

German Module for the datetime2 Package

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

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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.

Currently there is a regionless style as well as variant styles (de-DE, de-AT and de-CH).

I'm only capable of German standard German. If I messed up anything in regards to format and/or spelling, or even a variant style with differences to the existing ones is missing, please create a feature request on GitHub or send me an e-mail.

I would be very grateful, if some examples and/or a list of the weekdays' and months' spelling is/are also provided.

Thanks to Jürgen Spitzmüller for his valuable advice while developing Version 2.0 of this module.

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1 Installation

Extract the language definition files first:

1. Run \TeX 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

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

or just use the precompiled documentation shipped with the source files.

In both cases, copy the files `datetime2-german.pdf` and `README.md` to `TEXMF/doc/latex/datetime2-contrib/datetime2-german/`

File I

The Documentation

2 Setting up datetime2 with a language module

2.1 Loading a language module

There are three different ways to load the required language module. See the `datetime2` documentation for further details

Variant 1:

Request the desired language module explicitly by passing the `german`, `de-DE`, `de-AT` or `de-CH` option to the `datetime2` package:

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

Variant 2:

Load `babel` and pass the `german`, `austrian` or `swissgerman` option to the `\documentclass` command (or to `babel` directly). If you now pass the `useregional` option to `datetime2`, the language module suitable to the one specified with `babel` is loaded:

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

Variant 3:

When using `polyglossia`, you should request the desired language module by passing the `german`, `de-DE`, `de-AT` or `de-CH` option to the `datetime2` package:

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

2.2 Other features

2.2.1 Showing the weekday

All language modules shipped with `datetime2-german` support showing the weekday. To enable this feature, pass the `showdow` option to the `datetime2` package. Please note, that this has no effect when using the `numeric` style of the `de-AT` variant.

2.2.2 Using abbreviated weekday and month names

To enable abbreviated weekday and month names, use `\DTMlangsetup[german]{abbr}`.
To disable them, use `\DTMlangsetup[german]{abbr=false}`.

In both cases, replace `german` with the used variant style (`de-DE`, `de-AT` or `de-CH`).
Please note, that this has no effect when using the numeric style of the `de-AT` variant.

3 Style examples

3.1 Regionless style

- Non-numeric style:
3. Oktober 2017, 12:51:04 MESZ
3. Okt. '17, 12:51:04 MESZ *abbreviated version*
Dienstag, 3. Oktober 2017, 12:51:04 MESZ *with showdow option*
Di, 3. Okt. '17, 12:51:04 MESZ *abbreviated version with showdow option*
- Numeric style:
03.10.2017, 12:51:04 MESZ
03.10.17, 12:51:04 MESZ *abbreviated version*
Dienstag, 03.10.2017, 12:51:04 MESZ *with showdow option*
Di, 03.10.17, 12:51:04 MESZ *abbreviated version with showdow option*

3.2 German style (de-DE)

- Non-numeric style:
3. Oktober 2017, 12:51:04 MESZ
3. Okt. '17, 12:51:04 MESZ *abbreviated version*
Dienstag, 3. Oktober 2017, 12:51:04 MESZ *with showdow option*
Di, 3. Okt. '17, 12:51:04 MESZ *abbreviated version with showdow option*
- Numeric style:
03.10.2017, 12:51:04 MESZ
03.10.17, 12:51:04 MESZ *abbreviated version*
Dienstag, 03.10.2017, 12:51:04 MESZ *with showdow option*
Di, 03.10.17, 12:51:04 MESZ *abbreviated version with showdow option*

3.3 Austrian style (de-AT)

- Non-numeric style:
3. Oktober 2017, 12:51:04 MESZ
3. Okt. 2017, 12:51:04 MESZ *abbreviated version*
Dienstag, 3. Oktober 2017, 12:51:04 MESZ *with showdow option*
Di, 3. Okt. 2017, 12:51:04 MESZ *abbreviated version with showdow option*
- Numeric style:
2017-10-03, 12:51:04 MESZ

