German 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 http://www.dickimaw-books.com/contact.html

Abstract

This is the German 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*⟩ depending on the value of the **useregional** setting.

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

I don't know if these settings are correct as I can't speak German. In particular, I don't know if the `german` 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-german.ins` where Name is the name of the maintainer(s) and replace the 'inactive' status to 'maintained'.

Currently there is only a regionless style. New maintainers may want to add regional variants such as `de-DE`/`de-DE-numeric` and `de-AT`/`de-AT-numeric`. This style currently doesn't check the `showdow` setting.

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{german-utf8}[2017/03/09 v1.1]

`\DTMgermanordinal`

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

`\DTMgermanmonthname` German month names.

```
5 \newcommand*{\DTMgermanmonthname}[1]{%
6   \ifcase#1
7   \or
8   Januar%
9   \or
10  Februar%
11  \or
12  März%
13  \or
14  April%
15  \or
16  Mai%
17  \or
18  Juni%
19  \or
20  Juli%
21  \or
22  August%
23  \or
24  September%
25  \or
26  Oktober%
27  \or
28  November%
29  \or
30  Dezember%
31  \fi
32 }
```

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

`\DTMgermanweekdayname` These are provided here but not currently used in the date format.

```
33 \newcommand*{\DTMgermanweekdayname}[1]{%
34   \ifcase#1
35   Montag%
36   \or
37   Dienstag%
38   \or
39   Mittwoch%
40   \or
41   Donnerstag%
42   \or
```

```
43    Freitag%
44    \or
45    Samstag%
46    \or
47    Sonntag%
48    \fi
49 }
```

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

```
50 \ProvidesDateTimeModule{german-ascii}[2017/03/09 v1.1]
```

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

`\DTMgermanordinal`

```
51 \newcommand*{\DTMgermanordinal}[1]{%
52    \number#1
53 }
```

`\DTMgermanmonthname`   German month names.

```
54 \newcommand*{\DTMgermanmonthname}[1]{%
55    \ifcase#1
56    \or
57    Januar%
58    \or
59    Februar%
60    \or
61    M\protect\"arz%
62    \or
63    April%
64    \or
65    Mai%
66    \or
67    Juni%
68    \or
69    Juli%
70    \or
71    August%
72    \or
73    September%
74    \or
75    Oktober%
76    \or
```

```
77    November%
78    \or
79    Dezember%
80    \fi
81 }
```

\DTMgermanweekdayname These are provided here but not currently used in the date format.

```
82 \newcommand*{\DTMgermanweekdayname}[1]{%
83    \ifcase#1
84    Montag%
85    \or
86    Dienstag%
87    \or
88    Mittwoch%
89    \or
90    Donnerstag%
91    \or
92    Freitag%
93    \or
94    Samstag%
95    \or
96    Sonntag%
97    \fi
98 }
```

1.3   Main German Module (`datetime2-german.ldf`)

Identify Module

```
99 \ProvidesDateTimeModule{german}[2017/03/09 v1.1]
```

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

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

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

```
101 \ifxetex
102 \RequireDateTimeModule{german-utf8}
103 \else
104 \ifluatex
105   \RequireDateTimeModule{german-utf8}
106 \else
107   \RequireDateTimeModule{german-ascii}
108 \fi
109 \fi
```

Define the `german` style. The time style is the same as the `default` style provided by datetime2. This may need correcting.

Allow the user a way of configuring the `german` and `german-numeric` styles. This doesn't use the package wide separators such as \dtm@datetimesep in case other date formats are also required.

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

110 `\newcommand*{\DTMgermandaymonthsep}{.\DTMtexorpdfstring{\protect~}{\space}}`

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

111 `\newcommand*{\DTMgermanmonthyearsep}{\space}`

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

112 `\newcommand*{\DTMgermandatetimesep}{\space}`

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

113 `\newcommand*{\DTMgermantimezonesep}{\space}`

\DTMgermandatesep	The separator for the numeric date format.

114 `\newcommand*{\DTMgermandatesep}{/}`

\DTMgermantimesep	The separator for the numeric time format.

115 `\newcommand*{\DTMgermantimesep}{:}`

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

116 `\DTMdefkey{german}{daymonthsep}{\renewcommand*{\DTMgermandaymonthsep}{#1}}`
117 `\DTMdefkey{german}{monthyearsep}{\renewcommand*{\DTMgermanmonthyearsep}{#1}}`
118 `\DTMdefkey{german}{datetimesep}{\renewcommand*{\DTMgermandatetimesep}{#1}}`
119 `\DTMdefkey{german}{timezonesep}{\renewcommand*{\DTMgermantimezonesep}{#1}}`
120 `\DTMdefkey{german}{datesep}{\renewcommand*{\DTMgermandatesep}{#1}}`
121 `\DTMdefkey{german}{timesep}{\renewcommand*{\DTMgermantimesep}{#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.

122 `\DTMdefboolkey{german}{mapzone}[true]{}`

The default is to use mappings.

123 `\DTMsetbool{german}{mapzone}{true}`

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

124 `\DTMdefboolkey{german}{showdayofmonth}[true]{}`

The default is to show the day of month.

125 `\DTMsetbool{german}{showdayofmonth}{true}`

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

126 `\DTMdefboolkey{german}{showyear}[true]{}`

The default is to show the year.

