

# Upper Sorbian 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 <https://www.dickimaw-books.com/contact.html>

## Abstract

This is the Upper Sorbian 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-usorbian`'s `\today`.

I don't know if these settings are correct as I can't speak Upper Sorbian. In particular, I don't know if the `usorbian` 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-usorbian.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{usorbian-utf8}[2019/10/10 v1.1]
```

\DTMusorbianordinal

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

\DTMusorbiannewmonthname Upper Sorbian month names.

```
5 \newcommand*{\DTMusorbiannewmonthname}[1]{%  
6   \ifcase#1  
7   \or  
8   januara%  
9   \or  
10  februara%  
11  \or  
12  mërca%  
13  \or  
14  apryla%  
15  \or  
16  meje%  
17  \or  
18  junija%  
19  \or  
20  julija%  
21  \or  
22  awgusta%  
23  \or  
24  septembra%  
25  \or  
26  oktobra%  
27  \or  
28  nowembra%  
29  \or  
30  decembra%  
31  \fi  
32 }
```

\DTMusorbiannewMonthname As above but capitalize.

```
33 \newcommand*{\DTMusorbiannewMonthname}[1]{%  
34   \ifcase#1  
35   \or  
36   Januara%  
37   \or  
38   Februara%  
39   \or  
40   Mërca%  
41   \or  
42   Apryla%  
43   \or  
44   Meje%  
45   \or
```

```

46 Junija%
47 \or
48 Julija%
49 \or
50 Awgusta%
51 \or
52 Septembra%
53 \or
54 Oktobra%
55 \or
56 Nowembra%
57 \or
58 Decembra%
59 \fi
60 }

```

`\DTMusorbianoIdmonthname` Upper Sorbian (old) month names.

```

61 \newcommand*{\DTMusorbianoIdmonthname}[1]{%
62 \ifcase#1
63 \or
64 wulkeho rózka%
65 \or
66 małeho rózka%
67 \or
68 nalětnika%
69 \or
70 jutrownika%
71 \or
72 rózownika%
73 \or
74 smažnika%
75 \or
76 pražnika%
77 \or
78 žnjenca%
79 \or
80 požnjenca%
81 \or
82 winowca%
83 \or
84 nazymnika%
85 \or
86 hodownika%
87 \fi
88 }

```

`\DTMusorbianoIdMonthname` As above but capitalize.

```

89 \newcommand*{\DTMusorbianoIdMonthname}[1]{%
90 \ifcase#1
91 \or

```

```

92   Wulkeho rózka%
93   \or
94   Mažeho rózka%
95   \or
96   Nalětnika%
97   \or
98   Jutrownika%
99   \or
100  Róžownika%
101  \or
102  Smažnika%
103  \or
104  Pražnika%
105  \or
106  Žnjenca%
107  \or
108  Požnjenca%
109  \or
110  Winowca%
111  \or
112  Nazymnika%
113  \or
114  Hodownika%
115  \fi
116 }

```

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-usorbian-utf8.ldr` file as the non-ASCII characters are made active in that situation and would need protecting against expansion. Identify module

```

117 \ProvidesDateTimeModule{usorbian-ascii}[2019/10/10 v1.1]

```

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

`\DTMusorbianordinal`

```

118 \newcommand*{\DTMusorbianordinal}[1]{%
119   \number#1.%
120 }

```

`\DTMusorbiannewmonthname`

Upper Sorbian month names.

```

121 \newcommand*{\DTMusorbiannewmonthname}[1]{%
122   \ifcase#1
123   \or
124   januara%

```

```

125 \or
126 februara%
127 \or
128 m\protect\v erca%
129 \or
130 apryla%
131 \or
132 meje%
133 \or
134 junija%
135 \or
136 julija%
137 \or
138 awgusta%
139 \or
140 septembra%
141 \or
142 oktobra%
143 \or
144 nowembra%
145 \or
146 decembra%
147 \fi
148 }

```

\DTMusorbiannewMonthname As above but capitalize.