3.4 Swiss style (de-CH)

- Non-numeric style:
3. Oktober 2017, 12.51.04 Uhr MESZ

3. Okt. 2017, 12.51.04 Uhr MESZ	<i>abbreviated version</i>
Dienstag, 3. Oktober 2017, 12.51.04 Uhr MESZ	<i>with showdow option</i>
Di, 3. Okt. 2017, 12.51.04 Uhr MESZ	<i>abbreviated version with showdow option</i>
• Numeric style:	
03.10.2017, 12.51.04 Uhr MESZ	
03.10.17, 12.51.04 Uhr MESZ	<i>abbreviated version</i>
Dienstag, 03.10.2017, 12.51.04 Uhr MESZ	<i>with showdow option</i>
Di, 03.10.17, 12.51.04 Uhr MESZ	<i>abbreviated version with showdow option</i>

4 Further customization of styles

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 the keys listed here are *defined* for all variant styles, it depends on `datetime2`'s setup and the requested styles whether they're *used*.

For more information about the `\DTMLangsetup` command see the documentation of the main `datetime2` package.

5 License

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File II

The Code

6 Basic German module

This module defines the “basic” German style, which contains the necessary vocab for all German localizations.

The date and time format is based on the de-DE variant.

6.1 Weekday and month names (UTF-8)

This file contains the settings that use UTF-8 characters. This file is loaded if Xe_{La}TeX or Lua_{La}TeX 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}[2017/11/13 v2.1]
```

```
\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 }
```

```
\DTMdeATmonthname Austrian German month names. Spot the difference :D
```

```
33 \newcommand*{\DTMdeATmonthname}[1]{%
```

```

34 \ifcase#1
35 \or
36 Jänner%
37 \or
38 Februar%
39 \or
40 März%
41 \or
42 April%
43 \or
44 Mai%
45 \or
46 Juni%
47 \or
48 Juli%
49 \or
50 August%
51 \or
52 September%
53 \or
54 Oktober%
55 \or
56 November%
57 \or
58 Dezember%
59 \fi
60 }

```

`\DTMgermanshortmonthname` Abbreviated German month names.

```

61 \newcommand*{\DTMgermanshortmonthname}[1]{%
62 \ifcase#1
63 \or
64 Jan.%
65 \or
66 Feb.%
67 \or
68 März%
69 \or
70 Apr.%
71 \or
72 Mai%
73 \or
74 Juni%
75 \or
76 Juli%
77 \or
78 Aug.%
79 \or
80 Sept.%
81 \or
82 Okt.%
83 \or
84 Nov.%
85 \or
86 Dez.%
87 \fi
88 }

```



```

\DTMdeATshortmonthname Abbreviated Austrian German month names.
89 \newcommand*{\DTMdeATshortmonthname}[1]{%
90   \ifcase#1
91   \or
92   Jän.%
93   \or
94   Feb.%
95   \or
96   März%
97   \or
98   Apr.%
99   \or
100  Mai%
101  \or
102  Juni%
103  \or
104  Juli%
105  \or
106  Aug.%
107  \or
108  Sept.%
109  \or
110  Okt.%
111  \or
112  Nov.%
113  \or
114  Dez.%
115  \fi
116 }

```

```

\DTMdeCHshortmonthname Abbreviated Swiss German month names.
117 \newcommand*{\DTMdeCHshortmonthname}[1]{%
118   \ifcase#1
119   \or
120   Jan.%
121   \or
122   Febr.%
123   \or
124   März%
125   \or
126   April%
127   \or
128   Mai%
129   \or
130   Juni%
131   \or
132   Juli%
133   \or
134   Aug.%
135   \or
136   Sept.%
137   \or
138   Okt.%
139   \or
140   Nov.%
141   \or

```

```

142 Dez.%
143 \fi
144 }

```

`\DTMgermanweekdayname` Provides weekday names

```

145 \newcommand*{\DTMgermanweekdayname}[1]{%
146   \ifcase#1
147   Montag%
148   \or
149   Dienstag%
150   \or
151   Mittwoch%
152   \or
153   Donnerstag%
154   \or
155   Freitag%
156   \or
157   Samstag%
158   \or
159   Sonntag%
160   \fi
161 }

```

`\DTMgermanshortweekdayname` Provides abbreviated weekday names

```

162 \newcommand*{\DTMgermanshortweekdayname}[1]{%
163   \ifcase#1
164   Mo%
165   \or
166   Di%
167   \or
168   Mi%
169   \or
170   Do%
171   \or
172   Fr%
173   \or
174   Sa%
175   \or
176   So%
177   \fi
178 }

```

6.2 Weekday and month names (ASCII)

This file contains the settings that use \TeX commands for non-ASCII characters. This should be input if neither $X_{\text{Y}}\TeX$ nor $\text{Lua}\TeX$ 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

