### Danish 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 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 Danish 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 \delta depending on the value of the useregional setting.

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

I don't know if these settings are correct as I can't speak Danish. In particular, I don't know if the danish 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-danish.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{danish-utf8}[2015/03/30 v1.0]

#### **\DTMdanishordinal**

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

#### **\DTMdanishmonthname**

#### Danish month names.

- 5 \newcommand\*{\DTMdanishmonthname}[1]{%
- 6 \ifcase#1
- 7 \or
- 8 januar%
- 9 \**or**
- 10 februar%
- 11 \or
- 12 marts%
- 13 \or
- 14 april%
- 15 \or
- 16 **maj**%
- 17 \or
- 18 juni%
- 19 \or
- 20 juli%
- 20 Jul. 21 \or
- 22 august%
- 23 \or
- 24 september%
- 25 \or
- 26 oktober%
- 27 \or
- 28 november%
- 29 \or
- 30 december%
- 31 \fi
- 32 }

#### **\DTMdanishMonthname**

## As above but capitalize.

- 34 \ifcase#1
- 35 \or
- 36 Januar%
- 37 \or
- 38 Februar%
- 39 \or
- 40 Marts%
- 41 \or
- 42 April%
- 43 \or
- 44 Maj%
- 45 \or

```
Juni%
46
    \or
47
48
    Juli%
    \or
49
    August%
50
51
    \or
    September%
52
53
    Oktober%
54
    \or
55
    November%
56
    \or
57
    December%
58
    \fi
59
60 }
```

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

#### **\DTMdanishweekdayname**

Danish day of week names.

```
61 \mbox{ newcommand* {\DTMdanishweekdayname} [1] {%}}
    \ifcase#1
63
    mandag%
64
    \or
65
    tirsdag%
    \or
66
    onsdag%
67
68
    \or
69
    torsdag%
70
    \or
71
    fredag%
    \or
72
73
    lørdag%
74
    \or
75
    søndag%
    \fi
76
77 }
```

#### **\DTMdanishWeekdayname**

As above but start with a capital.

```
78 \newcommand* {\DTMdanishWeekdayname} [1] {%
   \ifcase#1
   Mandag%
80
   \or
81
   Tirsdag%
82
83
   \or
   Onsdag%
84
85
   \or
86
   Torsdag%
87
    \or
   Fredag%
88
   \or
```

```
90 Lørdag%
91 \or
92 Søndag%
93 \fi
94 }
```

#### 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-danish-utf8.ldf file as the non-ASCII characters are made active in that situation and would need protecting against expansion. Identify module

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

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

#### **\DTMdanishordinal**

```
96 \newcommand*{\DTMdanishordinal}[1]{%
97 \number#1.%
98}
```

#### **\DTMdanishmonthname**

Danish month names.

```
99 \newcommand* {\DTMdanishmonthname} [1] {%
100
     \ifcase#1
101
     \or
     januar%
102
     \or
103
     februar%
104
     \or
105
     marts%
106
107
     \or
     april%
108
109
     \or
     maj%
110
     \or
111
     juni%
112
113
     \or
114
     juli%
115
     \or
     august%
116
     \or
117
     september%
118
119
     \or
120
     oktober%
121
     \or
122
     november%
123
     \or
     december%
124
```

```
\DTMdanishMonthname
                        As above but capitalize.
                        127 \newcommand*{\DTMdanishMonthname}[1]{%
                             \ifcase#1
                        129
                             \or
                             Januar%
                        130
                             \or
                        131
                             Februar%
                        132
                             \or
                        133
                             Marts%
                        134
                        135
                             \or
                             April%
                        136
                             \or
                        137
                             Maj%
                        138
                             \or
                        139
                             Juni%
                        140
                        141
                             \or
                        142
                             Juli%
                             \or
                        143
                             August%
                        144
                             \or
                        145
```

125 **\fi** 126 }

#### **\DTMdanishweekdayname**

Danish day of week names.

September%

November%

December%

\or Oktober%

\or

\or

\fi

146 147

148

149

150

151

152 153

154 }

```
155 \mbox{\newcommand}^* {\DTMdanishweekdayname}[1]{\%}
     \ifcase#1
156
     mandag%
157
158
     \or
     tirsdag%
159
     \or
160
     onsdag%
161
     \or
162
     torsdag%
163
164
     \or
     fredag%
165
166
167
     1\protect\o rdag%
168
     s\protect\o ndag%
169
     \fi
170
```

171 }

```
\DTMdanishWeekdayname
```

As above but start with a capital.

```
172 \newcommand* {\DTMdanishWeekdayname}[1]{%
     \ifcase#1
173
     Mandag%
174
175
     \or
     Tirsdag%
176
177
     Onsdag%
178
     \or
179
    Torsdag%
180
     \or
181
182
    Fredag%
183
     \or
    L\protect\o rdag%
184
185
     S\protect\o ndag%
186
    \fi
187
188 }
```