```

149 \newcommand*{\DTMusorbiannewMonthname}[1]{%
150 \ifcase#1
151 \or
152 Januara%
153 \or
154 Februara%
155 \or
156 M\protect\v erca%
157 \or
158 Apryla%
159 \or
160 Meje%
161 \or
162 Junija%
163 \or
164 Julija%
165 \or
166 Awgusta%
167 \or
168 Septembra%
169 \or
170 Oktobra%
171 \or
172 Nowembra%

```

```

173 \or
174 Decembra%
175 \fi
176 }

```

```

\DTMusorbianooldmonthname Upper Sorbian (old) month names.
177 \newcommand*{\DTMusorbianooldmonthname}[1]{%
178 \ifcase#1
179 \or
180 wulkeho r\protect\'o\protect\v zka%
181 \or
182 ma\protect\l eho r\protect\'o\protect\v zka%
183 \or
184 nal\protect\v etnika%
185 \or
186 jutrownika%
187 \or
188 r\protect\'o\protect\v zownika%
189 \or
190 sma\protect\v znika%
191 \or
192 pra\protect\v znika%
193 \or
194 \protect\v znjenca%
195 \or
196 po\protect\v znjenca%
197 \or
198 winowca%
199 \or
200 nazymnika%
201 \or
202 hodownika%
203 \fi
204 }

```

```

\DTMusorbianooldMonthname As above but capitalize.
205 \newcommand*{\DTMusorbianooldMonthname}[1]{%
206 \ifcase#1
207 \or
208 Wulkeho r\protect\'o\protect\v zka%
209 \or
210 Ma\protect\l eho r\protect\'o\protect\v zka%
211 \or
212 Na\protect\v etnika%
213 \or
214 Jutrownika%
215 \or
216 R\protect\'o\protect\v zownika%
217 \or
218 Sma\protect\v znika%

```

```

219 \or
220 Pra\protect\v znika%
221 \or
222 \protect\v Znjenca%
223 \or
224 Po\protect\v znjenca%
225 \or
226 Winowca%
227 \or
228 Nazymnika%
229 \or
230 Hodownika%
231 \fi
232 }

```

### 1.3 Main Upper Sorbian Module (`datetime2-usorbian. ldf`)

Identify Module

```
233 \ProvidesDateTimeModule{usorbian}[2019/10/10 v1.1]
```

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

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

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

```
235 \ifxetex
```

```
236 \RequireDateTimeModule{usorbian-utf8}
```

```
237 \else
```

```
238 \ifluatex
```

```
239 \RequireDateTimeModule{usorbian-utf8}
```

```
240 \else
```

```
241 \RequireDateTimeModule{usorbian-ascii}
```

```
242 \fi
```

```
243 \fi
```

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

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