```

179 \ProvidesDateTimeModule{german-ascii}[2017/11/13 v2.1]

```

`\DTMgermanordinal`

```

180 \newcommand*{\DTMgermanordinal}[1]{%
181   \number#1
182 }

```

```

\DTMgermanmonthname German month names.
183 \newcommand*{\DTMgermanmonthname}[1]{%
184 \ifcase#1
185 \or
186 Januar%
187 \or
188 Februar%
189 \or
190 M\protect\"arz%
191 \or
192 April%
193 \or
194 Mai%
195 \or
196 Juni%
197 \or
198 Juli%
199 \or
200 August%
201 \or
202 September%
203 \or
204 Oktober%
205 \or
206 November%
207 \or
208 Dezember%
209 \fi
210 }

```

```

\DTMdeATmonthname Austrian German month names.
211 \newcommand*{\DTMdeATmonthname}[1]{%
212 \ifcase#1
213 \or
214 J\protect\"anner%
215 \or
216 Februar%
217 \or
218 M\protect\"arz%
219 \or
220 April%
221 \or
222 Mai%
223 \or
224 Juni%
225 \or
226 Juli%
227 \or
228 August%
229 \or
230 September%
231 \or
232 Oktober%
233 \or
234 November%
235 \or

```

```
236 Dezember%
237 \fi
238 }
```

`\DTMgermanshortmonthname` Abbreviated German month names.

```
239 \newcommand*{\DTMgermanshortmonthname}[1]{%
240 \ifcase#1
241 \or
242 Jan.%
243 \or
244 Feb.%
245 \or
246 M\protect\"arz%
247 \or
248 Apr.%
249 \or
250 Mai%
251 \or
252 Juni%
253 \or
254 Juli%
255 \or
256 Aug.%
257 \or
258 Sept.%
259 \or
260 Okt.%
261 \or
262 Nov.%
263 \or
264 Dez.%
265 \fi
266 }
```

`\DTMdeATshortmonthname` Abbreviated Austrian German month names.

```
267 \newcommand*{\DTMdeATshortmonthname}[1]{%
268 \ifcase#1
269 \or
270 J\protect\"an.%
271 \or
272 Feb.%
273 \or
274 M\protect\"arz%
275 \or
276 Apr.%
277 \or
278 Mai%
279 \or
280 Juni%
281 \or
282 Juli%
283 \or
284 Aug.%
285 \or
286 Sept.%
287 \or
```

```
288 Okt.%
289 \or
290 Nov.%
291 \or
292 Dez.%
293 \fi
294 }
```

`\DTMdeCHshortmonthname` Abbreviated Swiss German month names.

```
295 \newcommand*{\DTMdeCHshortmonthname}[1]{%
296 \ifcase#1
297 \or
298 Jan.%
299 \or
300 Febr.%
301 \or
302 M\protect\"arz%
303 \or
304 April%
305 \or
306 Mai%
307 \or
308 Juni%
309 \or
310 Juli%
311 \or
312 Aug.%
313 \or
314 Sept.%
315 \or
316 Okt.%
317 \or
318 Nov.%
319 \or
320 Dez.%
321 \fi
322 }
```

`\DTMgermanweekdayname` Provides weekday names

```
323 \newcommand*{\DTMgermanweekdayname}[1]{%
324 \ifcase#1
325 Montag%
326 \or
327 Dienstag%
328 \or
329 Mittwoch%
330 \or
331 Donnerstag%
332 \or
333 Freitag%
334 \or
335 Samstag%
336 \or
337 Sonntag%
338 \fi
339 }
```

`\DTMgermanshortweekdayname` Provides abbreviated weekday names

```

340 \newcommand*{\DTMgermanshortweekdayname}[1]{%
341   \ifcase#1
342     Mo%
343   \or
344     Di%
345   \or
346     Mi%
347   \or
348     Do%
349   \or
350     Fr%
351   \or
352     Sa%
353   \or
354     So%
355   \fi
356 }

```

6.3 Basic German Module (`datetime2-german.1df`)

Identify Module

```
357 \ProvidesDateTimeModule{german}[2017/11/13 v2.1]
```

Need to find out if $X_{\text{T}}\text{E}_{\text{X}}$ or $\text{L}u\text{A}_{\text{T}}\text{E}_{\text{X}}$ are being used.

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

$X_{\text{T}}\text{E}_{\text{X}}$ and $\text{L}u\text{A}_{\text{T}}\text{E}_{\text{X}}$ natively support UTF-8, so load `german-utf8` if either of those engines are used otherwise load `german-ascii`.

