

Icelandic 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 maintenance, contact me at <https://www.dickimaw-books.com/contact.html>

Abstract

This is the Icelandic 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 re-defining `\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-icelandic`'s `\today`.

I don't know if these settings are correct as I can't speak Icelandic. In particular, I don't know if the `icelandic` 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 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-icelandic.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{icelandic-utf8}[2022/12/06 v1.2]
```

```
\DTMicelandicordinal
```

```
2 \newcommand*{\DTMicelandicordinal}[1]{%
```

```
3   \number#1.%
```

```
4 }
```

`\DTMiceLandicMonthname` Icelandic month names.

```
5 \newcommand*{\DTMiceLandicMonthname}[1]{%
6   \ifcase#1
7   \or
8   janúar%
9   \or
10  febrúar%
11  \or
12  mars%
13  \or
14  apríl%
15  \or
16  maí%
17  \or
18  júní%
19  \or
20  júlí%
21  \or
22  ágúst%
23  \or
24  september%
25  \or
26  október%
27  \or
28  nóvember%
29  \or
30  desember%
31  \fi
32 }
```

`\DTMiceLandicMonthname` As above but capitalize.

```
33 \newcommand*{\DTMiceLandicMonthname}[1]{%
34   \ifcase#1
35   \or
36   Janúar%
37   \or
38   Febrúar%
39   \or
40   Mars%
41   \or
42   Apríl%
43   \or
44   Maí%
45   \or
46   Júní%
47   \or
48   Júlí%
49   \or
50   Ágúst%
51   \or
52   September%
53   \or
54   Október%
55   \or
```

```

56  Nóvember%
57  \or
58  Desember%
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-icelandic-utf8.ldf` file as the non-ASCII characters are made active in that situation and would need protecting against expansion. Identify module

```
61 \ProvidesDateTimeModule{icelandic-ascii}[2022/12/06 v1.2]
```

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

`\DTMicecelandicordinal`

```

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

```

`\DTMicecelandicmonthname` Icelandic month names.

```

65 \newcommand*{\DTMicecelandicmonthname}[1]{%
66   \ifcase#1
67   \or
68   jan\protect\'uar%
69   \or
70   febr\protect\'uar%
71   \or
72   mars%
73   \or
74   apr\protect\'il%
75   \or
76   ma\protect\'i%
77   \or
78   j\protect\'un\protect\'i%
79   \or
80   j\protect\'ul\protect\'i%
81   \or
82   \protect\'ag\protect\'ust%
83   \or
84   september%
85   \or
86   okt\protect\'ober%
87   \or
88   n\protect\'ovember%
89   \or
90   desember%
91   \fi
92 }

```

```

\DTMiceLandicMonthname As above but capitalize.
93 \newcommand*{\DTMiceLandicMonthname}[1]{%
94   \ifcase#1
95   \or
96   Jan\protect\'uar%
97   \or
98   Febr\protect\'uar%
99   \or
100  Mars%
101  \or
102  Apr\protect\'il%
103  \or
104  Ma\protect\'i%
105  \or
106  J\protect\'un\protect\'i%
107  \or
108  J\protect\'ul\protect\'i%
109  \or
110  \protect\'Ag\protect\'ust%
111  \or
112  September%
113  \or
114  Okt\protect\'ober%
115  \or
116  N\protect\'ovember%
117  \or
118  Desember%
119  \fi
120 }

```

1.3 Main Icelandic Module (datetime2-icelandic. ldf)

Identify Module

```
121 \ProvidesDateTimeModule{icelandic}[2022/12/06 v1.2]
```

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

```
122 \RequirePackage{iftex}
```

XeTeX and LuaTeX natively support UTF-8, so load `icelandic-utf8` if either of those engines are used otherwise load `icelandic-ascii`. Modern LaTeX kernels have much better support for UTF-8, so a test could also be added to determine if `\inputencoding is utf8`.

```
123 \ifxetex
```

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

```
125 \else
```

```
126   \ifluatex
```