```
244 \newcommand*{\DTMusorbiandaymonthsep}{%
```

```
245 \DTMtexpdfstring{\protect-}{\space}}%
```

```
246 }
```

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

```
247 \newcommand*{\DTMusorbianmonthyearsep}{\space}
```

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

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

`\DTMusorbiandatesep` The separator for the numeric date format.  
250 `\newcommand*{\DTMusorbiandatesep}{/}`

`\DTMusorbiantimesep` The separator for the numeric time format.  
251 `\newcommand*{\DTMusorbiantimesep}{:}`

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

252 `\DTMdefkey{usorbian}{daymonthsep}{\renewcommand*{\DTMusorbiandaymonthsep}{#1}}`  
253 `\DTMdefkey{usorbian}{monthyearsep}{\renewcommand*{\DTMusorbianmonthyearsep}{#1}}`  
254 `\DTMdefkey{usorbian}{datetimesep}{\renewcommand*{\DTMusorbiandatetimesep}{#1}}`  
255 `\DTMdefkey{usorbian}{timezonesep}{\renewcommand*{\DTMusorbiantimezonesep}{#1}}`  
256 `\DTMdefkey{usorbian}{datesep}{\renewcommand*{\DTMusorbiandatesep}{#1}}`  
257 `\DTMdefkey{usorbian}{timesep}{\renewcommand*{\DTMusorbiantimesep}{#1}}`

`\DTMusorbianmonthname` Provide a way to switch between old and new month names  
258 `\newcommand*\DTMusorbianmonthname{\DTMusorbiannewmonthname}`

`\DTMusorbianMonthname` Provide a way to switch between old and new month names  
259 `\newcommand*\DTMusorbianMonthname{\DTMusorbiannewMonthname}`

Define a key to easily switch:

260 `\DTMdefchoicekey{usorbian}{style}[\val\nr]{old,new}{%`  
261 `\ifcase\nr\relax`  
262 `\renewcommand*\DTMusorbianmonthname{\DTMusorbianoldmonthname}%`  
263 `\renewcommand*\DTMusorbianMonthname{\DTMusorbianoldMonthname}%`  
264 `\or`  
265 `\renewcommand*\DTMusorbianmonthname{\DTMusorbiannewmonthname}%`  
266 `\renewcommand*\DTMusorbianMonthname{\DTMusorbiannewMonthname}%`  
267 `\fi`  
268 `}`

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.

269 `\DTMdefboolkey{usorbian}{mapzone}[true]{}`

The default is to use mappings.

270 `\DTMsetbool{usorbian}{mapzone}{true}`

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

271 `\DTMdefboolkey{usorbian}{showdayofmonth}[true]{}`

The default is to show the day of month.

272 `\DTMsetbool{usorbian}{showdayofmonth}{true}`



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

```
273 \DTMdefboolkey{usorbian}{showyear}[true]{}  
The default is to show the year.
```

```
274 \DTMsetbool{usorbian}{showyear}{true}
```

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

```
275 \DTMnewstyle  
276 {usorbian}% label  
277 {% date style  
278   \renewcommand*\DTMdisplaydate[4]{%  
279     \DTMifbool{usorbian}{showdayofmonth}  
280     {\DTMusorbianordinal{##3}\DTMusorbiandaymonthsep}%  
281     }%  
282     \DTMusorbianmonthname{##2}%  
283     \DTMifbool{usorbian}{showyear}%  
284     {%  
285       \DTMusorbianmonthyearsep  
286       \number##1 % space intended  
287     }%  
288   }%  
289 }%  
290 \renewcommand*\DTMdisplaydate[4]{%  
291   \DTMifbool{usorbian}{showdayofmonth}  
292   {%  
293     \DTMusorbianordinal{##3}\DTMusorbiandaymonthsep  
294     \DTMusorbianmonthname{##2}%  
295   }%  
296   {%  
297     \DTMusorbianMonthname{##2}%  
298   }%  
299   \DTMifbool{usorbian}{showyear}%  
300   {%  
301     \DTMusorbianmonthyearsep  
302     \number##1 % space intended  
303   }%  
304   }%  
305 }%  
306 }%  
307 {% time style (use default)  
308   \DTMsettimestyle{default}%  
309 }%  
310 {% zone style  
311   \DTMresetzones  
312   \DTMusorbianzonemaps  
313   \renewcommand*\DTMdisplayzone[2]{%  
314     \DTMifbool{usorbian}{mapzone}%  
315     {\DTMusedzonemapordefault{##1}{##2}}%  
316     {%  
317       \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
```