```

359 \ifxetex
360   \RequireDateTimeModule{german-utf8}
361 \else
362   \ifluatex
363     \RequireDateTimeModule{german-utf8}
364   \else
365     \RequireDateTimeModule{german-ascii}
366   \fi
367 \fi

```

Define the german style.

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.

<code>\DTMgermandowdaysep</code>	The separator between weekday and day
	<pre>368 \newcommand*{\DTMgermandowdaysep}{, \space}</pre>
<code>\DTMgermandaymonthsep</code>	The separator between the day and month for the text format.
	<pre>369 \newcommand*{\DTMgermandaymonthsep}{.\DTMtexpdfstring{\protect~}{\space}}</pre>
<code>\DTMgermanmonthyearsep</code>	The separator between the month and year for the text format.
	<pre>370 \newcommand*{\DTMgermanmonthyearsep}{\space}</pre>
<code>\DTMgermandatetimesep</code>	The separator between the date and time blocks in the full format (either text or numeric).
	<pre>371 \newcommand*{\DTMgermandatetimesep}{, \space}</pre>
<code>\DTMgermantimezonesep</code>	The separator between the time and zone blocks in the full format (either text or numeric).
	<pre>372 \newcommand*{\DTMgermantimezonesep}{\space}</pre>

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

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

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

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

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

```
375 \DTMdefkey{german}{dowdaysep}{\renewcommand*\DTMgermandowdaysep}{#1}}
376 \DTMdefkey{german}{daymonthsep}{\renewcommand*\DTMgermandaymonthsep}{#1}}
377 \DTMdefkey{german}{monthyearsep}{\renewcommand*\DTMgermanmonthyearsep}{#1}}
378 \DTMdefkey{german}{datetimesep}{\renewcommand*\DTMgermandatetimesep}{#1}}
379 \DTMdefkey{german}{timezonesep}{\renewcommand*\DTMgermantimezonesep}{#1}}
380 \DTMdefkey{german}{datesep}{\renewcommand*\DTMgermandatesep}{#1}}
381 \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 in the text format.

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

The default is full name

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

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

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

The default is to use mappings.

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

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

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

The default is to show the day of month.

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

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

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

The default is to show the year.

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

Define the german style.

```
390 \DTMnewstyle
391 {german}% label
392 {% date style
393   \renewcommand*\DTMdisplaydate[4]{%
394     \ifDTMshowdow
395       \ifnum##4>-1
396         \DTMifbool{german}{abbr}%
397         {\DTMgermanshortweekdayname{##4}}%
398         {\DTMgermanweekdayname{##4}}%
399         \DTMgermandowdaysep
400     \fi
401   \fi
402   %
403   \DTMifbool{german}{showdayofmonth}%
404   {\DTMgermanordinal{##3}\DTMgermandaymonthsep}%
405   }%
406   %
407   \DTMifbool{german}{abbr}%
```

```

408     {\DTMgermanshortmonthname{##2}}%
409     {\DTMgermanmonthname{##2}}%
410     %
411     \DTMifbool{german}{showyear}%
412     {%
413         \DTMgermanmonthyearsep%
414         \DTMifbool{german}{abbr}%
415         {'\DTMtwdigits{##1}}%
416         {\number##1 }% space intended
417     }%
418     {}%
419 }%
420 \renewcommand*\DTMdisplaydate[4]{%
421     \ifDTMshowdow
422         \ifnum##4>-1
423             \DTMifbool{german}{abbr}%
424             {\DTMgermanshortweekdayname{##4}}%
425             {\DTMgermanweekdayname{##4}}%
426             \DTMgermandowdaysep
427         \fi
428     \fi
429     %
430     \DTMifbool{german}{showdayofmonth}%
431     {\DTMgermanordinal{##3}\DTMgermandaymonthsep}%
432     {}%
433     %
434     \DTMifbool{german}{abbr}%
435     {\DTMgermanshortmonthname{##2}}%
436     {\DTMgermanmonthname{##2}}%
437     %
438     \DTMifbool{german}{showyear}%
439     {%
440         \DTMgermanmonthyearsep%
441         \DTMifbool{german}{abbr}%
442         {'\DTMtwdigits{##1}}%
443         {\number##1 }% space intended
444     }%
445     {}%
446 }%
447 }%
448 {% time style (use default)
449     \renewcommand*\DTMdisplaytime[3]{%
450         \DTMtwdigits{##1}%
451         \DTMgermantimesep\DTMtwdigits{##2}%
452         \ifDTMshowseconds\DTMgermantimesep\DTMtwdigits{##3}\fi
453     }%
454 }%
455 {% zone style
456     \DTMresetzones
457     \DTMgermanzonemaps
458     \renewcommand*\DTMdisplayzone[2]{%
459         \DTMifbool{german}{mapzone}%
460         {\DTMusezonemapordefault{##1}{##2}}%
461     {%
462         \ifnum##1<0\else\fi\DTMtwdigits{##1}%
463         \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwdigits{##2}\fi

