

# Czech 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 Czech 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-czech's \today`.

I don't know if these settings are correct as I can't speak Czech. In particular, I don't know if the `czech` 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-czech.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{czech-utf8}[2018/03/19 v1.1]
```

`\DTMczechordinal`

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

`\DTMczechmonthname` Czech month names.

```
5 \newcommand*{\DTMczechmonthname}[1]{%  
6   \ifcase#1  
7   \or  
8   ledna%  
9   \or  
10  února%  
11  \or  
12  března%  
13  \or  
14  dubna%  
15  \or  
16  května%  
17  \or  
18  června%  
19  \or  
20  července%  
21  \or  
22  srpna%  
23  \or  
24  září%  
25  \or  
26  října%  
27  \or  
28  listopadu%  
29  \or  
30  prosince%  
31  \fi  
32 }
```

`\DTMczechMonthname` As above but capitalize.

```
33 \newcommand*{\DTMczechMonthname}[1]{%  
34   \ifcase#1  
35   \or  
36   Ledna%  
37   \or  
38   Února%  
39   \or  
40   Března%  
41   \or  
42   Dubna%  
43   \or  
44   Května%  
45   \or
```

```

46 Června%
47 \or
48 Července%
49 \or
50 Srpna%
51 \or
52 Září%
53 \or
54 Října%
55 \or
56 Listopadu%
57 \or
58 Prosince%
59 \fi
60 }

```

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

```
61 \ProvidesDateTimeModule{czech-ascii}[2018/03/19 v1.1]
```

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

`\DTMczechordinal`

```

62 \newcommand*{\DTMczechordinal}[1]{%
63   \number#1.%
64 }

```

`\DTMczechmonthname` Czech month names.

```

65 \newcommand*{\DTMczechmonthname}[1]{%
66   \ifcase#1
67   \or
68   ledna%
69   \or
70   \protect\'unora%
71   \or
72   b\protect\v{r}ezna%
73   \or
74   dubna%
75   \or
76   kv\protect\v{e}tna%
77   \or
78   \protect\v{c}ervna%

```

```

79 \or
80 \protect\v{c}ervence%
81 \or
82 srpna%
83 \or
84 z\protect\'a\protect\v{r}\protect\{\protect\i}%
85 \or
86 \protect\v{r}\protect\{\protect\i}jna%
87 \or
88 listopadu%
89 \or
90 prosince%
91 \fi
92 }

```

`\DTMczechMonthname` As above but start with a capital.

```

93 \newcommand*{\DTMczechMonthname}[1]{%
94 \ifcase#1
95 \or
96 Ledna%
97 \or
98 \protect\'Unora%
99 \or
100 B\protect\v{r}ezna%
101 \or
102 Dubna%
103 \or
104 Kv\protect\v{e}tna%
105 \or
106 \protect\v{C}ervna%
107 \or
108 \protect\v{C}ervence%
109 \or
110 Srpna%
111 \or
112 Z\protect\'a\protect\v{r}\protect\{\protect\i}%
113 \or
114 \protect\v{R}\protect\{\protect\i}jna%
115 \or
116 Listopadu%
117 \or
118 Prosince%
119 \fi
120 }

```

### 1.3 Main Czech Module (datetime2-czech.ldf)

Identify Module

```
121 \ProvidesDateTimeModule{czech}[2018/03/19 v1.1]
```

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

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

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

```
123 \ifxetex
```

```
124 \RequireDateTimeModule{czech-utf8}
```

```
125 \else
```

```
126 \ifluatex
```

```
127 \RequireDateTimeModule{czech-utf8}
```

```
128 \else
```

```
129 \RequireDateTimeModule{czech-ascii}
```

```
130 \fi
```

```
131 \fi
```

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

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

```
132 \newcommand*{\DTMczechdaymonthsep}{\DTMtexorpdfstring{\protect~}{\space}}
```

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

```
133 \newcommand*{\DTMczechmonthyearsep}{\space}
```

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

```
134 \newcommand*{\DTMczechdatetimesep}{\space}
```

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

```
135 \newcommand*{\DTMczechtimezonesep}{\space}
```

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

```
136 \newcommand*{\DTMczechdatesep}{.}
```

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

```
137 \newcommand*{\DTMczechtimesep}{:}
```

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

```
138 \DTMdefkey{czech}{daymonthsep}{\renewcommand*{\DTMczechdaymonthsep}{#1}}
```

```
139 \DTMdefkey{czech}{monthyearsep}{\renewcommand*{\DTMczechmonthyearsep}{#1}}
```

```
140 \DTMdefkey{czech}{datetimesep}{\renewcommand*{\DTMczechdatetimesep}{#1}}
```

```
141 \DTMdefkey{czech}{timezonesep}{\renewcommand*{\DTMczechtimezonesep}{#1}}
```

```
142 \DTMdefkey{czech}{datesep}{\renewcommand*{\DTMczechdatesep}{#1}}
```

```
143 \DTMdefkey{czech}{timesep}{\renewcommand*{\DTMczechtimesep}{#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.

```
144 \DTMdefboolkey{czech}{mapzone}[true]{}
```

The default is to use mappings.

```
145 \DTMsetbool{czech}{mapzone}{true}
```

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

```
146 \DTMdefboolkey{czech}{showdayofmonth}[true]{}
```

The default is to show the day of month.

```
147 \DTMsetbool{czech}{showdayofmonth}{true}
```

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

```
148 \DTMdefboolkey{czech}{showyear}[true]{}
```

