

German Module for the datetime2 Package

<https://gitlab.com/SFr682k/datetime2-german>

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Abstract

This is the German language module for the datetime2 package. It defines a regionless style as well as variant styles (de-DE, de-AT and de-CH).

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.

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Installation

Extract the language definition files first:

1. Run \LaTeX over the file `datetime2-german.ins`:
`latex datetime2-german.ins`
2. Move all `*.ldf` files to `TEXMF/tex/latex/datetime2-contrib/datetime2-german/`

Then, you can compile the documentation yourself by executing

```
lualatex datetime2-german-doc.dtx
makeindex -s gind.ist datetime2-german-doc.idx
makeindex -s gglo.ist -o datetime2-german-doc.gls datetime2-german-doc.glo
lualatex datetime2-german-doc.dtx
lualatex datetime2-german-doc.dtx
```

or just use the precompiled documentation shipped with the source files.
In both cases, copy the files `datetime2-german-doc.pdf` and `README.md` to
`TEXMF/doc/latex/datetime2-contrib/datetime2-german/`

License

This material is subject to the \LaTeX Project Public License, Version 1.3c or later.
Details may be found in the respective language definition file's copyright header.

Acknowledgments

Thanks to ...

- Jürgen Spitzmüller for his valuable advice while preparing version 2.0 of this module.
- Bernhard Waldbrunner for his merge request, which resulted in the adoption of the `DD.MM.YYYY` numeric date format with the Austrian numeric style in version 3.0. Previous versions used the ISO format (`YYYY-MM-DD`) as recommended by ÖNORM 1080, which was withdrawn in May 2018.

Part I

The Documentation

1 Usage

1.1 Setting up `datetime2` with a language module

*There are several methods of loading a language module.
Please refer to `datetime2`'s documentation for details.*

Variant 1:

Set the date style explicitly by passing `german`, `de-DE`, `de-AT` or `de-CH` to `datetime2`:

```
\documentclass{article}
\usepackage[german]{datetime2}
\begin{document}
\today
\end{document}
```

Variant 2: Pick up the desired style from `babel` or document class options)

Pass the language (e.g. `german`, `ngerman`, `austrian`, `naustrian`, ...) as an option to the `\documentclass` command (or `babel` itself). As soon as the `userregional` option is passed to `datetime2`, the suitable language module is loaded:

```
\documentclass[german]{article}
\usepackage{babel}
\usepackage[userregional]{datetime2}
\begin{document}
\today
\end{document}
```

1.2 Customization

There are a number of settings provided that can be used in `\DTMLangsetup` to modify the date-time style. These are:

dowdaysep The separator between the day of week name and the day of month number.

daymonthsep The separator between the day and the month name.

monthyearsep The separator between the month name and year.

datesep The separator between the date numbers in the numeric styles.

timesep The separator between hours, minutes and seconds.

datetimesep The separator between the date and time for the full date-time format.

timezonesep The separator between the time and zone for the full date-time format.

abbr This is a boolean key. If `true`, the month (and weekday name, if shown) is abbreviated.

mapzone This is a boolean key. If `true`, the time zone mappings are applied.

showdayofmonth A boolean key that determines whether or not to show the day of the month.

showyear A boolean key that determines whether or not to show the year.

Although these keys are *defined* for all variant styles, it depends on `datetime2`'s configuration and the requested styles whether they're *used*. More details about the `\DTMLangsetup` command can be found in `datetime2`'s documentation.

2 The Modules

2.1 Regionless style (german)

Textual style	13. Dezember 2019, 12:42:00 MEZ
<i>with showdow option</i>	Freitag, 13. Dezember 2019, 12:42:00 MEZ
<i>abbr.</i>	13. Dez. 2019, 12:42:00 MEZ
<i>abbr., with showdow option</i>	Fr, 13. Dez. 2019, 12:42:00 MEZ

Numeric style	13.12.2019, 12:42:00 MEZ
<i>with showdow option</i>	Freitag, 13.12.2019, 12:42:00 MEZ
<i>abbr.</i>	13.12.19, 12:42:00 MEZ
<i>abbr., with showdow option</i>	Fr, 13.12.19, 12:42:00 MEZ

2.2 German style (de-DE)

Textual style	13. Dezember 2019, 12:42:00 MEZ
<i>with showdow option</i>	Freitag, 13. Dezember 2019, 12:42:00 MEZ
<i>abbr.</i>	13. Dez. 2019, 12:42:00 MEZ
<i>abbr., with showdow option</i>	Fr, 13. Dez. 2019, 12:42:00 MEZ

Numeric style	13.12.2019, 12:42:00 MEZ
<i>with showdow option</i>	Freitag, 13.12.2019, 12:42:00 MEZ
<i>abbr.</i>	13.12.19, 12:42:00 MEZ
<i>abbr., with showdow option</i>	Fr, 13.12.19, 12:42:00 MEZ

2.3 Austrian style (de-AT)

Textual style	13. Dezember 2019, 12:42:00 MEZ
<i>with showdow option</i>	Freitag, 13. Dezember 2019, 12:42:00 MEZ
<i>abbr.</i>	13. Dez. 2019, 12:42:00 MEZ
<i>abbr., with showdow option</i>	Fr, 13. Dez. 2019, 12:42:00 MEZ

Numeric style	13.12.2019, 12:42:00 MEZ
<i>with showdow option</i>	Freitag, 13.12.2019, 12:42:00 MEZ
<i>abbr.</i>	13.12.19, 12:42:00 MEZ
<i>abbr., with showdow option</i>	Fr, 13.12.19, 12:42:00 MEZ

2.4 Swiss style (de-CH)

Textual style	13. Dezember 2019, 12.42.00 Uhr MEZ
<i>with showdow option</i>	Freitag, 13. Dezember 2019, 12.42.00 Uhr MEZ
<i>abbr.</i>	13. Dez. 2019, 12.42.00 Uhr MEZ
<i>abbr., with showdow option</i>	Fr, 13. Dez. 2019, 12.42.00 Uhr MEZ

Numeric style	13.12.2019, 12.42.00 Uhr MEZ
<i>with showdow option</i>	Freitag, 13.12.2019, 12.42.00 Uhr MEZ
<i>abbr.</i>	13.12.19, 12.42.00 Uhr MEZ
<i>abbr., with showdow option</i>	Fr, 13.12.19, 12.42.00 Uhr MEZ

Part II

The Code

3 The Base Module

The german-base module provides code common to all regional variations and engine-dependent code, e. g. commands printing weekday and month names.

3.1 Engine-independent code: `datetime2-german-base.ldf`

Identify module

```
1 \ProvidesDateTimeModule{german-base}[2019/12/13 v3.0]
```

`\DTMgermanordinal` Ordinals used for printing the day of month.

