

Russian 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 Russian 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-russian`'s `\today`.

I don't know if these settings are correct as I can't speak Russian. In particular, I don't know if the `russian` 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-russian.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{russian-utf8}[2018/12/07 v1.1]
```

```

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

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

\DTMrussianmonthname Russian month names.
 9 \newcommand*{\DTMrussianmonthname}[1]{%
10   \ifcase#1
11     \or
12     января%
13     \or
14     февраля%
15     \or
16     марта%
17     \or
18     апреля%
19     \or
20     мая%
21     \or
22     июня%
23     \or
24     июля%
25     \or
26     августа%
27     \or
28     сентября%
29     \or
30     октября%
31     \or
32     ноября%
33     \or
34     декабря%
35     \fi
36 }

\DTMrussianMonthname As above but capitalize.
37 \newcommand*{\DTMrussianMonthname}[1]{%
38   \ifcase#1
39     \or
40     Января%
41     \or
42     Февраля%
43     \or

```

```

44  \Марта%
45  \ор
46  \Апреля%
47  \ор
48  \Мая%
49  \ор
50  \Июня%
51  \ор
52  \Июля%
53  \ор
54  \Августа%
55  \ор
56  \Сентября%
57  \ор
58  \Октября%
59  \ор
60  \Ноября%
61  \ор
62  \Декабря%
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 L^AT_EX 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-russian-utf8.ldf` file as the non-ASCII characters are made active in that situation and would need protecting against expansion. Identify module

```
65 \ProvidesDateTimeModule{russian-ascii}[2018/12/07 v1.1]
```

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

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

\DTMrussianyear
69 \newcommand*{\DTMrussianyear}[1]{%
70   \number#1
71   \DTMtexorpdfstring{\protect~}{\space}\protect\cyrq.%}
72 }
```

```

\DTMrussianmonthname Russian month names.
73 \newcommand*{\DTMrussianmonthname}[1]{%
74   \ifcase#1
75   \or
76     \protect\cyrya\protect\cyrn\protect\cyrv\protect\cyra\protect\cyrr
77     \protect\cyrya
78   \or
79     \protect\cyrf\protect\cyre\protect\cyrv\protect\cyrr\protect\cyra
80     \protect\cyr1\protect\cyrya
81   \or
82     \protect\cyrm\protect\cyra\protect\cyrr\protect\cyrt\protect\cyra
83   \or
84     \protect\cyra\protect\cyrp\protect\cyrr\protect\cyre\protect\cyr1
85     \protect\cyrya
86   \or
87     \protect\cyrm\protect\cyra\protect\cyrya
88   \or
89     \protect\cyri\protect\cyryu\protect\cyrn\protect\cyrya
90   \or
91     \protect\cyri\protect\cyryu\protect\cyr1\protect\cyrya
92   \or
93     \protect\cyra\protect\cyrv\protect\cyrg\protect\cyru\protect\cyrs
94     \protect\cyrt\protect\cyra
95   \or
96     \protect\cyrs\protect\cyre\protect\cyrn\protect\cyrt\protect\cyrya
97     \protect\cyrb\protect\cyrr\protect\cyrya
98   \or
99     \protect\cyro\protect\cyrk\protect\cyrt\protect\cyrya\protect\cyrb
100    \protect\cyrr\protect\cyrya
101   \or
102     \protect\cyrn\protect\cyro\protect\cyrya\protect\cyrb\protect\cyrr
103     \protect\cyrya
104   \or
105     \protect\cyrd\protect\cyre\protect\cyrk\protect\cyra\protect\cyrb
106     \protect\cyrr\protect\cyrya
107   \fi
108 }

```

```

\DTMrussianMonthname As above but start with a capital.
109 \newcommand*{\DTMrussianMonthname}[1]{%
110 }

```

1.3 Main Russian Module (**datetime2-russian.1df**)

Identify Module

```
111 \ProvidesDateTimeModule{russian}[2018/12/07 v1.1]
```

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

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

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

```

113 \ifxetex
114   \RequireDateTimeModule{russian-utf8}
115 \else
116   \ifluatex
117     \RequireDateTimeModule{russian-utf8}
118   \else
119     \RequireDateTimeModule{russian-ascii}
120   \fi
121 \fi

```

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

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

