# Lower Sorbian Module for datetime2 Package

Nicola L. C. Talbot (inactive)

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This module is currently unmaintained and may be subject to change. If you want to volunteer to take over maintanance, contact me at <a href="http://www.dickimaw-books.com/contact.html">http://www.dickimaw-books.com/contact.html</a>

#### 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 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  $\today$  by  $\today$  depending on the value of the useregional 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 maintanance 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-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}[2015/03/30 v1.0]

```
\DTMlsorbianordinal
```

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

#### **\DTMlsorbiannewmonthname**

Lower Sorbian month names.

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

### **\DTMlsorbiannewMonthname**

32 }

```
As above but capitalize.
33 \rightarrow \text{Month mane} [1]
34
    \ifcase#1
35
    \or
36
    Januara%
    \or
37
    Februara%
38
39
    \or
    Měrca%
40
    \or
41
    Apryla%
42
    \or
43
    Maja%
44
45
    \or
```

```
Awgusta%
50
51
    \or
    Septembra%
52
53
    \or
    Oktobra%
54
    \or
55
    Nowembra%
56
    \or
57
    Decembra%
58
    \fi
59
60 }
Lower Sorbian (old) month names.
61 \newcommand*{\DTMlsorbianoldmonthname}[1]{%
    \ifcase#1
63
    wjelikego rožka%
64
65
    małego rožka%
66
    \or
67
    nalětnika%
68
69
70
    jatšownika%
71
    \or
72
    rožownika%
73
    \or
74
    smažnika%
75
    \or
76
    pražnika%
77
    \or
78
    žnjeńca%
    \or
79
    požnjeńca%
80
81
82
    winowca%
83
84
    nazymnika%
85
    \or
    godownika%
86
87
    \fi
88 }
As above but capitalize.
90
    \ifcase#1
    \or
91
```

Junija%

Julija% ∖or

\or

46

47 48

49

**\DTMlsorbianoldmonthname** 

**\DTMlsorbianoldMonthname** 

```
Wjelikego rožka%
92
93
     \or
     Małego rožka%
94
     \or
95
     Nalětnika%
96
97
     \or
98
     Jatšownika%
99
     Rožownika%
100
     \or
101
     Smažnika%
102
103
     \or
     Pražnika%
104
     \or
105
     Žnjeńca%
106
     \or
107
     Požnjeńca%
108
     \or
109
110
     Winowca%
111
     \or
     Nazymnika%
112
113
     Godownika%
114
     \fi
115
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-lsorbian-utf8.ldf file as the non-ASCII characters are made active in that situation and would need protecting against expansion. Identify module

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

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

#### **\DTMlsorbianordinal**

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

### **\DTMlsorbiannewmonthname**

Lower Sorbian month names.

```
121 \newcommand*{\DTMlsorbiannewmonthname}[1]{%
122 \ifcase#1
```

- 123 \or
- 124 januara%

```
\or
                           125
                                februara%
                           126
                           127
                                m\protect\v erca%
                           128
                                \or
                           129
                                apryla%
                           130
                           131
                                \or
                           132
                                maja%
                                \or
                           133
                                junija%
                           134
                                \or
                           135
                                julija%
                           136
                           137
                                \or
                           138
                                awgusta%
                                \or
                           139
                                septembra%
                           140
                                \or
                           141
                                oktobra%
                           142
                           143
                                \or
                                nowembra%
                           144
                           145
                                \or
                           146
                                decembra%
                           147
                                \fi
                           148 }
\DTMlsorbiannewMonthname
                           As above but capitalize.
                           \ifcase#1
                           150
                                \or
                           151
                                Januara%
                           152
                           153
                                \or
                                Februara%
                           154
                           155
                                M\protect\v erca%
                           156
                                \or
                           157
                           158
                                Apryla%
                                \or
                           159
                           160
                                Maja%
                                \or
                           161
                                Junija%
                           162
                                \or
                           163
                                Julija%
                           164
                           165
                                \or
                                Awgusta%
                           166
                           167
                           168
                                Septembra%
                           169
                                \or
                           170
                                Oktobra%
```

171

172

\or Nowembra%