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

`\DTMgermanweekdayname` Weekday names.

```
5 \newcommand*{\DTMgermanweekdayname}[1]{%
6   \ifcase#1
7     Montag%
8   \or
9     Dienstag%
10  \or
11  Mittwoch%
12  \or
13  Donnerstag%
14  \or
15  Freitag%
16  \or
17  Samstag%
18  \or
19  Sonntag%
20  \fi
21 }
```

`\DTMgermanshortweekdayname` Abbreviated weekday names.

```
22 \newcommand*{\DTMgermanshortweekdayname}[1]{%
23   \ifcase#1
24     Mo%
25   \or
26     Di%
27   \or
28     Mi%
29   \or
30     Do%
31   \or
32     Fr%
33   \or
34     Sa%
35   \or
```

```

36 So%
37 \fi
38 }

```

`\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.

```

39 \newcommand*{\DTMgermanzonemaps}{%
40 \DTMdefzonemap{01}{00}{MEZ}%
41 \DTMdefzonemap{02}{00}{MESZ}%
42 }

```

Load engine-dependent code.

$X_{\text{L}}\text{TeX}$ and LuaTeX natively support UTF-8, so the `german-base-utf8` module is loaded if either of those engines are used.

Otherwise, the `german-base-ascii` module is loaded.

```

43 \RequirePackage{ifxetex, ifluatex}
44 \ifxetex
45 \RequireDateTimeModule{german-base-utf8}
46 \else
47 \ifluatex
48 \RequireDateTimeModule{german-base-utf8}
49 \else
50 \RequireDateTimeModule{german-base-ascii}
51 \fi
52 \fi

```

3.2 ASCII-code: `datetime2-german-base-ascii.ldf`

The definitions in this file use LaTeX commands for non-ASCII characters. It should be used if neither $X_{\text{L}}\text{TeX}$ nor LuaTeX are used. Even if the user has loaded `inputenc` with `utf8`, this file should still be used instead of `datetime2-german-base-utf8.ldf` as the non-ASCII characters are made active in that situation and would need protecting against expansion.

Identify module.

```

53 \ProvidesDateTimeModule{german-base-ascii}[2019/12/13 v3.0]

```

`\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 }

```

`\DTMdeATmonthname` Austrian German month names.

```

82 \newcommand*{\DTMdeATmonthname}[1]{%
83 \ifcase#1
84 \or
85 J\protect\"anner%
86 \or
87 Februar%
88 \or
89 M\protect\"arz%
90 \or
91 April%
92 \or
93 Mai%
94 \or
95 Juni%
96 \or
97 Juli%
98 \or
99 August%
100 \or
101 September%
102 \or
103 Oktober%
104 \or
105 November%
106 \or
107 Dezember%
108 \fi
109 }

```

`\DTMgermanshortmonthname` Abbreviated German month names.

```

110 \newcommand*{\DTMgermanshortmonthname}[1]{%
111 \ifcase#1
112 \or
113 Jan.%
114 \or
115 Feb.%
116 \or
117 M\protect\"arz%
118 \or
119 Apr.%
120 \or
121 Mai%

```

```

122 \or
123 Juni%
124 \or
125 Juli%
126 \or
127 Aug.%
128 \or
129 Sept.%
130 \or
131 Okt.%
132 \or
133 Nov.%
134 \or
135 Dez.%
136 \fi
137 }

```

`\DTMdeATshortmonthname` Abbreviated Austrian German month names.

```

138 \newcommand*{\DTMdeATshortmonthname}[1]{%
139 \ifcase#1
140 \or
141 J\protect\"an.%
142 \or
143 Feb.%
144 \or
145 M\protect\"arz%
146 \or
147 Apr.%
148 \or
149 Mai%
150 \or
151 Juni%
152 \or
153 Juli%
154 \or
155 Aug.%
156 \or
157 Sept.%
158 \or
159 Okt.%
160 \or
161 Nov.%
162 \or
163 Dez.%
164 \fi
165 }

```

`\DTMdeCHshortmonthname` Abbreviated Swiss German month names.

```

166 \newcommand*{\DTMdeCHshortmonthname}[1]{%
167 \ifcase#1
168 \or
169 Jan.%
170 \or
171 Febr.%
172 \or
173 M\protect\"arz%

```

```

174 \or
175 April%
176 \or
177 Mai%
178 \or
179 Juni%
180 \or
181 Juli%
182 \or
183 Aug.%
184 \or
185 Sept.%
186 \or
187 Okt.%
188 \or
189 Nov.%
190 \or
191 Dez.%
192 \fi
193 }

```

3.3 UTF-8 code: `datetime2-german-base-utf8.dtx`

The definitions in this file use UTF-8 characters. It is loaded if `XYLaTeX` or `LuaLaTeX` are used. Please make sure that your text editor's encoding is set to UTF-8 if you want to view this code.

Identify module.

```
194 \ProvidesDateTimeModule{german-base-utf8}[2019/12/13 v3.0]
```

`\DTMgermanmonthname` German month names.

```

195 \newcommand*{\DTMgermanmonthname}[1]{%
196   \ifcase#1
197   \or
198   Januar%
199   \or
200   Februar%
201   \or
202   März%
203   \or
204   April%
205   \or
206   Mai%
207   \or
208   Juni%
209   \or
210   Juli%
211   \or
212   August%
213   \or
214   September%
215   \or
216   Oktober%
217   \or
218   November%

```

```
219 \or
220 Dezember%
221 \fi
222 }
```

`\DTMdeATmonthname` Austrian German month names.

```
223 \newcommand*{\DTMdeATmonthname}[1]{%
224 \ifcase#1
225 \or
226 Jänner%
227 \or
228 Februar%
229 \or
230 März%
231 \or
232 April%
233 \or
234 Mai%
235 \or
236 Juni%
237 \or
238 Juli%
239 \or
240 August%
241 \or
242 September%
243 \or
244 Oktober%
245 \or
246 November%
247 \or
248 Dezember%
249 \fi
250 }
```

`\DTMgermanshortmonthname` Abbreviated German month names.

```
251 \newcommand*{\DTMgermanshortmonthname}[1]{%
252 \ifcase#1
253 \or
254 Jan.%
255 \or
256 Feb.%
257 \or
258 März%
259 \or
260 Apr.%
261 \or
262 Mai%
263 \or
264 Juni%
265 \or
266 Juli%
267 \or
268 Aug.%
269 \or
270 Sept.%
```

```
271 \or
272 Okt.%
273 \or
274 Nov.%
275 \or
276 Dez.%
277 \fi
278 }
```

`\DTMdeATshortmonthname` Abbreviated Austrian German month names.

```
279 \newcommand*{\DTMdeATshortmonthname}[1]{%
280 \ifcase#1
281 \or
282 Jän.%
283 \or
284 Feb.%
285 \or
286 März%
287 \or
288 Apr.%
289 \or
290 Mai%
291 \or
292 Juni%
293 \or
294 Juli%
295 \or
296 Aug.%
297 \or
298 Sept.%
299 \or
300 Okt.%
301 \or
302 Nov.%
303 \or
304 Dez.%
305 \fi
306 }
```

`\DTMdeCHshortmonthname` Abbreviated Swiss German month names.