127 `\DTMsetbool{german}{showyear}{true}`

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

```
128 \DTMnewstyle
129 {german}% label
130 {% date style
131   \renewcommand*\DTMdisplaydate[4]{%
132     \DTMifbool{german}{showdayofmonth}%
133     {\DTMgermanordinal{##3}\DTMgermandaymonthsep}%
134     {}%
135     \DTMgermanmonthname{##2}%
136     \DTMifbool{german}{showyear}%
137     {%
138       \DTMgermanmonthyearsep
139       \number##1 % space intended
140     }%
141     {}%
142   }%
143   \renewcommand*\DTMDisplaydate[4]{%
144     \DTMifbool{german}{showdayofmonth}%
145     {%
146       \DTMgermanordinal{##3}\DTMgermandaymonthsep
147       \DTMgermanmonthname{##2}%
148     }%
149     {\DTMgermanmonthname{##2}}%
150     \DTMifbool{german}{showyear}%
151     {%
152       \DTMgermanmonthyearsep
153       \number##1 % space intended
154     }%
155     {}%
156   }%
157 }%
158 {% time style (use default)
159   \DTMsettimestyle{default}%
160 }%
161 {% zone style
162   \DTMresetzones
163   \DTMgermanzonemaps
164   \renewcommand*{\DTMdisplayzone}[2]{%
165     \DTMifbool{german}{mapzone}%
166     {\DTMusezonemapordefault{##1}{##2}}%
167     {%
168       \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
169       \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwodigits{##2}\fi
170     }%
171   }%
172 }%
173 {% full style
174   \renewcommand*{\DTMdisplay}[9]{%
175     \ifDTMshowdate
```

```
176        \DTMdisplaydate{##1}{##2}{##3}{##4}%
177        \DTMgermandatetimesep
178      \fi
179      \DTMdisplaytime{##5}{##6}{##7}%
180      \ifDTMshowzone
181        \DTMgermantimezonesep
182        \DTMdisplayzone{##8}{##9}%
183      \fi
184    }%
185    \renewcommand*{\DTMDisplay}[9]{%
186      \ifDTMshowdate
187        \DTMDisplaydate{##1}{##2}{##3}{##4}%
188        \DTMgermandatetimesep
189      \fi
190      \DTMdisplaytime{##5}{##6}{##7}%
191      \ifDTMshowzone
192        \DTMgermantimezonesep
193        \DTMdisplayzone{##8}{##9}%
194      \fi
195    }%
196 }%
```

Define numeric style.

```
197 \DTMnewstyle
198  {german-numeric}% label
199  {% date style
200      \renewcommand*\DTMdisplaydate[4]{%
201        \DTMifbool{german}{showdayofmonth}%
202        {%
203          \number##3 % space intended
204          \DTMgermandatesep
205        }%
206        {}%
207        \number##2 % space intended
208        \DTMifbool{german}{showyear}%
209        {%
210          \DTMgermandatesep
211          \number##1 % space intended
212        }%
213        {}%
214      }%
215      \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
216  }%
217  {% time style
218      \renewcommand*\DTMdisplaytime[3]{%
219        \number##1
220        \DTMgermantimesep\DTMtwodigits{##2}%
221        \ifDTMshowseconds\DTMgermantimesep\DTMtwodigits{##3}\fi
222      }%
223  }%
```

```
224 {% zone style
225    \DTMresetzones
226    \DTMgermanzonemaps
227    \renewcommand*{\DTMdisplayzone}[2]{%
228      \DTMifbool{german}{mapzone}%
229      {\DTMusezonemapordefault{##1}{##2}}%
230      {%
231        \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
232        \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwodigits{##2}\fi
233      }%
234    }%
235 }%
236 {% full style
237    \renewcommand*{\DTMdisplay}[9]{%
238      \ifDTMshowdate
239      \DTMdisplaydate{##1}{##2}{##3}{##4}%
240      \DTMgermandatetimesep
241      \fi
242      \DTMdisplaytime{##5}{##6}{##7}%
243      \ifDTMshowzone
244        \DTMgermantimezonesep
245        \DTMdisplayzone{##8}{##9}%
246      \fi
247    }%
248    \renewcommand*{\DTMDisplay}{\DTMdisplay}%
249 }
```

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

```
250 \newcommand*{\DTMgermanzonemaps}{%
251    \DTMdefzonemap{01}{00}{CET}%
252    \DTMdefzonemap{02}{00}{CEST}%
253 }
```

Switch style according to the usaregional setting.

```
254 \DTMifcaseregional
255 {}% do nothing
256 {\DTMsetstyle{german}}
257 {\DTMsetstyle{german-numeric}}
```

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

```
258 \ifcsundef{date\CurrentTrackedDialect}
259 {%
260    \ifundef\dategerman
261    {% do nothing
262    }%
263    {%
264      \def\dategerman{%
265        \DTMifcaseregional
```

```
266        {}% do nothing
267        {\DTMsetstyle{german}}%
268        {\DTMsetstyle{german-numeric}}%
269     }%
270   }%
271 }%
272 {%
273   \csdef{date\CurrentTrackedDialect}{%
274     \DTMifcaseregional
275     {}% do nothing
276     {\DTMsetstyle{german}}%
277     {\DTMsetstyle{german-numeric}}
278   }%
279 }%
```

Change History

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