### 1.3 Main Danish Module (datetime2-danish.ldf)

**Identify Module** 

```
189 \ProvidesDateTimeModule{danish}[2015/03/30 v1.0]
```

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

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

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

```
191 \ifxetex
192 \RequireDateTimeModule{danish-utf8}
193 \else
194 \ifluatex
195 \RequireDateTimeModule{danish-utf8}
196 \else
197 \RequireDateTimeModule{danish-ascii}
198 \fi
199 \fi
```

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

#### **\DTMdanishdaymonthsep**

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

200 \newcommand\*{\DTMdanishdaymonthsep}{\DTMtexorpdfstring{\protect~}{\space}}

```
\DTMdanishmonthyearsep
                           The separator between the month and year for the text format.
                           201 \newcommand*{\DTMdanishmonthyearsep}{\space}
                           The separator between the date and time blocks in the full format (either text or numeric).
 \DTMdanishdatetimesep
                           202 \newcommand*{\DTMdanishdatetimesep}{\space}
 \DTMdanishtimezonesep
                           The separator between the time and zone blocks in the full format (either text or numeric).
                           203 \newcommand*{\DTMdanishtimezonesep}{\space}
     \DTMdanishdatesep
                           The separator for the numeric date format.
                           204 \newcommand* {\DTMdanishdatesep}{-}
     \DTMdanishtimesep
                           The separator for the numeric time format.
                           205 \newcommand*{\DTMdanishtimesep}{:}
                              Provide keys that can be used in \DTMlangsetup to set these separators.
                           206 \DTMdefkey{danish}{daymonthsep}{\renewcommand*{\DTMdanishdaymonthsep}{#1}}}
                           207 \DTMdefkey{danish}{monthyearsep}{\renewcommand*{\DTMdanishmonthyearsep}{#11}}
                           208 \DTMdefkey{danish}{datetimesep}{\renewcommand*{\DTMdanishdatetimesep}{#1}}
                           209 \DTMdefkey{danish}{timezonesep}{\renewcommand*{\DTMdanishtimezonesep}{#1}}
                           210 \DTMdefkey{danish}{datesep}{\renewcommand*{\DTMdanishdatesep}{#1}}
                           211 \DTMdefkey{danish}{timesep}{\renewcommand*{\DTMdanishtimesep}{#11}}
                               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.
                           212 \DTMdefboolkey{danish}{mapzone}[true]{}
                           The default is to use mappings.
                           213 \DTMsetbool{danish}{mapzone}{true}
                              Define a boolean key that determines if the day of month should be displayed.
                           214 \DTMdefboolkey{danish}{showdayofmonth}[true]{}
                           The default is to show the day of month.
                           215 \DTMsetbool{danish}{showdayofmonth}{true}
                              Define a boolean key that determines if the year should be displayed.
                           216 \DTMdefboolkey{danish}{showyear}[true]{}
                           The default is to show the year.
                           217 \DTMsetbool{danish}{showyear}{true}
                               Define the danish style. (TODO: implement day of week?)
                           218 \DTMnewstyle
                              {danish}% label
                               {% date style
                           220
                                 \renewcommand*\DTMdisplaydate[4]{%
                           221
                                   \DTMifbool{danish}{showdayofmonth}
                           222
                                    {\DTMdanishordinal{##3}\DTMdanishdaymonthsep}%
                           223
```

