

# Lower 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 <http://www.dickimaw-books.com/contact.html>

## Abstract

This is the Lower 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 user regional 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 user regional setting.

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

I don't know if these settings are correct as I can't speak Lower Sorbian. In particular, I don't know if the lsorbian 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-lsorbian.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{lsorbian-utf8}[2018/05/18 v1.1]
```

\DTMlsorbianordinal

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

\DTMlsorbiannewmonthname Lower Sorbian month names.

```
5 \newcommand*{\DTMlsorbiannewmonthname}[1]{%
6   \ifcase#1
7     \or
8     januara%
9     \or
10    februara%
11    \or
12    měrca%
13    \or
14    apryla%
15    \or
16    maja%
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 }
```

\DTMlsorbiannewMonthname As above but capitalize.

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

```

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

```

\DTMlsorianoldmonthname Lower Sorbian (old) month names.

```

61 \newcommand*{\DTMlsorianoldmonthname}[1]{%
62   \ifcase#1
63     \or
64     wjelikego rožka%
65     \or
66     małego rožka%
67     \or
68     nalětnika%
69     \or
70     jatšownika%
71     \or
72     rožownika%
73     \or
74     smažnika%
75     \or
76     pražnika%
77     \or
78     žnjeńca%
79     \or
80     požnjeńca%
81     \or
82     winowca%
83     \or
84     nazymnika%
85     \or
86     godownika%
87     \fi
88 }

```

\DTMlsorianoldMonthname As above but capitalize.

```

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

```

```

92 Wjelikego rožka%
93 \or
94 Małego rožka%
95 \or
96 Nalětnika%
97 \or
98 Jatšownika%
99 \or
100 Rožownika%
101 \or
102 Smažnika%
103 \or
104 Pražnika%
105 \or
106 Žnjeńca%
107 \or
108 Požnjeńca%
109 \or
110 Winowca%
111 \or
112 Nazymnika%
113 \or
114 Godownika%
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 L<sup>A</sup>T<sub>E</sub>X 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-lsorbian-utf8.1df` file as the non-ASCII characters are made active in that situation and would need protecting against expansion. Identify module

```
117 \ProvidesDateTimeModule{lsorbian-ascii}[2018/05/18 v1.1]
```

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

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

\DTMlsoriannewmonthname Lower Sorbian month names.
121 \newcommand*{\DTMlsoriannewmonthname}[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 maja%
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 }

```

\DTMlsorbiannewMonthname As above but capitalize.

```

149 \newcommand*{\DTMlsorbiannewMonthname}[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 Maja%
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 }

\DTMlsorbianoldmonthname Lower Sorbian (old) month names.
177 \newcommand*{\DTMlsorbianoldmonthname}[1]{%
178 \ifcase#1
179 \or
180 wjelikego ro\protect\v zka%
181 \or
182 ma\protect\l ego ro\protect\v zka%
183 \or
184 nal\protect\v etnika%
185 \or
186 jat\protect\v sownika%
187 \or
188 ro\protect\v zownika%
189 \or
190 sma\protect\v znika%
191 \or
192 pra\protect\v znika%
193 \or
194 \protect\v znje\protect\'nca%
195 \or
196 po\protect\v znje\protec\'nca%
197 \or
198 winowca%
199 \or
200 nazymnika%
201 \or
202 godownika%
203 \fi
204 }

\DTMlsorbianoldMonthname As above but capitalize.
205 \newcommand*{\DTMlsorbianoldMonthname}[1]{%
206 \ifcase#1
207 \or
208 Wjelikego ro\protect\v zka%
209 \or
210 Ma\protect\l ego ro\protect\v zka%
211 \or
212 Nal\protect\v etnika%
213 \or
214 Jat\protect\v sownika%
215 \or
216 Ro\protect\v zownika%
217 \or
218 Sma\protect\v znika%

```

```

219 \or
220 Pra\protect\v_znika%
221 \or
222 \protect\v_Znje\protect\'nca%
223 \or
224 Po\protect\v_znje\protec\'nca%
225 \or
226 Winowca%
227 \or
228 Nazymnika%
229 \or
230 Godownika%
231 \fi
232 }

```

### 1.3 Main Lower Sorbian Module (`datetime2-lsorbian.ldf`)

Identify Module