```
Decembra%
                            174
                                 \fi
                            175
                            176 }
\DTMlsorbianoldmonthname
                            Lower Sorbian (old) month names.
                            177 \newcommand* {\DTMlsorbianoldmonthname} [1] {%
                                 \ifcase#1
                            178
                                 \or
                            179
                                 wjelikego ro\protect\v zka%
                            180
                            181
                                 ma\protect\l ego ro\protect\v zka%
                            182
                            183
                                 nal\protect\v etnika%
                            184
                            185
                                 jat\protect\v sownika%
                            186
                            187
                                 ro\protect\v zownika%
                            188
                            189
                            190
                                 sma\protect\v znika%
                            191
                                 pra\protect\v znika%
                            192
                            193
                                 \protect\v znje\protect\'nca%
                            194
                            195
                                 po\protect\v znje\protec\'nca%
                            196
                            197
                                 \or
                                 winowca%
                            198
                                 \or
                            199
                                 nazymnika%
                            200
                            201
                                 \or
                            202
                                 godownika%
                            203
                                 \fi
                            204 }
\DTMlsorbianoldMonthname As above but capitalize.
                            205 \newcommand*{\DTMlsorbianoldMonthname}[1]{%
                                 \ifcase#1
                            207
                                 \or
                                 Wjelikego ro\protect\v zka%
                            208
                            209
                                 Ma\protect\l ego ro\protect\v zka%
                            210
                            211
                                 Nal\protect\v etnika%
                            212
                            213
                            214
                                 Jat\protect\v sownika%
                            215
                                 Ro\protect\v zownika%
                            216
```

217

218

\or

Sma\protect\v znika%

173

\or

```
219
    Pra\protect\v znika%
220
221
     \protect\v Znje\protect\'nca%
222
223
224
    Po\protect\v znje\protec\'nca%
225
    Winowca%
226
     \or
227
    Nazymnika%
228
     \or
229
     Godownika%
230
231
     \fi
232 }
```

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

Identify Module

```
233 \ProvidesDateTimeModule{lsorbian}[2015/03/30 v1.0]
```

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}
```

#### **\DTMlsorbianmonthyearsep**

The separator between the month and year for the text format.

247 \newcommand\*{\DTMlsorbianmonthyearsep}{\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}
                            The separator for the numeric date format.
    \DTMlsorbiandatesep
                            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*{\DTMlsorbianmonthyearsep}{<math>\#1}}
                            254 \DTMdefkey{lsorbian}{datetimesep}{\renewcommand*{\DTMlsorbiandatetimesep}{#1}}
                             255 \texttt{\DTMdefkey} \{lsorbian\} \{timezonesep\} \{\texttt{\Tenewcommand}^* \{\texttt{\DTMlsorbiantimezonesep}\} \{\#1\}\} \} 
                            256 \DTMdefkey{lsorbian}{datesep}{\renewcommand*{\DTMlsorbiandatesep}{#1}}
                            257 \DTMdefkey{lsorbian}{timesep}{\renewcommand*{\DTMlsorbiantimesep}{#1}}
  \DTMlsorbianmonthname
                            Provide a way to switch between old and new month names
                            258 \newcommand*\DTMlsorbianmonthname{\DTMlsorbiannewmonthname}
  \DTMlsorbianMonthname
                            Provide a way to switch between old and new month names
                            259 \newcommand*\DTMlsorbianMonthname{\DTMlsorbiannewMonthname}
                            Define a key to easily switch:
                            260 \DTMdefchoicekey{lsorbian}{style}[\val\nr]{old, new}{%
                                \ifcase\nr\relax
                                 \renewcommand*\DTMlsorbianmonthname{\DTMlsorbianoldmonthname}%
                            262
                                \renewcommand*\DTMlsorbianMonthname{\DTMlsorbianoldMonthname}%
                            263
                            264 \nr
                                 \renewcommand*\DTMlsorbianmonthname{\DTMlsorbiannewmonthname}%
                                \renewcommand*\DTMlsorbianMonthname{\DTMlsorbiannewMonthname}%
                            267
                               \fi
                            268 }
                                TODO: provide a boolean key to switch between full and abbreviated formats if ap-
                            propriate. (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
   {lsorbian}% label
   {% date style
277
      \renewcommand*\DTMdisplaydate[4]{%
278
        \DTMifbool{lsorbian}{showdayofmonth}
279
        {\DTMlsorbianordinal{##3}\DTMlsorbiandaymonthsep}%
280
        {}%
281
        \DTMlsorbianmonthname{##2}%
282
        \DTMifbool{lsorbian}{showyear}%
283
        {%
284
          \DTMlsorbianmonthyearsep
          \number##1
286
        }%
287
        {}%
288
289
      \renewcommand*\DTMDisplaydate[4]{%
290
        \DTMifbool{lsorbian}{showdayofmonth}
291
292
          \DTMlsorbianordinal{##3}\DTMlsorbiandaymonthsep
293
          \DTMlsorbianmonthname{##2}%
294
        }%
295
        {%
296
          \DTMlsorbianMonthname{##2}%
297
298
        \DTMifbool{lsorbian}{showyear}%
299
300
          \DTMlsorbianmonthyearsep
301
          \number##1
302
        }%
303
        {}%
304
     }%
305
306
   {% time style (use default)
307
308
      \DTMsettimestyle{default}%
   }%
309
   {% zone style
310
      \DTMresetzones
311
      \DTMlsorbianzonemaps
312
      \renewcommand*{\DTMdisplayzone}[2]{%
313
314
        \DTMifbool{lsorbian}{mapzone}%
        {\DTMusezonemapordefault{##1}{##2}}%
315
        {%
316
          \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
317
```

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