```
307 \newcommand*{\DTMdeCHshortmonthname}[1]{%
308 \ifcase#1
309 \or
310 Jan.%
311 \or
312 Febr.%
313 \or
314 März%
315 \or
316 April%
317 \or
318 Mai%
319 \or
320 Juni%
321 \or
322 Juli%
```

```

323 \or
324 Aug.%
325 \or
326 Sept.%
327 \or
328 Okt.%
329 \or
330 Nov.%
331 \or
332 Dez.%
333 \fi
334 }

```

4 Regionless Style: `datetime2-german.ldf`

This file contains the style used when German is requested without a known region.

Identify Module.

```
335 \ProvidesDateTimeModule{german}[2019/12/13 v3.0]
```

Require the base German module

```
336 \RequireDateTimeModule{german-base}
```

Allow the user to configure the `german` and `german-numeric` styles. The package wide separators such as `\dtm@datetimesep` are not used in case other date formats are also required.

`\DTMgermandowdaysep` The separator between weekday and day.

```
337 \newcommand*{\DTMgermandowdaysep}{, \space}
```

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

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

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

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

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

```
340 \newcommand*{\DTMgermandatetimesep}{, \space}
```

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

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

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

```
342 \newcommand*{\DTMgermandatesep}{.}
```

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

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

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

```
344 \DTMdefkey{german}{dowdaysep}{\renewcommand*\DTMgermandowdaysep}{#1}}
345 \DTMdefkey{german}{daymonthsep}{\renewcommand*\DTMgermandaymonthsep}{#1}}
346 \DTMdefkey{german}{monthyearsep}{\renewcommand*\DTMgermanmonthyearsep}{#1}}
347 \DTMdefkey{german}{datetimesep}{\renewcommand*\DTMgermandatetimesep}{#1}}
348 \DTMdefkey{german}{timezonesep}{\renewcommand*\DTMgermantimezonesep}{#1}}
349 \DTMdefkey{german}{datesep}{\renewcommand*\DTMgermandatesep}{#1}}
350 \DTMdefkey{german}{timesep}{\renewcommand*\DTMgermantimesep}{#1}}
```

Define a boolean key that can switch between full and abbreviated formats for the month and day of week names.

```
351 \DTMdefboolkey{german}{abbr}[true]{} 
```

The default is to show the full names.

```
352 \DTMsetbool{german}{abbr}{false}
```

Define a boolean key that determines if the time zone mappings should be used.

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

The default is to use mappings.

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

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

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

The default is to show the day of month.

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

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

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

The default is to show the year.

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

Define the (regionless) german style.

```
359 \DTMnewstyle
360 {german}% label
361 {% date style
362   \renewcommand*\DTMdisplaydate[4]{%
363     \ifDTMshowdow
364       \ifnum##4>-1
365         \DTMifbool{german}{abbr}%
366         {\DTMgermanshortweekdayname{##4}}%
367         {\DTMgermanweekdayname{##4}}%
368         \DTMgermandowdaysep
369       \fi
370     \fi
371     %
372     \DTMifbool{german}{showdayofmonth}%
373     {\DTMgermanordinal{##3}\DTMgermandaymonthsep}%
374     }%
375     %
376     \DTMifbool{german}{abbr}%
377     {\DTMgermanshortmonthname{##2}}%
378     {\DTMgermanmonthname{##2}}%
379     %
380     \DTMifbool{german}{showyear}%
381     {%
382     \DTMgermanmonthyearsep%
```

```

383     \number##1 % space intended
384   }%
385   {}%
386   }%
387   \renewcommand*\DTMdisplaydate[4]{%
388     \ifDTMshowdow
389       \ifnum##4>-1
390         \DTMifbool{german}{abbr}%
391         {\DTMgermanshortweekdayname{##4}}%
392         {\DTMgermanweekdayname{##4}}%
393         \DTMgermandowdaysep
394       \fi
395     \fi
396     %
397     \DTMifbool{german}{showdayofmonth}%
398     {\DTMgermanordinal{##3}\DTMgermandaymonthsep}%
399     {}%
400     %
401     \DTMifbool{german}{abbr}%
402     {\DTMgermanshortmonthname{##2}}%
403     {\DTMgermanmonthname{##2}}%
404     %
405     \DTMifbool{german}{showyear}%
406     {%
407       \DTMgermanmonthyearsep%
408       \number##1 % space intended
409     }%
410     {}%
411   }%
412 }%
413 {% time style (use default)
414   \renewcommand*\DTMdisplaytime[3]{%
415     \DTMtwodigits{##1}%
416     \DTMgermantimesep\DTMtwodigits{##2}%
417     \ifDTMshowseconds\DTMgermantimesep\DTMtwodigits{##3}\fi
418   }%
419 }%
420 {% zone style
421   \DTMresetzones
422   \DTMgermanzonemaps
423   \renewcommand*\DTMdisplayzone}[2]{%
424     \DTMifbool{german}{mapzone}%
425     {\DTMusezonemapordefault{##1}{##2}}%
426     {%
427       \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
428       \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwodigits{##2}\fi
429     }%
430   }%
431 }%
432 {% full style
433   \renewcommand*\DTMdisplay}[9]{%
434     \ifDTMshowdate
435       \DTMdisplaydate{##1}{##2}{##3}{##4}%
436       \DTMgermandatetimesep
437     \fi
438     \DTMdisplaytime{##5}{##6}{##7}%

```



```

439 \ifDTMshowzone
440 \DTMgermantimezonesep
441 \DTMdisplayzone{##8}{##9}%
442 \fi
443 }%
444 \renewcommand*\DTMdisplay}[9]{%
445 \ifDTMshowdate
446 \DTMdisplaydate{##1}{##2}{##3}{##4}%
447 \DTMgermandatetimesep
448 \fi
449 \DTMdisplaytime{##5}{##6}{##7}%
450 \ifDTMshowzone
451 \DTMgermantimezonesep
452 \DTMdisplayzone{##8}{##9}%
453 \fi
454 }%
455 }%

```

Define the corresponding numeric style.