```



```

464 }%
465 }%
466 }%
467 {% full style
468 \renewcommand*\DTMdisplay}[9]{%
469 \ifDTMshowdate
470 \DTMdisplaydate{##1}{##2}{##3}{##4}%
471 \DTMgermandatetimesep
472 \fi
473 \DTMdisplaytime{##5}{##6}{##7}%
474 \ifDTMshowzone
475 \DTMgermantimezonesep
476 \DTMdisplayzone{##8}{##9}%
477 \fi
478 }%
479 \renewcommand*\DTMDisplay}[9]{%
480 \ifDTMshowdate
481 \DTMDisplaydate{##1}{##2}{##3}{##4}%
482 \DTMgermandatetimesep
483 \fi
484 \DTMdisplaytime{##5}{##6}{##7}%
485 \ifDTMshowzone
486 \DTMgermantimezonesep
487 \DTMdisplayzone{##8}{##9}%
488 \fi
489 }%
490 }%

```

Define numeric style.

```

491 \DTMnewstyle
492 {german-numeric}% label
493 {% date style
494 \renewcommand*\DTMdisplaydate[4]{%
495 \ifDTMshowdow
496 \ifnum##4>-1
497 \DTMifbool{german}{abbr}%
498 {\DTMgermanshortweekdayname{##4}}%
499 {\DTMgermanweekdayname{##4}}%
500 \DTMgermandowdaysep
501 \fi
502 \fi
503 %
504 \DTMifbool{german}{showdayofmonth}%
505 {%
506 \DTMtwodigits{##3}%
507 \DTMgermandatesep
508 }%
509 }%
510 \DTMtwodigits{##2}%
511 \DTMgermandatesep%
512 \DTMifbool{german}{showyear}%
513 {%
514 \DTMifbool{german}{abbr}%
515 {\DTMtwodigits{##1}}%
516 {\number##1 }% space intended
517 }%
518 }%

```

```

519 }%
520 \renewcommand*\DTMdisplaydate[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
521 }%
522 {% time style
523 \renewcommand*\DTMdisplaytime[3]{%
524 \DTMtwodigits{##1}%
525 \DTMgermantimesep\DTMtwodigits{##2}%
526 \ifDTMshowseconds\DTMgermantimesep\DTMtwodigits{##3}\fi
527 }%
528 }%
529 {% zone style
530 \DTMresetzones
531 \DTMgermanzonemaps
532 \renewcommand*\DTMdisplayzone[2]{%
533 \DTMifbool{german}{mapzone}%
534 {\DTMusedzonemapordefault{##1}{##2}}%
535 {%
536 \ifnum##1<0\else\fi\DTMtwodigits{##1}%
537 \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwodigits{##2}\fi
538 }%
539 }%
540 }%
541 {% full style
542 \renewcommand*\DTMdisplay[9]{%
543 \ifDTMshowdate
544 \DTMdisplaydate{##1}{##2}{##3}{##4}%
545 \DTMgermandatetimesep
546 \fi
547 \DTMdisplaytime{##5}{##6}{##7}%
548 \ifDTMshowzone
549 \DTMgermantimezonesep
550 \DTMdisplayzone{##8}{##9}%
551 \fi
552 }%
553 \renewcommand*\DTMdisplay{\DTMdisplay}%
554 }