```
233 \ProvidesDateTimeModule{lsorbian}[2018/05/18 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 `lsorbian-utf8` if either of those engines are used otherwise load `lsorbian-ascii`.

```

235 \ifxetex
236   \RequireDateTimeModule{lsorbian-utf8}
237 \else
238   \ifluatex
239     \RequireDateTimeModule{lsorbian-utf8}
240   \else
241     \RequireDateTimeModule{lsorbian-ascii}
242   \fi
243 \fi

```

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

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

```

244 \newcommand*{\DTMlsorbiandaymonthsep}{%
245   \DTMtexorpdfstring{\protect~}{\space}%
246 }

```

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

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

```

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

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

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

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

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

252 \DTMdefkey{lsorbian}{daymonthsep}{\renewcommand*{\DTMlsorbiandaymonthsep}{#1}}
253 \DTMdefkey{lsorbian}{monthyearsep}{\renewcommand*{\DTMlsorianmonthyearsep}{#1}}
254 \DTMdefkey{lsorbian}{datetimesep}{\renewcommand*{\DTMlsorbiandatetimesep}{#1}}
255 \DTMdefkey{lsorbian}{timezonesep}{\renewcommand*{\DTMlsorbiantimezonesep}{#1}}
256 \DTMdefkey{lsorbian}{datesep}{\renewcommand*{\DTMlsorbiandatesep}{#1}}
257 \DTMdefkey{lsorbian}{timesep}{\renewcommand*{\DTMlsorbiantimesep}{#1}}


\DTMlsorianmonthname Provide a way to switch between old and new month names
258 \newcommand*{\DTMlsorianmonthname}{\DTMlsoriannewmonthname}

\DTMlsorianMonthname Provide a way to switch between old and new month names
259 \newcommand*{\DTMlsorianMonthname}{\DTMlsoriannewMonthname}

    Define a key to easily switch:

260 \DTMdefchoicekey{lsorbian}{style}{\val\nr}{old,new}{%
261   \ifcase\nr\relax
262     \renewcommand*{\DTMlsorianmonthname}{\DTMlsorianoldmonthname}%
263     \renewcommand*{\DTMlsorianMonthname}{\DTMlsorianoldMonthname}%
264   \or
265     \renewcommand*{\DTMlsorianmonthname}{\DTMlsoriannewmonthname}%
266     \renewcommand*{\DTMlsorianMonthname}{\DTMlsoriannewMonthname}%
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{lsorbian}{mapzone}[true]{}

    The default is to use mappings.

270 \DTMsetbool{lsorbian}{mapzone}{true}

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

271 \DTMdefboolkey{lsorbian}{showdayofmonth}[true]{}

    The default is to show the day of month.

272 \DTMsetbool{lsorbian}{showdayofmonth}{true}

```

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

```

273 \DTMdefboolkey{lsorbian}{showyear}[true]{}

```

The default is to show the year.

```

274 \DTMsetbool{lsorbian}{showyear}{true}

```

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

```

275 \DTMnewstyle
276 {lsorbian}% label
277 {% date style
278   \renewcommand*\DTMdisplaydate[4]{%
279     \DTMifbool{lsorbian}{showdayofmonth}{%
280       {\DTMlsorbianordinal{##3}\DTMlsorbiandaymonthsep}{%
281         {}%}
282       \DTMlsorbianmonthname{##2}%
283       \DTMifbool{lsorbian}{showyear}{%
284         {}%
285         \DTMlsorbianmonthyearsep
286         \number##1
287       }%
288     }%
289   }%
290   \renewcommand*\DTMDisplaydate[4]{%
291     \DTMifbool{lsorbian}{showdayofmonth}{%
292       {}%
293       \DTMlsorbianordinal{##3}\DTMlsorbiandaymonthsep
294       \DTMlsorbianmonthname{##2}%
295     }%
296     {}%
297     \DTMlsorbianMonthname{##2}%
298   }%
299   \DTMifbool{lsorbian}{showyear}{%
300     {}%
301     \DTMlsorbianmonthyearsep
302     \number##1
303   }%
304   {}%
305 }%
306 }%
307 {% time style (use default)
308   \DTMsettimestyle{default}%
309 }%
310 {% zone style
311   \DTMresetzones
312   \DTMlsorbianzonemaps
313   \renewcommand*{\DTMdisplayzone}[2]{%
314     \DTMifbool{lsorbian}{mapzone}{%
315       {\DTMusezonemapordefault{##1}{##2}}%
316     }%
317     \ifnum##1<0\else+\fi\DTMtowodigits{##1}%

