`\DTMukrainiandatetimesep` The separator between the date and time blocks in the full format (either text or numeric).
163 `\newcommand*{\DTMukrainiandatetimesep}{\space}`

`\DTMukrainiantimezonesep` The separator between the time and zone blocks in the full format (either text or numeric).
164 `\newcommand*{\DTMukrainiantimezonesep}{\space}`

`\DTMukrainiandatesep` The separator for the numeric date format.
165 `\newcommand*{\DTMukrainiandatesep}{.}`

`\DTMukrainiantimesep` The separator for the numeric time format.
166 `\newcommand*{\DTMukrainiantimesep}{:}`

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

```
167 \DTMdefkey{ukrainian}{daymonthsep}{\renewcommand*{\DTMukrainiandaymonthsep}{#1}}
168 \DTMdefkey{ukrainian}{monthyearsep}{\renewcommand*{\DTMukrainianmonthyearsep}{#1}}
169 \DTMdefkey{ukrainian}{datetimesep}{\renewcommand*{\DTMukrainiandatetimesep}{#1}}
170 \DTMdefkey{ukrainian}{timezonesep}{\renewcommand*{\DTMukrainiantimezonesep}{#1}}
171 \DTMdefkey{ukrainian}{datesep}{\renewcommand*{\DTMukrainiandatesep}{#1}}
172 \DTMdefkey{ukrainian}{timesep}{\renewcommand*{\DTMukrainiantimesep}{#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.

```
173 \DTMdefboolkey{ukrainian}{mapzone}[true]{}

```

The default is to use mappings.

```
174 \DTMsetbool{ukrainian}{mapzone}{true}

```

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

```
175 \DTMdefboolkey{ukrainian}{showdayofmonth}[true]{}

```

The default is to show the day of month.

```
176 \DTMsetbool{ukrainian}{showdayofmonth}{true}

```

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

```
177 \DTMdefboolkey{ukrainian}{showyear}[true]{}

```

The default is to show the year.

```
178 \DTMsetbool{ukrainian}{showyear}{true}
    Define the ukrainian style. (TODO: implement day of week?)
179 \DTMnewstyle
180 {ukrainian}% label
181 {% date style
182   \renewcommand*\DTMdisplaydate[4]{%
183     \DTMifbool{ukrainian}{showdayofmonth}
184     {\DTMukrainianordinal{##3}\DTMukrainiandaymonthsep}%
185     }%
186     \DTMukrainianmonthname{##2}%
187     \DTMifbool{ukrainian}{showyear}%
188     {%
189       \DTMukrainianmonthyearsep
190       \DTMukrainianyear{##1}%
191     }%
192   }%
193 }%
194 \renewcommand*\DTMdisplaydate[4]{%
195   \DTMifbool{ukrainian}{showdayofmonth}
196   {%
197     \DTMukrainianordinal{##3}\DTMukrainiandaymonthsep
198     \DTMukrainianmonthname{##2}%
199   }%
200   {%
201     \DTMukrainianMonthname{##2}%
202   }%
203   \DTMifbool{ukrainian}{showyear}%
204   {%
205     \DTMukrainianmonthyearsep
206     \DTMukrainianyear{##1}%
207   }%
208 }%
209 }%
210 }%
211 {% time style (use default)
212   \DTMsettimestyle{default}%
213 }%
214 {% zone style
215   \DTMresetzones
216   \DTMukrainianzonemaps
217   \renewcommand*\DTMdisplayzone[2]{%
218     \DTMifbool{ukrainian}{mapzone}%
219     {\DTMusezonemapordefault{##1}{##2}}%
220     {%
221       \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
222       \ifDTMshowzoneminutes\DTMukrainiantimesep\DTMtwodigits{##2}\fi
223     }%
224   }%
```