```

`\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.

```

555 \newcommand*\DTMgermanzonemaps{%
556 \DTMdefzonemap{01}{00}{MEZ}%
557 \DTMdefzonemap{02}{00}{MESZ}%
558 }

```

Switch style according to the useregional setting.

```

559 \DTMifcaseregional
560 {}% do nothing
561 {\DTMsetstyle{german}}
562 {\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.)

```

563 \ifcsundef{date\CurrentTrackedDialect}
564 {%
565 \ifundef\dategerman
566 {}% do nothing
567 }%

```

```

568 {%
569   \def\dategerman{%
570     \DTMifcaseregional
571     {}% do nothing
572     {\DTMsetstyle{german}}%
573     {\DTMsetstyle{german-numeric}}%
574   }%
575 }%
576 }%
577 {%
578   \csdef{date\CurrentTrackedDialect}{%
579     \DTMifcaseregional
580     {}% do nothing
581     {\DTMsetstyle{german}}%
582     {\DTMsetstyle{german-numeric}}%
583   }%
584 }%

```

7 German localization (de-DE, datetime2-de-DE.1df)

Identify Module

```
585 \ProvidesDateTimeModule{de-DE}[2017/11/13 v2.1]
```

Require the basic German module

```
586 \RequireDateTimeModule{german}
```

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

- `\DTMdeDEdowdaysep` The separator between weekday and day
587 \newcommand*{\DTMdeDEdowdaysep}{, \space}
- `\DTMdeDEdaymonthsep` The separator between the day and month for the text format.
588 \newcommand*{\DTMdeDEdaymonthsep}{.\DTMtexorpdfstring{\protect~}{\space}}
- `\DTMdeDEmonthyearsep` The separator between the month and year for the text format.
589 \newcommand*{\DTMdeDEmonthyearsep}{\space}
- `\DTMdeDEdatetimesep` The separator between the date and time blocks in the full format (either text or numeric).
590 \newcommand*{\DTMdeDEdatetimesep}{, \space}
- `\DTMdeDEtimezonesep` The separator between the time and zone blocks in the full format (either text or numeric).
591 \newcommand*{\DTMdeDEtimezonesep}{\space}
- `\DTMdeDEdatesep` The separator for the numeric date format.
592 \newcommand*{\DTMdeDEdatesep}{.}
- `\DTMdeDEtimesep` The separator for the numeric time format.
593 \newcommand*{\DTMdeDEtimesep}{:}

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

```

594 \DTMdefkey{de-DE}{dowdaysep}{\renewcommand*{\DTMdeDEdowdaysep}{#1}}
595 \DTMdefkey{de-DE}{daymonthsep}{\renewcommand*{\DTMdeDEdaymonthsep}{#1}}
596 \DTMdefkey{de-DE}{monthyearsep}{\renewcommand*{\DTMdeDEmonthyearsep}{#1}}
597 \DTMdefkey{de-DE}{datetimesep}{\renewcommand*{\DTMdeDEdatetimesep}{#1}}

```

```

598 \DTMdefkey{de-DE}{timezonesep}{\renewcommand*\DTMdeDEtimezonesep}{#1}}
599 \DTMdefkey{de-DE}{datesep}{\renewcommand*\DTMdeDEdatesep}{#1}}
600 \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 in the text format.

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

```

The default is full name

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

```

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

```
603 \DTMdefboolkey{de-DE}{mapzone}[true]{}

```

The default is to use mappings.

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

```

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

```
605 \DTMdefboolkey{de-DE}{showdayofmonth}[true]{}

```

The default is to show the day of month.

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

```

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

```
607 \DTMdefboolkey{de-DE}{showyear}[true]{}

```

The default is to show the year.