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

```
128   \else
```

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

```
130   \fi
```

```
131 \fi
```

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

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

```
132 \newcommand*{\DTMicecelandicdaymonthsep}{%
133 \DTMtexpdfstring{\protect~}{\space}%
134 }
```

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

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

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

```
136 \newcommand*{\DTMicecelandicdatetimesep}{\space}
```

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

```
137 \newcommand*{\DTMicecelandictimezonesep}{\space}
```

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

```
138 \newcommand*{\DTMicecelandicdatesep}{/}
```

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

```
139 \newcommand*{\DTMicecelandictimesep}{:}
```

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

```
140 \DTMdefkey{icelandic}{daymonthsep}{\renewcommand*{\DTMicecelandicdaymonthsep}{#1}}
```

```
141 \DTMdefkey{icelandic}{monthyearsep}{\renewcommand*{\DTMicecelandicmonthyearsep}{#1}}
```

```
142 \DTMdefkey{icelandic}{datetimesep}{\renewcommand*{\DTMicecelandicdatetimesep}{#1}}
```

```
143 \DTMdefkey{icelandic}{timezonesep}{\renewcommand*{\DTMicecelandictimezonesep}{#1}}
```

```
144 \DTMdefkey{icelandic}{datesep}{\renewcommand*{\DTMicecelandicdatesep}{#1}}
```

```
145 \DTMdefkey{icelandic}{timesep}{\renewcommand*{\DTMicecelandictimesep}{#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.

```
146 \DTMdefboolkey{icelandic}{mapzone}[true]{}
```

The default is to use mappings.

```
147 \DTMsetbool{icelandic}{mapzone}{true}
```

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

```
148 \DTMdefboolkey{icelandic}{showdayofmonth}[true]{}
```

The default is to show the day of month.

```
149 \DTMsetbool{icelandic}{showdayofmonth}{true}
```

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

```
150 \DTMdefboolkey{icelandic}{showyear}[true]{}
```

The default is to show the year.

```
151 \DTMsetbool{icelandic}{showyear}{true}
```

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

```
152 \DTMnewstyle
153 {icelandic}% label
154 {% date style
155   \renewcommand*\DTMdisplaydate[4]{%
156     \DTMifbool{icelandic}{showdayofmonth}
157     {\DTMicelandicordinal{##3}\DTMicelandicdaymonthsep}%
158     }%
159     \DTMicelandicmonthname{##2}%
160     \DTMifbool{icelandic}{showyear}%
161     {%
162       \DTMicelandicmonthyearsep
163       \number##1
164     }%
165   }%
166 }%
167 \renewcommand*\DTMdisplaydate[4]{%
168   \DTMifbool{icelandic}{showdayofmonth}
169   {%
170     \DTMicelandicordinal{##3}\DTMicelandicdaymonthsep
171     \DTMicelandicmonthname{##2}%
172   }%
173   {%
174     \DTMicelandicMonthname{##2}%
175   }%
176   \DTMifbool{icelandic}{showyear}%
177   {%
178     \DTMicelandicmonthyearsep
179     \number##1
180   }%
181 }%
182 }%
183 }%
184 {% time style (use default)
185   \DTMsettimestyle{default}%
186 }%
187 {% zone style
188   \DTMresetzones
189   \DTMicelandiczonemaps
190   \renewcommand*\DTMdisplayzone[2]{%
191     \DTMifbool{icelandic}{mapzone}%
192     {\DTMusezonemapordefault{##1}{##2}}%
193     {%
194       \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
195       \ifDTMshowzoneminutes\DTMicelandictimesep\DTMtwodigits{##2}\fi
196     }%
197   }%
198 }%
199 {% full style
200   \renewcommand*\DTMdisplay[9]{%
201     \ifDTMshowdate
202       \DTMdisplaydate{##1}{##2}{##3}{##4}%
203       \DTMicelandicdatetimesep
204     \fi
```