```

225 }%
226 {% full style
227 \renewcommand*{\DTMdisplay}[9]{%
228 \ifDTMshowdate
229 \DTMdisplaydate{##1}{##2}{##3}{##4}%
230 \DTMukrainiandatetimesep
231 \fi
232 \DTMdisplaytime{##5}{##6}{##7}%
233 \ifDTMshowzone
234 \DTMukrainiantimezonesep
235 \DTMdisplayzone{##8}{##9}%
236 \fi
237 }%
238 \renewcommand*{\DTMDisplay}[9]{%
239 \ifDTMshowdate
240 \DTMDisplaydate{##1}{##2}{##3}{##4}%
241 \DTMukrainiandatetimesep
242 \fi
243 \DTMdisplaytime{##5}{##6}{##7}%
244 \ifDTMshowzone
245 \DTMukrainiantimezonesep
246 \DTMdisplayzone{##8}{##9}%
247 \fi
248 }%
249 }%
    Define numeric style.
250 \DTMnewstyle
251 {ukrainian-numeric}% label
252 {% date style
253 \renewcommand*\DTMdisplaydate[4]{%
254 \DTMifbool{ukrainian}{showdayofmonth}%
255 {%
256 \number##3 % space intended
257 \DTMukrainiandatesep
258 }%
259 }%
260 \number##2 % space intended
261 \DTMifbool{ukrainian}{showyear}%
262 {%
263 \DTMukrainiandatesep
264 \number##1 % space intended
265 }%
266 }%
267 }%
268 \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
269 }%
270 {% time style
271 \renewcommand*\DTMdisplaytime[3]{%
272 \number##1

```



```

273     \DTMukrainiantimesep\DTMtwdigits{##2}%
274     \ifDTMshowseconds\DTMukrainiantimesep\DTMtwdigits{##3}\fi
275   }%
276 }%
277 {% zone style
278   \DTMresetzones
279   \DTMukrainianzonemaps
280   \renewcommand*\DTMdisplayzone[2]{%
281     \DTMifbool{ukrainian}{mapzone}%
282     {\DTMusedzonemapordefault{##1}{##2}}%
283     {%
284       \ifnum##1<0\else+\fi\DTMtwdigits{##1}%
285       \ifDTMshowzoneminutes\DTMukrainiantimesep\DTMtwdigits{##2}\fi
286     }%
287   }%
288 }%
289 {% full style
290   \renewcommand*\DTMdisplay[9]{%
291     \ifDTMshowdate
292       \DTMdisplaydate{##1}{##2}{##3}{##4}%
293       \DTMukrainiandatetimesep
294       \fi
295       \DTMdisplaytime{##5}{##6}{##7}%
296       \ifDTMshowzone
297         \DTMukrainiantimezonesep
298         \DTMdisplayzone{##8}{##9}%
299       \fi
300     }%
301   \renewcommand*\DTMDisplay{\DTMdisplay}%
302 }

```

`\DTMukrainianzonemaps` The time zone mappings are set through this command, which can be redefined if extra mappings are required or mappings need to be removed. These may need translating (in which case the definitions might need to be moved to the `utf8` and `ascii` ldf files).

```

303 \newcommand*\DTMukrainianzonemaps{%
304   \DTMdefzonemap{02}{00}{EET}%
305   \DTMdefzonemap{03}{00}{EEST}%
306 }

```

Switch style according to the `useregional` setting.

```

307 \DTMifcaseregional
308 {}% do nothing
309 {\DTMsetstyle{ukrainian}}
310 {\DTMsetstyle{ukrainian-numeric}}

```

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

```
311 \ifcsundef{date\CurrentTrackedDialect}
312 {%
313   \ifundef\dateukrainian
314   {% do nothing
315   }%
316   {%
317     \def\dateukrainian{%
318       \DTMifcaseregional
319       }% do nothing
320       {\DTMsetstyle{ukrainian}}%
321       {\DTMsetstyle{ukrainian-numeric}}%
322     }%
323   }%
324 }%
325 {%
326   \csdef{date\CurrentTrackedDialect}{%
327     \DTMifcaseregional
328     }% do nothing
329     {\DTMsetstyle{ukrainian}}%
330     {\DTMsetstyle{ukrainian-numeric}}
331   }%
332 }%
```

Change History

1.0
General: Initial release 1, 3, 5

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