The default is to show the year.

```
149 \DTMsetbool{czech}{showyear}{true}
```

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

```
150 \DTMnewstyle
```

```
151 {czech}% label
```

```
152 {% date style
```

```
153   \renewcommand*\DTMdisplaydate[4]{%
```

```
154     \DTMifbool{czech}{showdayofmonth}
```

```
155     {\DTMczechordinal{##3}\DTMczechdaymonthsep}%
```

```
156     }%
```

```
157     \DTMczechmonthname{##2}%
```

```
158     \DTMifbool{czech}{showyear}%
```

```
159     {%
```

```
160       \DTMczechmonthyearsep
```

```
161       \number##1
```

```
162     }%
```

```
163   }%
```

```
164 }%
```

```
165 \renewcommand*\DTMdisplaydate[4]{%
```

```
166   \DTMifbool{czech}{showdayofmonth}
```

```
167   {%
```

```
168     \DTMczechordinal{##3}\DTMczechdaymonthsep
```

```
169     \DTMczechmonthname{##2}%
```

```
170     }%
```

```
171     {%
```

```
172       \DTMczechMonthname{##2}%
```

```
173       }%
```

```
174       \DTMifbool{czech}{showyear}%
```

```
175       {%
```

```
176         \DTMczechmonthyearsep
```

```
177         \number##1
```

```
178       }%
```

```
179     }%
```

```
180 }%
```

```

181 }%
182 {% time style (use default)
183   \DTMsettimestyle{default}%
184 }%
185 {% zone style
186   \DTMresetzones
187   \DTMczechzonemaps
188   \renewcommand*{\DTMdisplayzone}[2]{%
189     \DTMifbool{czech}{mapzone}%
190     {\DTMusezonemapordefault{##1}{##2}}%
191     {%
192       \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
193       \ifDTMshowzoneminutes\DTMczechtimestep\DTMtwodigits{##2}\fi
194     }%
195   }%
196 }%
197 {% full style
198   \renewcommand*{\DTMdisplay}[9]{%
199     \ifDTMshowdate
200       \DTMdisplaydate{##1}{##2}{##3}{##4}%
201       \DTMczechdatetimestep
202       \fi
203       \DTMdisplaytime{##5}{##6}{##7}%
204       \ifDTMshowzone
205         \DTMczechtimestep
206         \DTMdisplayzone{##8}{##9}%
207       \fi
208     }%
209   \renewcommand*{\DTMDisplay}[9]{%
210     \ifDTMshowdate
211       \DTMDisplaydate{##1}{##2}{##3}{##4}%
212       \DTMczechdatetimestep
213       \fi
214       \DTMdisplaytime{##5}{##6}{##7}%
215       \ifDTMshowzone
216         \DTMczechtimestep
217         \DTMdisplayzone{##8}{##9}%
218       \fi
219     }%
220 }%
    Define numeric style.
221 \DTMnewstyle
222 {czech-numeric}% label
223 {% date style
224   \renewcommand*\DTMdisplaydate[4]{%
225     \DTMifbool{czech}{showdayofmonth}%
226     {%
227       \number##3 % space intended
228       \DTMczechdatesep

```

```

229     }%
230     {}%
231     \number##2 % space intended
232     \DTMifbool{czech}{showyear}%
233     {%
234         \DTMczechdatesep
235         \number##1 % space intended
236     }%
237     {}%
238     }%
239     \renewcommand*\DTMdisplaydate[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
240 }%
241 {% time style
242     \renewcommand*\DTMdisplaytime[3]{%
243         \number##1
244         \DTMczechtimesep\DTMtwodigits{##2}%
245         \ifDTMshowseconds\DTMczechtimesep\DTMtwodigits{##3}\fi
246     }%
247 }%
248 {% zone style
249     \DTMresetzones
250     \DTMczechzonemaps
251     \renewcommand*\DTMdisplayzone[2]{%
252         \DTMifbool{czech}{mapzone}%
253         {\DTMusezonemapordefault{##1}{##2}}%
254         {%
255             \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
256             \ifDTMshowzoneminutes\DTMczechtimesep\DTMtwodigits{##2}\fi
257         }%
258     }%
259 }%
260 {% full style
261     \renewcommand*\DTMdisplay[9]{%
262         \ifDTMshowdate
263             \DTMdisplaydate{##1}{##2}{##3}{##4}%
264             \DTMczechdatetimesep
265             \fi
266             \DTMdisplaytime{##5}{##6}{##7}%
267             \ifDTMshowzone
268                 \DTMczechtimezonesep
269                 \DTMdisplayzone{##8}{##9}%
270             \fi
271         }%
272     \renewcommand*\DTMdisplay{\DTMdisplay}%
273 }

```

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

```

274 \newcommand*\DTMczechzonemaps{%
275     \DTMdefzonemap{01}{00}{CET}%

```



```
276 \DTMdefzonemap{02}{00}{CEST}%
277 }
```

Switch style according to the `useregional` setting.

```
278 \DTMifcaseregional
279 {}% do nothing
280 {\DTMsetstyle{czech}}
281 {\DTMsetstyle{czech-numeric}}
```

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

```
282 \ifcsundef{date\CurrentTrackedDialect}
283 {%
284   \ifundef\dateczech
285   {% do nothing
286   }%
287   {%
288     \def\dateczech{%
289       \DTMifcaseregional
290       {}% do nothing
291       {\DTMsetstyle{czech}}%
292       {\DTMsetstyle{czech-numeric}}%
293     }%
294   }%
295 }%
296 {%
297   \csdef{date\CurrentTrackedDialect}{%
298     \DTMifcaseregional
299     {}% do nothing
300     {\DTMsetstyle{czech}}%
301     {\DTMsetstyle{czech-numeric}}%
302   }%
303 }%
```

## Change History

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

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