```

456 \DTMnewstyle
457 {german-numeric}% label
458 {% date style
459 \renewcommand*\DTMdisplaydate[4]{%
460 \ifDTMshowdow
461 \ifnum##4>-1
462 \DTMifbool{german}{abbr}%
463 {\DTMgermanshortweekdayname{##4}}%
464 {\DTMgermanweekdayname{##4}}%
465 \DTMgermandowdaysep
466 \fi
467 \fi
468 %
469 \DTMifbool{german}{showdayofmonth}%
470 {%
471 \DTMtwodigits{##3}%
472 \DTMgermandatesep
473 }%
474 }%
475 \DTMtwodigits{##2}%
476 \DTMgermandatesep%
477 \DTMifbool{german}{showyear}%
478 {%
479 \DTMifbool{german}{abbr}%
480 {\DTMtwodigits{##1}}%
481 {\number##1 }% space intended
482 }%
483 }%
484 }%
485 \renewcommand*\DTMdisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
486 }%
487 {% time style
488 \renewcommand*\DTMdisplaytime[3]{%
489 \DTMtwodigits{##1}%
490 \DTMgermantimesep\DTMtwodigits{##2}%
491 \ifDTMshowseconds\DTMgermantimesep\DTMtwodigits{##3}\fi
492 }%

```

```

493 }%
494 {% zone style
495   \DTMresetzones
496   \DTMgermanzonemaps
497   \renewcommand*{\DTMdisplayzone}[2]{%
498     \DTMifbool{german}{mapzone}%
499     {\DTMusezonemapordefault{##1}{##2}}%
500     {%
501       \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
502       \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwodigits{##2}\fi
503     }%
504   }%
505 }%
506 {% full style
507   \renewcommand*{\DTMdisplay}[9]{%
508     \ifDTMshowdate
509       \DTMdisplaydate{##1}{##2}{##3}{##4}%
510       \DTMgermandatetimesep
511       \fi
512       \DTMdisplaytime{##5}{##6}{##7}%
513       \ifDTMshowzone
514         \DTMgermantimezonesep
515         \DTMdisplayzone{##8}{##9}%
516       \fi
517     }%
518   \renewcommand*{\DTMdisplay}{\DTMdisplay}%
519 }

```

Switch the style according to the useregional setting.

```

520 \DTMifcaseregional
521 {}% do nothing
522 {\DTMsetstyle{german}}
523 {\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.)

```

524 \ifcsundef{date\CurrentTrackedDialect}
525 {%
526   \ifundef\dategerman
527     {% do nothing
528     }%
529     {%
530       \def\dategerman{%
531         \DTMifcaseregional
532         }% do nothing
533         {\DTMsetstyle{german}}%
534         {\DTMsetstyle{german-numeric}}%
535       }%
536     }%
537 }%
538 {%
539   \csdef{date\CurrentTrackedDialect}{%
540     \DTMifcaseregional
541     }% do nothing
542     {\DTMsetstyle{german}}%
543     {\DTMsetstyle{german-numeric}}%
544   }%

```

545 }%

5 Regional Variations

5.1 German (de-DE): `datetime2-de-DE.ldf`

Identify Module.

```
546 \ProvidesDateTimeModule{de-DE}[2019/12/13 v3.0]
```

Require the base German module.

```
547 \RequireDateTimeModule{german-base}
```

Allow the user to configure the de-DE and de-DE-numeric styles. The package wide separators such as `\dtm@datetimesep` are not used in case other date formats are also required.

`\DTMdeDEdowdaysep` The separator between weekday and day.

```
548 \newcommand*{\DTMdeDEdowdaysep}{, \space}
```

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

```
549 \newcommand*{\DTMdeDEdaymonthsep}{.\DTMtexorpdfstring{\protect~}{\space}}
```

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

```
550 \newcommand*{\DTMdeDEmonthyearsep}{\space}
```

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

```
551 \newcommand*{\DTMdeDEdatetimesep}{, \space}
```

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

```
552 \newcommand*{\DTMdeDEtimezonesep}{\space}
```

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

```
553 \newcommand*{\DTMdeDEdatesep}{.}
```

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

```
554 \newcommand*{\DTMdeDEtimesep}{:}
```

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

```
555 \DTMdefkey{de-DE}{dowdaysep}{\renewcommand*{\DTMdeDEdowdaysep}{#1}}
```

```
556 \DTMdefkey{de-DE}{daymonthsep}{\renewcommand*{\DTMdeDEdaymonthsep}{#1}}
```

```
557 \DTMdefkey{de-DE}{monthyearsep}{\renewcommand*{\DTMdeDEmonthyearsep}{#1}}
```

```
558 \DTMdefkey{de-DE}{datetimesep}{\renewcommand*{\DTMdeDEdatetimesep}{#1}}
```

```
559 \DTMdefkey{de-DE}{timezonesep}{\renewcommand*{\DTMdeDEtimezonesep}{#1}}
```

```
560 \DTMdefkey{de-DE}{datesep}{\renewcommand*{\DTMdeDEdatesep}{#1}}
```

```
561 \DTMdefkey{de-DE}{timesep}{\renewcommand*{\DTMdeDEtimesep}{#1}}
```

Define a boolean key that can switch between full and abbreviated formats for the month and day of week names.

```
562 \DTMdefboolkey{de-DE}{abbr}[true]{} 
```

The default is to show the full names.

```
563 \DTMsetbool{de-DE}{abbr}{false}
```

Define a boolean key that determines if the time zone mappings should be used.

```
564 \DTMdefboolkey{de-DE}{mapzone}[true]{}  
The default is to use mappings.
```

```
565 \DTMsetbool{de-DE}{mapzone}{true}
```

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

```
566 \DTMdefboolkey{de-DE}{showdayofmonth}[true]{}  
The default is to show the day of month.
```

```
567 \DTMsetbool{de-DE}{showdayofmonth}{true}
```

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

```
568 \DTMdefboolkey{de-DE}{showyear}[true]{}  
The default is to show the year.
```

```
569 \DTMsetbool{de-DE}{showyear}{true}
```

Define the de-DE style.

```
570 \DTMnewstyle
```

```
571 {de-DE}% label
```

```
572 {% date style
```

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

```
574 \ifDTMshowdown
```

```
575 \ifnum##4>-1
```

```
576 \DTMifbool{de-DE}{abbr}%
```

```
577 {\DTMgermanshortweekdayname{##4}}%
```

```
578 {\DTMgermanweekdayname{##4}}%
```

```
579 \DTMdeDEdowdaysep
```

```
580 \fi
```

```
581 \fi
```

```
582 %
```

```
583 \DTMifbool{de-DE}{showdayofmonth}%
```

```
584 {\DTMgermanordinal{##3}\DTMdeDEdaymonthsep}%
```

```
585 {}%
```

```
586 %
```

```
587 \DTMifbool{de-DE}{abbr}%
```

```
588 {\DTMgermanshortmonthname{##2}}%
```

```
589 {\DTMgermanmonthname{##2}}%
```

```
590 %
```

```
591 \DTMifbool{de-DE}{showyear}%
```

```
592 {%
```

```
593 \DTMdeDEmonthyearsep%
```

```
594 \number##1 % space intended
```

```
595 }%
```

```
596 {}%
```

```
597 }%
```