```

122 \newcommand*{\DTMrussiandaymonthsep}{%
123   \DTMtexorpdfstring{\protect\{}{\space}}

```

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

```
124 \newcommand*{\DTMrussianmonthyearsep}{\space}
```

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

```
125 \newcommand*{\DTMrussiandatetimesep}{\space}
```

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

```
126 \newcommand*{\DTMrussiantimezonesep}{\space}
```

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

```
127 \newcommand*{\DTMrussiandatesep}{.}
```

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

```
128 \newcommand*{\DTMrussiantimesep}{:}
```

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

```

129 \DTMdefkey{russian}{daymonthsep}{\renewcommand*{\DTMrussiandaymonthsep}{#1}}
130 \DTMdefkey{russian}{monthyearsep}{\renewcommand*{\DTMrussianmonthyearsep}{#1}}
131 \DTMdefkey{russian}{datetimesep}{\renewcommand*{\DTMrussiandatetimesep}{#1}}
132 \DTMdefkey{russian}{timezonesep}{\renewcommand*{\DTMrussiantimezonesep}{#1}}
133 \DTMdefkey{russian}{datesep}{\renewcommand*{\DTMrussiandatesep}{#1}}
134 \DTMdefkey{russian}{timesep}{\renewcommand*{\DTMrussiantimesep}{#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.

```
135 \DTMdefboolkey{russian}{mapzone}[true]{}
```

The default is to use mappings.

```
136 \DTMsetbool{russian}{mapzone}{true}
```

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

```
137 \DTMdefboolkey{russian}{showdayofmonth}[true]{}
```

The default is to show the day of month.

```
138 \DTMsetbool{russian}{showdayofmonth}{true}
```

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

```
139 \DTMdefboolkey{russian}{showyear}[true]{}
```

The default is to show the year.

```
140 \DTMsetbool{russian}{showyear}{true}
```

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

```
141 \DTMnewstyle
142   {russian}%
143   {%
144     % date style
145     \renewcommand*\DTMdisplaydate[4]{%
146       \DTMifbool{russian}{showdayofmonth}{%
147         {\DTMrussianordinal{\##3}\DTMrussiandaymonthsep}%
148         {}%
149         \DTMrussianmonthname{\##2}%
150         \DTMifbool{russian}{showyear}{%
151           {%
152             \DTMrussianmonthyearsep
153             \DTMrussianyear{\##1}%
154           }%
155         }%
156       \renewcommand*\DTMDisplaydate[4]{%
157         \DTMifbool{russian}{showdayofmonth}{%
158           {%
159             \DTMrussianordinal{\##3}\DTMrussiandaymonthsep
160             \DTMrussianmonthname{\##2}%
161           }%
162           {%
163             \DTMrussianMonthname{\##2}%
164           }%
165         \DTMifbool{russian}{showyear}{%
166           {%
167             \DTMrussianmonthyearsep
168             \DTMrussianyear{\##1}%
169           }%
170         }%
171       }%
172     }%
173   }%
```

```

171      }%
172  }%
173 {%
174   \DTMsetimestyle{default}%
175 }%
176 {%
177   \DTMresetzones
178   \DTMrussianzonemaps
179   \renewcommand*{\DTMdisplayzone}[2]{%
180     \DTMifbool{russian}{mapzone}{%
181       {\DTMusezonemapordefault{##1}{##2}}%
182     }%
183     \ifnum##1<0\else+\fi\DTMtowodigits{##1}%
184     \ifDTMshowzoneminutes\DTMrussiantimesep\DTMtowodigits{##2}\fi
185   }%
186 }%
187 }%
188 {%
189   \renewcommand*{\DTMdisplay}[9]{%
190     \ifDTMshowdate
191       \DTMdisplaydate{##1}{##2}{##3}{##4}%
192       \DTMrussiandatetimesep
193       \fi
194       \DTMdisplaytime{##5}{##6}{##7}%
195       \ifDTMshowzone
196         \DTMrussiantimezonesep
197         \DTMdisplayzone{##8}{##9}%
198         \fi
199   }%
200   \renewcommand*{\DTMDisplay}[9]{%
201     \ifDTMshowdate
202       \DTMDisplaydate{##1}{##2}{##3}{##4}%
203       \DTMrussiandatetimesep
204       \fi
205       \DTMdisplaytime{##5}{##6}{##7}%
206       \ifDTMshowzone
207         \DTMrussiantimezonesep
208         \DTMdisplayzone{##8}{##9}%
209         \fi
210   }%
211 }%
212 Define numeric style.
213 \DTMnewstyle
214 {russian-numeric}%
215 label
216 {%
217   \renewcommand*{\DTMdisplaydate}[4]{%
218     \DTMifbool{russian}{showdayofmonth}{%
219       \number##3 % space intended