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

```

Define the de-DE style

```

609 \DTMnewstyle
610 {de-DE}% label
611 {% date style
612   \renewcommand*\DTMdisplaydate[4]{%
613     \ifDTMshowdow
614       \ifnum##4>-1
615         \DTMifbool{de-DE}{abbr}%
616         {\DTMgermanshortweekdayname{##4}}%
617         {\DTMgermanweekdayname{##4}}%
618         \DTMdeDEdowdaysep
619       \fi
620     \fi
621     %
622     \DTMifbool{de-DE}{showdayofmonth}%
623     {\DTMgermanordinal{##3}\DTMdeDEdaymonthsep}%
624     }%
625     %
626     \DTMifbool{de-DE}{abbr}%
627     {\DTMgermanshortmonthname{##2}}%
628     {\DTMgermanmonthname{##2}}%
629     %
630     \DTMifbool{de-DE}{showyear}%
631     {%
632       \DTMdeDEmonthyearsep%
633       \DTMifbool{de-DE}{abbr}%
634       {'\DTMtwodigits{##1}}%
635       {\number##1 }% space intended
636     }%
637   }%
638 }%

```

```

639 \renewcommand*\DTMdisplaydate[4]{%
640   \ifDTMshowdow
641     \ifnum##4>-1
642       \DTMifbool{de-DE}{abbr}%
643       {\DTMgermanshortweekdayname{##4}}%
644       {\DTMgermanweekdayname{##4}}%
645       \DTMdeDEdowdaysep
646     \fi
647   \fi
648   %
649   \DTMifbool{de-DE}{showdayofmonth}%
650   {\DTMgermanordinal{##3}\DTMdeDEdaymonthsep}%
651   }%
652   %
653   \DTMifbool{de-DE}{abbr}%
654   {\DTMgermanshortmonthname{##2}}%
655   {\DTMgermanmonthname{##2}}%
656   %
657   \DTMifbool{de-DE}{showyear}%
658   {%
659     \DTMdeDEmonthyearsep%
660     \DTMifbool{de-DE}{abbr}%
661     {'\DTMtwodigits{##1}}%
662     {\number##1 }% space intended
663   }%
664   }%
665 }
666 }%
667 {% time style (use default)
668 \renewcommand*\DTMdisplaytime[3]{%
669   \DTMtwodigits{##1}%
670   \DTMdeDEtimesep\DTMtwodigits{##2}%
671   \ifDTMshowseconds\DTMdeDEtimesep\DTMtwodigits{##3}\fi
672 }%
673 }%
674 {% zone style
675 \DTMresetzones
676 \DTMgermanzonemaps
677 \renewcommand*\DTMdisplayzone[2]{%
678   \DTMifbool{de-DE}{mapzone}%
679   {\DTMusezonemapordefault{##1}{##2}}%
680   {%
681     \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
682     \ifDTMshowzoneminutes\DTMdeDEtimesep\DTMtwodigits{##2}\fi
683   }%
684 }%
685 }%
686 {% full style
687 \renewcommand*\DTMdisplay[9]{%
688   \ifDTMshowdate
689     \DTMdisplaydate{##1}{##2}{##3}{##4}%
690     \DTMdeDEdatetimesep
691   \fi
692   \DTMdisplaytime{##5}{##6}{##7}%
693   \ifDTMshowzone
694     \DTMdeDEtimezonesep

```

```

695     \DTMdisplayzone{##8}{##9}%
696 \fi
697 }%
698 \renewcommand*\DTMdisplay}[9]{%
699     \ifDTMshowdate
700         \DTMdisplaydate{##1}{##2}{##3}{##4}%
701         \DTMdeDEdatetimesep
702     \fi
703     \DTMdisplaytime{##5}{##6}{##7}%
704     \ifDTMshowzone
705         \DTMdeDEtimezonesep
706         \DTMdisplayzone{##8}{##9}%
707     \fi
708 }%
709 }%