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

```
599 \ifDTMshowdown
```

```
600 \ifnum##4>-1
```

```
601 \DTMifbool{de-DE}{abbr}%
```

```
602 {\DTMgermanshortweekdayname{##4}}%
```

```
603 {\DTMgermanweekdayname{##4}}%
```

```
604 \DTMdeDEdowdaysep
```

```
605 \fi
```

```
606 \fi
```

```
607 %
```

```
608 \DTMifbool{de-DE}{showdayofmonth}%
```

```

609     {\DTMgermanordinal{##3}\DTMdeDEdaymonthsep}%
610     }%
611     %
612     \DTMifbool{de-DE}{abbr}%
613     {\DTMgermanshortmonthname{##2}}%
614     {\DTMgermanmonthname{##2}}%
615     %
616     \DTMifbool{de-DE}{showyear}%
617     {%
618         \DTMdeDEmonthyearsep%
619         \number##1 % space intended
620     }%
621     }%
622 }
623 }%
624 {% time style (use default)
625 \renewcommand*\DTMdisplaytime[3]{%
626     \DTMtwodigits{##1}%
627     \DTMdeDEtimesep\DTMtwodigits{##2}%
628     \ifDTMshowseconds\DTMdeDEtimesep\DTMtwodigits{##3}\fi
629 }%
630 }%
631 {% zone style
632 \DTMresetzones
633 \DTMgermanzonemaps
634 \renewcommand*\DTMdisplayzone[2]{%
635     \DTMifbool{de-DE}{mapzone}%
636     {\DTMusezonemapordefault{##1}{##2}}%
637     {%
638         \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
639         \ifDTMshowzoneminutes\DTMdeDEtimesep\DTMtwodigits{##2}\fi
640     }%
641 }%
642 }%
643 {% full style
644 \renewcommand*\DTMdisplay[9]{%
645     \ifDTMshowdate
646         \DTMdisplaydate{##1}{##2}{##3}{##4}%
647         \DTMdeDEdatetimesep
648         \fi
649         \DTMdisplaytime{##5}{##6}{##7}%
650         \ifDTMshowzone
651             \DTMdeDEtimezonesep
652             \DTMdisplayzone{##8}{##9}%
653         \fi
654     }%
655 \renewcommand*\DTMdisplay[9]{%
656     \ifDTMshowdate
657         \DTMdisplaydate{##1}{##2}{##3}{##4}%
658         \DTMdeDEdatetimesep
659         \fi
660         \DTMdisplaytime{##5}{##6}{##7}%
661         \ifDTMshowzone
662             \DTMdeDEtimezonesep
663             \DTMdisplayzone{##8}{##9}%
664         \fi

```

```

665 }%
666 }%

Define the corresponding numeric style.
667 \DTMnewstyle
668 {de-DE-numeric}% label
669 {% date style
670 \renewcommand*\DTMdisplaydate[4]{%
671 \ifDTMshowdow
672 \ifnum##4>-1
673 \DTMifbool{de-DE}{abbr}%
674 {\DTMgermanshortweekdayname{##4}}%
675 {\DTMgermanweekdayname{##4}}%
676 \DTMdeDEdowdaysep
677 \fi
678 \fi
679 %
680 \DTMifbool{de-DE}{showdayofmonth}%
681 {%
682 \DTMtwodigits{##3}%
683 \DTMdeDEdatesep
684 }%
685 }%
686 \DTMtwodigits{##2}%
687 \DTMdeDEdatesep%
688 \DTMifbool{de-DE}{showyear}%
689 {%
690 \DTMifbool{de-DE}{abbr}%
691 {\DTMtwodigits{##1}}%
692 {\number##1 }% space intended
693 }%
694 }%
695 }%
696 \renewcommand*\DTMdisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
697 }%
698 {% time style
699 \renewcommand*\DTMdisplaytime[3]{%
700 \DTMtwodigits{##1}%
701 \DTMdeDEtimesep\DTMtwodigits{##2}%
702 \ifDTMshowseconds\DTMdeDEtimesep\DTMtwodigits{##3}\fi
703 }%
704 }%
705 {% zone style
706 \DTMresetzones
707 \DTMgermanzonemaps
708 \renewcommand*\DTMdisplayzone}[2]{%
709 \DTMifbool{de-DE}{mapzone}%
710 {\DTMusezonemapordefault{##1}{##2}}%
711 {%
712 \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
713 \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwodigits{##2}\fi
714 }%
715 }%
716 }%
717 {% full style
718 \renewcommand*\DTMdisplay}[9]{%

```

```

719 \ifDTMshowdate
720 \DTMdisplaydate{##1}{##2}{##3}{##4}%
721 \DTMdeDEdatetimesep
722 \fi
723 \DTMdisplaytime{##5}{##6}{##7}%
724 \ifDTMshowzone
725 \DTMdeDEtimezonesep
726 \DTMdisplayzone{##8}{##9}%
727 \fi
728 }%
729 \renewcommand*{\DTMdisplay}{\DTMdisplay}%
730 }

```

Switch the style according to the user regional setting.

```

731 \DTMifcaseregional
732 {}% do nothing
733 {\DTMsetstyle{de-DE}}%
734 {\DTMsetstyle{de-DE-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.)

```

735 \ifcsundef{date\CurrentTrackedDialect}
736 {%
737 \ifundef\dategerman
738 {}% do nothing
739 {%
740 \def\dategerman{%
741 \DTMifcaseregional
742 {}% do nothing
743 {\DTMsetstyle{de-DE}}%
744 {\DTMsetstyle{de-DE-numeric}}%
745 }%
746 }%
747 }%
748 {%
749 \csdef{date\CurrentTrackedDialect}{%
750 \DTMifcaseregional
751 {}% do nothing
752 {\DTMsetstyle{de-DE}}%
753 {\DTMsetstyle{de-DE-numeric}}
754 }%
755 }%

```

5.2 Austrian German (de-AT): `datetime2-de-AT.ldf`

Identify Module.

```
756 \ProvidesDateTimeModule{de-AT}[2019/12/13 v3.0]
```

Require the base German module.

```
757 \RequireDateTimeModule{german-base}
```

Allow the to configure the `de-AT` and `de-AT-numeric` styles. The package wide separators such as `\dtm@datetimesep` are not used in case other date formats are also required.