```

```

219      \DTMrussiandatesep
220  }%
221  {}%
222  \number##2 % space intended
223  \DTMifbool{russian}{showyear}%
224  {}%
225      \DTMrussiandatesep
226      \number##1 % space intended
227  }%
228  {}%
229 }%
230 \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
231 }%
232 {%
233     \renewcommand*{\DTMdisplaytime}[3]{%
234         \number##1
235         \DTMrussiantimesep\DTMtwodigits{##2}%
236         \ifDTMshowseconds\DTMrussiantimesep\DTMtwodigits{##3}\fi
237     }%
238 }%
239 {%
240     \DTMresetzones
241     \DTMrussianzonemaps
242     \renewcommand*{\DTMdisplayzone}[2]{%
243         \DTMifbool{russian}{mapzone}%
244         {\DTMusezonemapordefault{##1}{##2}}%
245         {}%
246         \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
247         \ifDTMshowzoneminutes\DTMrussiantimesep\DTMtwodigits{##2}\fi
248     }%
249 }%
250 }%
251 {%
252     \renewcommand*{\DTMdisplay}[9]{%
253         \ifDTMshowdate
254             \DTMdisplaydate{##1}{##2}{##3}{##4}%
255             \DTMrussiandatetimesep
256         \fi
257         \DTMdisplaytime{##5}{##6}{##7}%
258         \ifDTMshowzone
259             \DTMrussiantimezonesep
260             \DTMdisplayzone{##8}{##9}%
261         \fi
262     }%
263     \renewcommand*{\DTMDisplay}{\DTMdisplay}%
264 }

```

\DTMrussianzonemaps 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). Daylight saving is not taken into account.

```
265 \newcommand*{\DTMrussianzonemaps}{%
266   \DTMdefzonemap{03}{00}{MKT}%
267   \DTMdefzonemap{04}{00}{SAMT}%
268   \DTMdefzonemap{05}{00}{YEKT}%
269   \DTMdefzonemap{06}{00}{OMST}%
270   \DTMdefzonemap{07}{00}{KRAT}%
271   \DTMdefzonemap{08}{00}{IRKST}%
272   \DTMdefzonemap{09}{00}{YAKST}%
273   \DTMdefzonemap{10}{00}{VLAT}%
274   \DTMdefzonemap{11}{00}{SRET}%
275   \DTMdefzonemap{12}{00}{PETT}%
276 }
```

Switch style according to the `useregional` setting.

```
277 \DTMifcaseregional
278 {}% do nothing
279 {\DTMsetstyle{russian}}
280 {\DTMsetstyle{russian-numeric}}
```

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

```
281 \ifcsundef{date\CurrentTrackedDialect}%
282 {%
283   \ifundef{\daterussian}
284     {}% do nothing
285   }%
286   {%
287     \def{\daterussian}{%
288       \DTMifcaseregional
289       {}% do nothing
290       {\DTMsetstyle{russian}}%
291       {\DTMsetstyle{russian-numeric}}%
292     }%
293   }%
294 }%
295 {%
296   \csdef{date\CurrentTrackedDialect}{%
297     \DTMifcaseregional
298     {}% do nothing
299     {\DTMsetstyle{russian}}%
300     {\DTMsetstyle{russian-numeric}}%
301   }%
302 }
```

Change History

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