```
{% time style
                         366
                                \renewcommand*\DTMdisplaytime[3]{%
                         367
                                   \number##1
                         368
                                   \DTMlsorbiantimesep\DTMtwodigits{##2}%
                         369
                                   \ifDTMshowseconds\DTMlsorbiantimesep\DTMtwodigits{##3}\fi
                         370
                         371
                                }%
                         372
                             }%
                             {% zone style
                         373
                               \DTMresetzones
                         374
                               \DTMlsorbianzonemaps
                         375
                               \renewcommand*{\DTMdisplayzone}[2]{%
                         376
                                  \DTMifbool{lsorbian}{mapzone}%
                         377
                                  {\DTMusezonemapordefault{##1}{##2}}%
                         378
                         379
                                    \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
                         380
                                    \ifDTMshowzoneminutes\DTMlsorbiantimesep\DTMtwodigits{##2}\fi
                         381
                                 }%
                         382
                               }%
                         383
                             }%
                         384
                         385
                             {% full style
                               \renewcommand*{\DTMdisplay}[9]{%
                         386
                                 \ifDTMshowdate
                         387
                                  \DTMdisplaydate{##1}{##2}{##3}{##4}%
                         388
                                  \DTMlsorbiandatetimesep
                         389
                         390
                                 \fi
                                \DTMdisplaytime{##5}{##6}{##7}%
                         391
                                 \ifDTMshowzone
                         392
                                  \DTMlsorbiantimezonesep
                         393
                                  \DTMdisplayzone{##8}{##9}%
                         394
                                \fi
                         395
                               }%
                         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} {%
                              \label{local_def} $$ \operatorname{DTMdefzonemap}_{01}_{00}_{\operatorname{CET}_{0}} $$
                              \DTMdefzonemap{02}{00}{CEST}%
                         402 }
                             Switch style according to the useregional setting.
                         403 \DTMifcaseregional
                         404 {}% do nothing
                         405 {\DTMsetstyle{lsorbian}}
                         406 {\DTMsetstyle{lsorbian-numeric}}
                             Redefine \del{datelsorbian} (or \del{datect}) 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 {%
     \ifundef\datelsorbian
409
     {% do nothing
410
     }%
411
     {%
412
       \def\datelsorbian{%
413
         \DTMifcaseregional
414
415
         {}% do nothing
         {\DTMsetstyle{lsorbian}}%
416
         {\tt \{\DTMsetstyle\{lsorbian-numeric\}\}\%}
417
       }%
418
    }%
419
420 }%
421 {%
422
     \verb|\csdef{date}| CurrentTrackedDialect| \{\%
423
       \DTMifcaseregional
       {}% do nothing
424
       {\DTMsetstyle{lsorbian}}%
425
       {\DTMsetstyle{lsorbian-numeric}}
426
    }%
427
428 }%
```

# **Change History**

1.0	
General: Initial release	 1, 4, 7

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