```

\DTMdeATdowdaysep The separator between weekday and day
758 \newcommand*{\DTMdeATdowdaysep}{, \space}

```

`\DTMdeATdaymonthsep` The separator between the day and month for the text format.
759 `\newcommand*{\DTMdeATdaymonthsep}{.\DTMtexorpdfstring{\protect~}{\space}}`

`\DTMdeATmonthyearsep` The separator between the month and year for the text format.
760 `\newcommand*{\DTMdeATmonthyearsep}{\space}`

`\DTMdeATdatetimesep` The separator between the date and time blocks in the full format (either text or numeric).
761 `\newcommand*{\DTMdeATdatetimesep}{,\space}`

`\DTMdeATtimezonesep` The separator between the time and zone blocks in the full format (either text or numeric).
762 `\newcommand*{\DTMdeATtimezonesep}{\space}`

`\DTMdeATdatesep` The separator for the numeric date format.
763 `\newcommand*{\DTMdeATdatesep}{.}`

`\DTMdeATtimesep` The separator for the numeric time format.
764 `\newcommand*{\DTMdeATtimesep}{:}`

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

765 `\DTMdefkey{de-AT}{dowdaysep}{\renewcommand*{\DTMdeATdowdaysep}{#1}}`
766 `\DTMdefkey{de-AT}{daymonthsep}{\renewcommand*{\DTMdeATdaymonthsep}{#1}}`
767 `\DTMdefkey{de-AT}{monthyearsep}{\renewcommand*{\DTMdeATmonthyearsep}{#1}}`
768 `\DTMdefkey{de-AT}{datetimesep}{\renewcommand*{\DTMdeATdatetimesep}{#1}}`
769 `\DTMdefkey{de-AT}{timezonesep}{\renewcommand*{\DTMdeATtimezonesep}{#1}}`
770 `\DTMdefkey{de-AT}{datesep}{\renewcommand*{\DTMdeATdatesep}{#1}}`
771 `\DTMdefkey{de-AT}{timesep}{\renewcommand*{\DTMdeATtimesep}{#1}}`

Define a boolean key that can switch between full and abbreviated formats for the month and day of week names.

772 `\DTMdefboolkey{de-AT}{abbr}[true]{}{}`

The default is to show the full names.

773 `\DTMsetbool{de-AT}{abbr}{false}`

Define a boolean key that determines if the time zone mappings should be used.

774 `\DTMdefboolkey{de-AT}{mapzone}[true]{}{}`

The default is to use mappings.

775 `\DTMsetbool{de-AT}{mapzone}{true}`

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

776 `\DTMdefboolkey{de-AT}{showdayofmonth}[true]{}{}`

The default is to show the day of month.

777 `\DTMsetbool{de-AT}{showdayofmonth}{true}`

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

778 `\DTMdefboolkey{de-AT}{showyear}[true]{}{}`

The default is to show the year.

779 `\DTMsetbool{de-AT}{showyear}{true}`

Define the de-AT style.

```
780 \DTMnewstyle
781 {de-AT}% label
782 {% date style
783   \renewcommand*\DTMdisplaydate[4]{%
784     \ifDTMshowdow
785       \ifnum##4>-1
786         \DTMifbool{de-AT}{abbr}%
787         {\DTMgermanshortweekdayname{##4}}%
788         {\DTMgermanweekdayname{##4}}%
789         \DTMdeATdowdaysep
790       \fi
791     \fi
792     %
793     \DTMifbool{de-AT}{showdayofmonth}%
794     {\DTMgermanordinal{##3}\DTMdeATdaymonthsep}%
795     }%
796     %
797     \DTMifbool{de-AT}{abbr}%
798     {\DTMdeATshortmonthname{##2}}%
799     {\DTMdeATmonthname{##2}}%
800     %
801     \DTMifbool{de-AT}{showyear}%
802     {%
803       \DTMdeATmonthyearsep%
804       \number##1 % space intended
805     }%
806     }%
807   }%
808 \renewcommand*\DTMdisplaydate[4]{%
809   \ifDTMshowdow
810     \ifnum##4>-1
811       \DTMifbool{de-AT}{abbr}%
812       {\DTMgermanshortweekdayname{##4}}%
813       {\DTMgermanweekdayname{##4}}%
814       \DTMdeATdowdaysep
815     \fi
816   \fi
817   %
818   \DTMifbool{de-AT}{showdayofmonth}%
819   {\DTMgermanordinal{##3}\DTMdeATdaymonthsep}%
820   }%
821   %
822   \DTMifbool{de-AT}{abbr}%
823   {\DTMdeATshortmonthname{##2}}%
824   {\DTMdeATmonthname{##2}}%
825   %
826   \DTMifbool{de-AT}{showyear}%
827   {%
828     \DTMdeATmonthyearsep%
829     \number##1 % space intended
830   }%
831   }%
832 }%
833 }%
834 {% time style (use default)
```

```

835 \renewcommand*\DTMdisplaytime[3]{%
836   \DTMtwodigits{##1}%
837   \DTMdeATtimesep\DTMtwodigits{##2}%
838   \ifDTMshowseconds\DTMdeATtimesep\DTMtwodigits{##3}\fi
839 }%
840 }%
841 {% zone style
842   \DTMresetzones
843   \DTMgermanzonemaps
844   \renewcommand*\DTMdisplayzone}[2]{%
845     \DTMifbool{de-AT}{mapzone}%
846     {\DTMusedzonemapordefault{##1}{##2}}%
847     {%
848       \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
849       \ifDTMshowzoneminutes\DTMdeATtimesep\DTMtwodigits{##2}\fi
850     }%
851   }%
852 }%
853 {% full style
854   \renewcommand*\DTMdisplay}[9]{%
855     \ifDTMshowdate
856       \DTMdisplaydate{##1}{##2}{##3}{##4}%
857       \DTMdeATdatetimesep
858     \fi
859     \DTMdisplaytime{##5}{##6}{##7}%
860     \ifDTMshowzone
861       \DTMdeATtimezonesep
862       \DTMdisplayzone{##8}{##9}%
863     \fi
864   }%
865   \renewcommand*\DTMdisplay}[9]{%
866     \ifDTMshowdate
867       \DTMdisplaydate{##1}{##2}{##3}{##4}%
868       \DTMdeATdatetimesep
869     \fi
870     \DTMdisplaytime{##5}{##6}{##7}%
871     \ifDTMshowzone
872       \DTMdeATtimezonesep
873       \DTMdisplayzone{##8}{##9}%
874     \fi
875   }%
876 }%

```

Define the corresponding numeric style.

```

877 \DTMnewstyle
878 {de-AT-numeric}% label
879 {% date style
880   \renewcommand*\DTMdisplaydate[4]{%
881     \ifDTMshowdow
882       \ifnum##4>-1
883         \DTMifbool{de-AT}{abbr}%
884         {\DTMgermanshortweekdayname{##4}}%
885         {\DTMgermanweekdayname{##4}}%
886         \DTMdeATdowdaysep
887       \fi
888     \fi

```