```

318     \ifDTMshowzoneminutes\DTMusorbiantimesep\DTMtwodigits{##2}\fi
319   }%
320 }%
321 }%
322 {% full style
323 \renewcommand*\DTMdisplay}[9]{%
324   \ifDTMshowdate
325     \DTMdisplaydate{##1}{##2}{##3}{##4}%
326     \DTMusorbiantatetimesep
327     \fi
328     \DTMdisplaytime{##5}{##6}{##7}%
329     \ifDTMshowzone
330       \DTMusorbiantimezonesep
331       \DTMdisplayzone{##8}{##9}%
332     \fi
333   }%
334 \renewcommand*\DTMDisplay}[9]{%
335   \ifDTMshowdate
336     \DTMDisplaydate{##1}{##2}{##3}{##4}%
337     \DTMusorbiantatetimesep
338     \fi
339     \DTMdisplaytime{##5}{##6}{##7}%
340     \ifDTMshowzone
341       \DTMusorbiantimezonesep
342       \DTMdisplayzone{##8}{##9}%
343     \fi
344   }%
345 }%
    Define numeric style.
346 \DTMnewstyle
347 {usorbian-numeric}% label
348 {% date style
349   \renewcommand*\DTMdisplaydate[4]{%
350     \DTMifbool{usorbian}{showdayofmonth}%
351     {%
352       \number##3 % space intended
353       \DTMusorbiantatesep
354     }%
355     {%
356       \number##2 % space intended
357       \DTMifbool{usorbian}{showyear}%
358       {%
359         \DTMusorbiantatesep
360         \number##1 % space intended
361       }%
362     }%
363   }%
364 \renewcommand*\DTMDisplaydate{\DTMdisplaydate}%
365 }%

```

```

366 {% time style
367   \renewcommand*\DTMdisplaytime[3]{%
368     \number##1 % space intended
369     \DTMusorbiantimesep\DTMtwodigits{##2}%
370     \ifDTMshowseconds\DTMusorbiantimesep\DTMtwodigits{##3}\fi
371   }%
372 }%
373 {% zone style
374   \DTMresetzones
375   \DTMusorbianzonemaps
376   \renewcommand*\DTMdisplayzone[2]{%
377     \DTMifbool{usorbian}{mapzone}%
378     {\DTMusezonemapordefault{##1}{##2}}%
379     {%
380       \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
381       \ifDTMshowzoneminutes\DTMusorbiantimesep\DTMtwodigits{##2}\fi
382     }%
383   }%
384 }%
385 {% full style
386   \renewcommand*\DTMdisplay[9]{%
387     \ifDTMshowdate
388       \DTMdisplaydate{##1}{##2}{##3}{##4}%
389       \DTMusorbiantimetimesep
390       \fi
391       \DTMdisplaytime{##5}{##6}{##7}%
392       \ifDTMshowzone
393         \DTMusorbiantimezonesep
394         \DTMdisplayzone{##8}{##9}%
395       \fi
396     }%
397   \renewcommand*\DTMDisplay{\DTMdisplay}%
398 }

```

`\DTMusorbianzonemaps` The time zone mappings are set through this command, which can be redefined if extra mappings are required or mappings need to be removed.

```

399 \newcommand*\DTMusorbianzonemaps{%
400   \DTMdefzonemap{01}{00}{CET}%
401   \DTMdefzonemap{02}{00}{CEST}%
402 }

```

Switch style according to the `userregionall` setting.

```

403 \DTMifcaseregional
404 {}% do nothing
405 {\DTMsetstyle{usorbian}}
406 {\DTMsetstyle{usorbian-numeric}}

```

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

```

407 \ifcsundef{date\CurrentTrackedDialect}

```

```
408 {%
409   \ifundef\dateusorbian
410   {% do nothing
411   }%
412   {%
413     \def\dateusorbian{%
414       \DTMifcaseregional
415       }% do nothing
416       {\DTMsetstyle{usorbian}}%
417       {\DTMsetstyle{usorbian-numeric}}%
418     }%
419   }%
420 }%
421 {%
422   \csdef{date\CurrentTrackedDialect}{%
423     \DTMifcaseregional
424     }% do nothing
425     {\DTMsetstyle{usorbian}}%
426     {\DTMsetstyle{usorbian-numeric}}%
427   }%
428 }%
```

## Change History

|                          |         |                                 |    |
|--------------------------|---------|---------------------------------|----|
| 1.0                      |         | 1.1                             |    |
| General: Initial release | 1, 4, 7 | General: removed spurious space | 11 |

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