224

{}%

```
\DTMdanishmonthname{##2}%
225
        \DTMifbool{danish}{showyear}%
226
        {%
227
          \DTMdanishmonthyearsep
228
          \number##1
229
230
        }%
231
        {}%
232
      \renewcommand*\DTMDisplaydate[4]{%
233
        \DTMifbool{danish}{showdayofmonth}
234
235
          \DTMdanishordinal{##3}\DTMdanishdaymonthsep
236
          \DTMdanishmonthname{##2}%
237
238
        {%
239
          \DTMdanishMonthname{##2}%
240
241
        \DTMifbool{danish}{showyear}%
242
243
244
          \DTMdanishmonthyearsep
          \number##1
245
        }%
246
        {}%
247
     }%
248
   }%
249
   {% time style (use default)
250
     \DTMsettimestyle{default}%
251
   }%
252
   {% zone style
253
      \DTMresetzones
254
      \DTMdanishzonemaps
255
256
      \renewcommand*{\DTMdisplayzone}[2]{%
257
        \DTMifbool{danish}{mapzone}%
        {\DTMusezonemapordefault{##1}{##2}}%
258
259
          \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
260
          \ifDTMshowzoneminutes\DTMdanishtimesep\DTMtwodigits{##2}\fi
261
        }%
262
263
     }%
264
265
   {% full style
      \renewcommand*{\DTMdisplay}[9]{%
266
       \ifDTMshowdate
267
        \DTMdisplaydate{##1}{##2}{##3}{##4}%
268
269
        \DTMdanishdatetimesep
270
271
       \DTMdisplaytime{##5}{##6}{##7}%
       \ifDTMshowzone
272
        \DTMdanishtimezonesep
273
        \DTMdisplayzone{##8}{##9}%
274
```

```
\fi
275
     }%
276
     \renewcommand*{\DTMDisplay}[9]{%
277
      \ifDTMshowdate
278
       \DTMDisplaydate{##1}{##2}{##3}{##4}%
279
280
       \DTMdanishdatetimesep
281
      \DTMdisplaytime{##5}{##6}{##7}%
282
      \ifDTMshowzone
283
       \DTMdanishtimezonesep
284
       \DTMdisplayzone{##8}{##9}%
285
      \fi
286
     }%
287
   }%
288
   Define numeric style.
289 \DTMnewstyle
   {danish-numeric}% label
   {% date style
291
      \renewcommand*\DTMdisplaydate[4]{%
292
        \DTMifbool{danish}{showdayofmonth}%
293
        {%
294
          \number##3 % space intended
295
          \DTMdanishdatesep
296
        }%
297
        {}%
298
        \number##2 % space intended
299
        \DTMifbool{danish}{showyear}%
300
301
          \DTMdanishdatesep
302
303
          \number##1 % space intended
        }%
304
        {}%
305
      }%
306
      307
   }%
308
   {% time style
309
      \renewcommand*\DTMdisplaytime[3]{%
310
        \number##1
311
        \DTMdanishtimesep\DTMtwodigits{##2}%
312
        \ifDTMshowseconds\DTMdanishtimesep\DTMtwodigits{##3}\fi
313
      }%
314
   }%
315
316
   {% zone style
     \DTMresetzones
317
     \DTMdanishzonemaps
318
     \renewcommand*{\DTMdisplayzone}[2]{%
319
       \DTMifbool{danish}{mapzone}%
320
       {\DTMusezonemapordefault{##1}{##2}}%
321
322
```

```
\ifnum##1<0\else+\fi\DTMtwodigits{##1}%
323
          \ifDTMshowzoneminutes\DTMdanishtimesep\DTMtwodigits{##2}\fi
324
        }%
325
      }%
326
    }%
327
328
    {% full style
329
      \renewcommand*{\DTMdisplay}[9]{%
       \ifDTMshowdate
330
        \DTMdisplaydate{##1}{##2}{##3}{##4}%
331
        \DTMdanishdatetimesep
332
       \fi
333
       \DTMdisplaytime{##5}{##6}{##7}%
334
335
       \ifDTMshowzone
        \DTMdanishtimezonesep
336
        \DTMdisplayzone{##8}{##9}%
337
       \fi
338
      }%
339
      \renewcommand*{\DTMDisplay}{\DTMdisplay}%
340
341 }
The time zone mappings are set through this command, which can be redefined if extra
mappings are required or mappings need to be removed.
342 \newcommand* {\DTMdanishzonemaps} {%
     \DTMdefzonemap{01}{00}{CET}%
343
     \DTMdefzonemap{02}{00}{CEST}%
344
345 }
   Switch style according to the useregional setting.
346 \DTMifcaseregional
347 {}% do nothing
348 {\DTMsetstyle{danish}}
349 {\DTMsetstyle{danish-numeric}}
   Redefine \datedanish (or \date \dialect \) to prevent babel from resetting \to-
day. (For this to work, babel must already have been loaded if it's required.)
350 \ifcsundef{date\CurrentTrackedDialect}
351 {%
     \ifundef\datedanish
352
     {% do nothing
353
     }%
354
     {%
355
       \def\datedanish{\%}
356
         \DTMifcaseregional
357
         {}% do nothing
358
         {\DTMsetstyle{danish}}%
359
         {\DTMsetstyle{danish-numeric}}%
360
361
       }%
     }%
362
363 }%
```

**\DTMdanishzonemaps** 

364 {%

```
365 \csdef{date\CurrentTrackedDialect}{%
366 \DTMifcaseregional
367 {}% do nothing
368 {\DTMsetstyle{danish}}%
369 {\DTMsetstyle{danish-numeric}}
370 }%
```

# **Change History**

1.0	
General: Initial release	 1, 4, 6

# Index

D	\DTMdanishtimesep 7
<b>\DTMdanishdatesep 7</b>	<b>\DTMdanishtimezonesep</b> 7
<b>\DTMdanishdatetimesep 7</b>	\DTMdanishWeekdayname3,6
<b>\DTMdanishdaymonthsep 6</b>	\DTMdanishweekdayname3,5
\DTMdanishMonthname2,5	\DTMdanishzonemaps 10
<b>\DTMdanishmonthname</b> 2, 4	·
<b>\DTMdanishmonthyearsep</b> 7	U
\DTMdanishordinal2,4	useregional