```

889 %
890 \DTMifbool{de-AT}{showdayofmonth}%
891 {%
892   \DTMtwodigits{##3}%
893   \DTMdeATdatesep
894 }%
895 {%
896   \DTMtwodigits{##2}%
897   \DTMdeATdatesep%
898   \DTMifbool{de-AT}{showyear}%
899   {%
900     \DTMifbool{de-AT}{abbr}%
901     {\DTMtwodigits{##1}}%
902     {\number##1 }% space intended
903   }%
904 }%
905 }%
906 \renewcommand*\DTMdisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
907 }%
908 {% time style
909   \renewcommand*\DTMdisplaytime[3]{%
910     \DTMtwodigits{##1}%
911     \DTMdeATtimesep\DTMtwodigits{##2}%
912     \ifDTMshowseconds\DTMdeATtimesep\DTMtwodigits{##3}\fi
913   }%
914 }%
915 {% zone style
916   \DTMresetzones
917   \DTMgermanzonemaps
918   \renewcommand*\DTMdisplayzone}[2]{%
919     \DTMifbool{de-AT}{mapzone}%
920     {\DTMusezonemapordefault{##1}{##2}}%
921     {%
922       \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
923       \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwodigits{##2}\fi
924     }%
925   }%
926 }%
927 {% full style
928   \renewcommand*\DTMdisplay}[9]{%
929     \ifDTMshowdate
930       \DTMdisplaydate{##1}{##2}{##3}{##4}%
931       \DTMdeATdatetimesep
932     \fi
933     \DTMdisplaytime{##5}{##6}{##7}%
934     \ifDTMshowzone
935       \DTMdeATtimezonesep
936       \DTMdisplayzone{##8}{##9}%
937     \fi
938   }%
939   \renewcommand*\DTMdisplay}{\DTMdisplay}%
940 }

```

Switch the style according to the useregional setting.

```

941 \DTMifcaseregional
942 {% do nothing

```

```

943 {\DTMsetstyle{de-AT}}%
944 {\DTMsetstyle{de-AT-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.)
945 \ifcsundef{date\CurrentTrackedDialect}
946 {%
947   \ifundef\dategerman
948   }% do nothing
949   {%
950     \def\dategerman{%
951       \DTMifcaseregional
952       }% do nothing
953       {\DTMsetstyle{de-AT}}%
954       {\DTMsetstyle{de-AT-numeric}}%
955     }%
956   }%
957 }%
958 {%
959   \csdef{date\CurrentTrackedDialect}{%
960     \DTMifcaseregional
961     }% do nothing
962     {\DTMsetstyle{de-AT}}%
963     {\DTMsetstyle{de-AT-numeric}}%
964   }%
965 }%

```

5.3 Swiss German (de-CH): `datetime2-de-CH.lfd`

Identify Module.

```
966 \ProvidesDateTimeModule{de-CH}[2019/12/13 v3.0]
```

Require the base German module

```
967 \RequireDateTimeModule{german-base}
```

Allow the user to configure the `de-CH` and `de-CH-numeric` styles. The package wide separators such as `\dtm@datetimesep` are not used in case other date formats are also required.

`\DTMdeCHdowdaysep` The separator between weekday and day

```
968 \newcommand*{\DTMdeCHdowdaysep}{, \space}
```

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

```
969 \newcommand*{\DTMdeCHdaymonthsep}{.\DTMtexorpdfstring{\protect~}{\space}}
```

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

```
970 \newcommand*{\DTMdeCHmonthyearsep}{\space}
```

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

```
971 \newcommand*{\DTMdeCHdatetimesep}{, \space}
```

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

```
972 \newcommand*{\DTMdeCHtimezonesep}{\space}
```

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

```
973 \newcommand*\DTMdeCHdatesep{. }
```

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

```
974 \newcommand*\DTMdeCHtimesep{. }
```

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

```
975 \DTMdefkey{de-CH}{dowdaysep}{\renewcommand*\DTMdeCHdowdaysep}{#1}}
```

```
976 \DTMdefkey{de-CH}{daymonthsep}{\renewcommand*\DTMdeCHdaymonthsep}{#1}}
```

```
977 \DTMdefkey{de-CH}{monthyearsep}{\renewcommand*\DTMdeCHmonthyearsep}{#1}}
```

```
978 \DTMdefkey{de-CH}{datetimesep}{\renewcommand*\DTMdeCHdatetimesep}{#1}}
```

```
979 \DTMdefkey{de-CH}{timezonesep}{\renewcommand*\DTMdeCHtimezonesep}{#1}}
```

```
980 \DTMdefkey{de-CH}{datesep}{\renewcommand*\DTMdeCHdatesep}{#1}}
```

```
981 \DTMdefkey{de-CH}{timesep}{\renewcommand*\DTMdeCHtimesep}{#1}}
```

Define a boolean key that can switch between full and abbreviated formats for the month and day of week names.

```
982 \DTMdefboolkey{de-CH}{abbr}[true]{} 
```

The default is to show the full name.

```
983 \DTMsetbool{de-CH}{abbr}{false}
```

Define a boolean key that determines if the time zone mappings should be used.

```
984 \DTMdefboolkey{de-CH}{mapzone}[true]{} 
```

The default is to use mappings.

```
985 \DTMsetbool{de-CH}{mapzone}{true}
```

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

```
986 \DTMdefboolkey{de-CH}{showdayofmonth}[true]{} 
```

The default is to show the day of month.

```
987 \DTMsetbool{de-CH}{showdayofmonth}{true}
```

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

```
988 \DTMdefboolkey{de-CH}{showyear}[true]{} 
```

The default is to show the year.

```
989 \DTMsetbool{de-CH}{showyear}{true}
```

Define the de-CH style.