```

```

318      \ifDTMshowzoneminutes\DTMlsorbiantimesep\DTMtowodigits{##2}\fi
319      }%
320  }%
321 }%
322 {%
323   \renewcommand*\{\DTMdisplay}[9]{%
324     \ifDTMshowdate
325       \DTMdisplaydate{##1}{##2}{##3}{##4}%
326       \DTMlsorbiandatetimesep
327     \fi
328     \DTMdisplaytime{##5}{##6}{##7}%
329     \ifDTMshowzone
330       \DTMlsorbiantimezonesep
331       \DTMdisplayzone{##8}{##9}%
332     \fi
333   }%
334   \renewcommand*\{\DTMDisplay}[9]{%
335     \ifDTMshowdate
336       \DTMDisplaydate{##1}{##2}{##3}{##4}%
337       \DTMlsorbiandatetimesep
338     \fi
339     \DTMdisplaytime{##5}{##6}{##7}%
340     \ifDTMshowzone
341       \DTMlsorbiantimezonesep
342       \DTMdisplayzone{##8}{##9}%
343     \fi
344   }%
345 }%

```

Define numeric style.

```

346 \DTMnewstyle
347 {lsorbian-numeric}% label
348 {%
349   \renewcommand*\{\DTMdisplaydate}[4]{%
350     \DTMifbool{lsorbian}{showdayofmonth}%
351     {%
352       \number##3 % space intended
353       \DTMlsorbiandatesep
354     }%
355     {}%
356     \number##2 % space intended
357     \DTMifbool{lsorbian}{showyear}%
358     {%
359       \DTMlsorbiandatesep
360       \number##1 % space intended
361     }%
362     {}%
363   }%
364   \renewcommand*\{\DTMDisplaydate}{\DTMdisplaydate}%
365 }%

```

```

366  {%
367    \renewcommand*\DTMdisplaytime[3]{%
368      \number##1
369      \DTMlsorbiantimesep\DTMtowodigits{##2}%
370      \ifDTMshowseconds\DTMlsorbiantimesep\DTMtowodigits{##3}\fi
371    }%
372  }%
373  {%
374    \DTMresetzones
375    \DTMlsorbianzonemaps
376    \renewcommand*{\DTMdisplayzone}[2]{%
377      \DTMifbool{\lsorbian}{mapzone}%
378      {\DTMusezonemapOrDefault{##1}{##2}}%
379      {%
380        \ifnum##1<0\else+\fi\DTMtowodigits{##1}%
381        \ifDTMshowzoneminutes\DTMlsorbiantimesep\DTMtowodigits{##2}\fi
382      }%
383    }%
384  }%
385  {%
386    \renewcommand*{\DTMdisplay}[9]{%
387      \ifDTMshowdate
388        \DTMdisplaydate{##1}{##2}{##3}{##4}%
389        \DTMlsorbiandatetimesep
390        \fi
391        \DTMdisplaytime{##5}{##6}{##7}%
392      \ifDTMshowzone
393        \DTMlsorbiantimezonesep
394        \DTMdisplayzone{##8}{##9}%
395        \fi
396    }%
397    \renewcommand*{\DTMDisplay}{\DTMdisplay}%
398  }

```

\DTMlsorbianzonemaps 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*{\DTMlsorbianzonemaps}{%
400   \DTMdefzonemap{01}{00}{CET}%
401   \DTMdefzonemap{02}{00}{CEST}%
402 }

```

Switch style according to the `userregional` setting.

```

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

```

Redefine `\datelsorbian` (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\datelsorbian
410     {% do nothing
411   }%
412   {%
413     \def\datelsorbian{%
414       \DTMifcaseregional
415       {}% do nothing
416       {\DTMsetstyle{\lsorbian}}%
417       {\DTMsetstyle{\lsorbian-numeric}}%
418     }%
419   }%
420 }%
421 {%
422   \csdef{date\CurrentTrackedDialect}{%
423     \DTMifcaseregional
424     {}% do nothing
425     {\DTMsetstyle{\lsorbian}}%
426     {\DTMsetstyle{\lsorbian-numeric}}%
427   }%
428 }%
```

## Change History

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