

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 maintenance, 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 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-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}[2015/03/27 v1.0]
```

`\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 L^AT_EX 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 `datettime2-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}[2015/03/27 v1.0]
```

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.1df`)

Identify Module

```
99 \ProvidesDateTimeModule{german}[2015/03/27 v1.0]
```

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     {\DTMusedzonemapordefault{##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 `useregional` 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

1.0
General: Initial release 1, 3, 4

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