```

205 \DTMdisplaytime{##5}{##6}{##7}%
206 \ifDTMshowzone
207 \DTMicelandictimezonesep
208 \DTMdisplayzone{##8}{##9}%
209 \fi
210 }%
211 \renewcommand*\DTMDisplay}[9]{%
212 \ifDTMshowdate
213 \DTMDisplaydate{##1}{##2}{##3}{##4}%
214 \DTMicelandicdatetimesep
215 \fi
216 \DTMdisplaytime{##5}{##6}{##7}%
217 \ifDTMshowzone
218 \DTMicelandictimezonesep
219 \DTMdisplayzone{##8}{##9}%
220 \fi
221 }%
222 }%
    Define numeric style.
223 \DTMnewstyle
224 {icelandic-numeric}% label
225 {% date style
226 \renewcommand*\DTMdisplaydate[4]{%
227 \DTMifbool{icelandic}{showdayofmonth}%
228 {%
229 \number##3 % space intended
230 \DTMicelandicdatesep
231 }%
232 }%
233 \number##2 % space intended
234 \DTMifbool{icelandic}{showyear}%
235 {%
236 \DTMicelandicdatesep
237 \number##1 % space intended
238 }%
239 }%
240 }%
241 \renewcommand*\DTMDisplaydate{\DTMdisplaydate}%
242 }%
243 {% time style
244 \renewcommand*\DTMdisplaytime[3]{%
245 \number##1 % space intended
246 \DTMicelandictimesep\DTMtwodigits{##2}%
247 \ifDTMshowseconds\DTMicelandictimesep\DTMtwodigits{##3}\fi
248 }%
249 }%
250 {% zone style
251 \DTMresetzones
252 \DTMicelandiczonemaps
253 \renewcommand*\DTMdisplayzone}[2]{%
254 \DTMifbool{icelandic}{mapzone}%
255 {\DTMuseumaportdefault{##1}{##2}}%
256 {%
257 \ifnum##1<0\else+\fi\DTMtwodigits{##1}%

```

```

258     \ifDTMshowzoneminutes\DTMicelandictimesep\DTMtwdigits{##2}\fi
259     }%
260 }%
261 }%
262 {% full style
263 \renewcommand*\DTMdisplay[9]{%
264 \ifDTMshowdate
265 \DTMdisplaydate{##1}{##2}{##3}{##4}%
266 \DTMicelandicdatetimesep
267 \fi
268 \DTMdisplaytime{##5}{##6}{##7}%
269 \ifDTMshowzone
270 \DTMicelandictimezonesep
271 \DTMdisplayzone{##8}{##9}%
272 \fi
273 }%
274 \renewcommand*\DTMDisplay{\DTMdisplay}%
275 }

```

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

```

276 \newcommand*\DTMicelandiczonemaps{%
277 \DTMdefzonemap{00}{00}{GMT}%
278 }

```

Switch style according to the `userregional` setting.

```

279 \DTMifcaseregional
280 {}% do nothing
281 {\DTMsetstyle{icelandic}}
282 {\DTMsetstyle{icelandic-numeric}}

```

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

```

283 \ifcsundef{date\CurrentTrackedDialect}
284 {%
285 \ifundef\dateicelandic
286 {% do nothing
287 }%
288 {%
289 \def\dateicelandic{%
290 \DTMifcaseregional
291 {}% do nothing
292 {\DTMsetstyle{icelandic}}%
293 {\DTMsetstyle{icelandic-numeric}}%
294 }%
295 }%
296 }%
297 {%
298 \csdef{date\CurrentTrackedDialect}{%
299 \DTMifcaseregional
300 {}% do nothing
301 {\DTMsetstyle{icelandic}}%
302 {\DTMsetstyle{icelandic-numeric}}%
303 }%
304 }%

```


Change History

1.0	General: Initial release	1, 3, 4	\DTMice landicMonthname: corrected Desember	2, 4
1.1	General: removed spurious space	8	\DTMice landicmonthname: corrected desember	2, 3
1.2	General: switched to iftex	4		

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