```
990 \DTMnewstyle
```

```
991 {de-CH}% label
```

```
992 {% date style
```

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

```
994 \ifDTMshowdow
```

```
995 \ifnum##4>-1
```

```
996 \DTMifbool{de-CH}{abbr}%
```

```
997 {\DTMgermanshortweekdayname{##4}}%
```

```
998 {\DTMgermanweekdayname{##4}}%
```

```
999 \DTMdeCHdowdaysep
```

```
1000 \fi
```

```
1001 \fi
```

```
1002 %
```

```
1003 \DTMifbool{de-CH}{showdayofmonth}%
```

```
1004 {\DTMgermanordinal{##3}\DTMdeCHdaymonthsep}%
```

```
1005 {}%
```

```
1006 %
```

```
1007 \DTMifbool{de-CH}{abbr}%
```

```

1008   {\DTMdeCHshortmonthname{##2}}%
1009   {\DTMgermanmonthname{##2}}%
1010   %
1011   \DTMifbool{de-CH}{showyear}%
1012   {%
1013     \DTMdeCHmonthyearsep%
1014     \number##1 % space intended
1015   }%
1016   }%
1017 }%
1018 \renewcommand*\DTMdisplaydate[4]{%
1019   \ifDTMshowdow
1020     \ifnum##4>-1
1021       \DTMifbool{de-CH}{abbr}%
1022       {\DTMgermanshortweekdayname{##4}}%
1023       {\DTMgermanweekdayname{##4}}%
1024       \DTMdeCHdowdaysep
1025     \fi
1026   \fi
1027   %
1028   \DTMifbool{de-CH}{showdayofmonth}%
1029   {\DTMgermanordinal{##3}\DTMdeCHdaymonthsep}%
1030   }%
1031   %
1032   \DTMifbool{de-CH}{abbr}%
1033   {\DTMdeCHshortmonthname{##2}}%
1034   {\DTMgermanmonthname{##2}}%
1035   %
1036   \DTMifbool{de-CH}{showyear}%
1037   {%
1038     \DTMdeCHmonthyearsep%
1039     \number##1 % space intended
1040   }%
1041   }%
1042 }
1043 }%
1044 {% time style (use default)
1045 \renewcommand*\DTMdisplaytime[3]{%
1046   \DTMtwodigits{##1}%
1047   \DTMdeCHtimesep\DTMtwodigits{##2}%
1048   \ifDTMshowseconds\DTMdeCHtimesep\DTMtwodigits{##3}\fi\space%
1049   Uhr%
1050 }%
1051 }%
1052 {% zone style
1053 \DTMresetzones
1054 \DTMgermanzonemaps
1055 \renewcommand*\DTMdisplayzone[2]{%
1056   \DTMifbool{de-CH}{mapzone}%
1057   {\DTMusezonemapordefault{##1}{##2}}%
1058   {%
1059     \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
1060     \ifDTMshowzoneminutes\DTMdeCHtimesep\DTMtwodigits{##2}\fi
1061   }%
1062 }%
1063 }%

```

```

1064 {% full style
1065 \renewcommand*\DTMdisplay}[9]{%
1066   \ifDTMshowdate
1067     \DTMdisplaydate{##1}{##2}{##3}{##4}%
1068     \DTMdeCHdatetimesep
1069   \fi
1070   \DTMdisplaytime{##5}{##6}{##7}%
1071   \ifDTMshowzone
1072     \DTMdeCHtimezonesep
1073     \DTMdisplayzone{##8}{##9}%
1074   \fi
1075 }%
1076 \renewcommand*\DTMDisplay}[9]{%
1077   \ifDTMshowdate
1078     \DTMdisplaydate{##1}{##2}{##3}{##4}%
1079     \DTMdeCHdatetimesep
1080   \fi
1081   \DTMdisplaytime{##5}{##6}{##7}%
1082   \ifDTMshowzone
1083     \DTMdeCHtimezonesep
1084     \DTMdisplayzone{##8}{##9}%
1085   \fi
1086 }%
1087 }%

```

Define the corresponding numeric style.

```

1088 \DTMnewstyle
1089 {de-CH-numeric}% label
1090 {% date style
1091 \renewcommand*\DTMdisplaydate[4]{%
1092   \ifDTMshowdow
1093     \ifnum##4>-1
1094       \DTMifbool{de-CH}{abbr}%
1095       {\DTMgermanshortweekdayname{##4}}%
1096       {\DTMgermanweekdayname{##4}}%
1097       \DTMdeCHdowdaysep
1098     \fi
1099   \fi
1100   %
1101   \DTMifbool{de-CH}{showdayofmonth}%
1102   {%
1103     \DTMtwodigits{##3}%
1104     \DTMdeCHdatesep
1105   }%
1106   {%
1107     \DTMtwodigits{##2}%
1108     \DTMdeCHdatesep%
1109     \DTMifbool{de-CH}{showyear}%
1110     {%
1111       \DTMifbool{de-CH}{abbr}%
1112       {\DTMtwodigits{##1}}%
1113       {\number##1 }% space intended
1114     }%
1115   }%
1116 }%
1117 \renewcommand*\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%

```

```

1118 }%
1119 {% time style
1120 \renewcommand*\DTMdisplaytime[3]{%
1121 \DTMtwodigits{##1}%
1122 \DTMdeCHtimesep\DTMtwodigits{##2}%
1123 \ifDTMshowseconds\DTMdeCHtimesep\DTMtwodigits{##3}\fi\space%
1124 Uhr%
1125 }%
1126 }%
1127 {% zone style
1128 \DTMresetzones
1129 \DTMgermanzonemaps
1130 \renewcommand*\DTMdisplayzone[2]{%
1131 \DTMifbool{de-CH}{mapzone}%
1132 {\DTMusedzonemapordefault{##1}{##2}}%
1133 {%
1134 \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
1135 \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwodigits{##2}\fi
1136 }%
1137 }%
1138 }%
1139 {% full style
1140 \renewcommand*\DTMdisplay[9]{%
1141 \ifDTMshowdate
1142 \DTMdisplaydate{##1}{##2}{##3}{##4}%
1143 \DTMdeCHdatetimesep
1144 \fi
1145 \DTMdisplaytime{##5}{##6}{##7}%
1146 \ifDTMshowzone
1147 \DTMdeCHtimezonesep
1148 \DTMdisplayzone{##8}{##9}%
1149 \fi
1150 }%
1151 \renewcommand*\DTMdisplay{\DTMdisplay}%
1152 }

```

Switch the style according to the useregional setting.

```

1153 \DTMifcaseregional
1154 {}% do nothing
1155 {\DTMsetstyle{de-CH}}%
1156 {\DTMsetstyle{de-CH-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.)

```

1157 \ifcsundef{date\CurrentTrackedDialect}
1158 {%
1159 \ifundef\dategerman
1160 {}% do nothing
1161 {%
1162 \def\dategerman{%
1163 \DTMifcaseregional
1164 {}% do nothing
1165 {\DTMsetstyle{de-CH}}%
1166 {\DTMsetstyle{de-CH-numeric}}%
1167 }%
1168 }%
1169 }%

```



```
1170 {%
1171   \csdef{date\CurrentTrackedDialect}{%
1172     \DTMifcaseregional
1173     }% do nothing
1174     {\DTMsetstyle{de-CH}}%
1175     {\DTMsetstyle{de-CH-numeric}}%
1176   }%
1177 }%
```

Change History

1.0	General: Initial release . . .	7, 8, 11, 14	month names	10, 13	
1.1	General: Fixed bug in \DTMdisplaydate	15	\DTMdeCHshortmonthname: Implemented Swiss short month names	10, 13	
1.2	\DTMgermanshortmonthname: Implemented short month names	9, 12	\DTMgermanshortmonthname: Fixed German short month names	9, 12	
	\DTMgermanshortweekdayname: Implemented short weekday names	7	\DTMgermanshortweekdayname: Fixed short weekday names	7	
	\DTMgermanzonemaps: Use German time zone names (ME[S]Z)	8	General: Added regional variant: Austrian German (de-AT)	23	
	General: Implemented day of week	15, 17	Added regional variant: German (de-DE)	19	
	Implemented short month names	15	Added regional variant: Swiss German (de-CH)	28	
	Implemented short weekday names	15	Fixed month-year-separator . . .	17	
2.0	\DTMdeATmonthname: Implemented Austrian month names	9, 12	2.1	General: Fixed spurious space when switching languages	15
	\DTMdeATshortmonthname: Implemented Austrian short		3.0	General: Change Austrian numeric style	26
				Load regionless style only when no regional variant is stated . . .	14

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