Define numeric style.
710 \DTMnewstyle
711 {de-DE-numeric}% label
712 {% date style
713     \renewcommand*\DTMdisplaydate[4]{%
714         \ifDTMshowdow
715             \ifnum##4>-1
716                 \DTMifbool{de-DE}{abbr}%
717                 {\DTMgermanshortweekdayname{##4}}%
718                 {\DTMgermanweekdayname{##4}}%
719                 \DTMdeDEdowdaysep
720             \fi
721         \fi
722         %
723         \DTMifbool{de-DE}{showdayofmonth}%
724         {%
725             \DTMtwodigits{##3}%
726             \DTMdeDEdatesep
727         }%
728     }%
729     \DTMtwodigits{##2}%
730     \DTMdeDEdatesep%
731     \DTMifbool{de-DE}{showyear}%
732     {%
733         \DTMifbool{de-DE}{abbr}%
734         {\DTMtwodigits{##1}}%
735         {\number##1 }% space intended
736     }%
737 }%
738 }%
739 \renewcommand*\DTMdisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
740 }%
741 {% time style
742     \renewcommand*\DTMdisplaytime[3]{%
743         \DTMtwodigits{##1}%
744         \DTMdeDEtimesep\DTMtwodigits{##2}%
745         \ifDTMshowseconds\DTMdeDEtimesep\DTMtwodigits{##3}\fi
746     }%
747 }%
748 {% zone style
749     \DTMresetzones

```

```

750 \DTMgermanzonemaps
751 \renewcommand*{\DTMdisplayzone}[2]{%
752   \DTMifbool{de-DE}{mapzone}%
753   {\DTMuseumaportdefault{##1}{##2}}%
754   {%
755     \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
756     \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwodigits{##2}\fi
757   }%
758 }%
759 }%
760 {% full style
761 \renewcommand*{\DTMdisplay}[9]{%
762   \ifDTMshowdate
763     \DTMdisplaydate{##1}{##2}{##3}{##4}%
764     \DTMdeDEdatetimesep
765     \fi
766     \DTMdisplaytime{##5}{##6}{##7}%
767     \ifDTMshowzone
768       \DTMdeDEtimezonesep
769       \DTMdisplayzone{##8}{##9}%
770     \fi
771   }%
772 \renewcommand*{\DTMDisplay}{\DTMdisplay}%
773 }

```

Switch style according to the userregional setting.

```

774 \DTMifcaseregional
775 {}% do nothing
776 {\DTMsetstyle{de-DE}}
777 {\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.)

```

778 \ifcsundef{date\CurrentTrackedDialect}
779 {%
780   \ifundef\dategerman
781   {}% do nothing
782   }%
783   {%
784     \def\dategerman{%
785       \DTMifcaseregional
786       {}% do nothing
787       {\DTMsetstyle{german}}%
788       {\DTMsetstyle{german-numeric}}%
789     }%
790   }%
791 }%
792 {%
793   \csdef{date\CurrentTrackedDialect}{%
794     \DTMifcaseregional
795     {}% do nothing
796     {\DTMsetstyle{de-DE}}%
797     {\DTMsetstyle{de-DE-numeric}}
798   }%
799 }%

```

8 Austrian German localization (de-AT, datetime2-de-AT.1df)

Identify Module

800 \ProvidesDateTimeModule{de-AT}[2017/11/13 v2.1]

Require the basic German module

801 \RequireDateTimeModule{german}

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

<code>\DTMdeATdowdaysep</code>	The separator between weekday and day 802 \newcommand*{\DTMdeATdowdaysep}{, \space}
<code>\DTMdeATdaymonthsep</code>	The separator between the day and month for the text format. 803 \newcommand*{\DTMdeATdaymonthsep}{.\DTMtexorpdfstring{\protect~}{\space}}
<code>\DTMdeATmonthyearsep</code>	The separator between the month and year for the text format. 804 \newcommand*{\DTMdeATmonthyearsep}{\space}
<code>\DTMdeATdatetimesep</code>	The separator between the date and time blocks in the full format (either text or numeric). 805 \newcommand*{\DTMdeATdatetimesep}{, \space}
<code>\DTMdeATtimezonesep</code>	The separator between the time and zone blocks in the full format (either text or numeric). 806 \newcommand*{\DTMdeATtimezonesep}{\space}
<code>\DTMdeATdatesep</code>	The separator for the numeric date format. 807 \newcommand*{\DTMdeATdatesep}{-}
<code>\DTMdeATtimesep</code>	The separator for the numeric time format. 808 \newcommand*{\DTMdeATtimesep}{:}

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

```
809 \DTMdefkey{de-AT}{dowdaysep}{\renewcommand*{\DTMdeATdowdaysep}{#1}}
810 \DTMdefkey{de-AT}{daymonthsep}{\renewcommand*{\DTMdeATdaymonthsep}{#1}}
811 \DTMdefkey{de-AT}{monthyearsep}{\renewcommand*{\DTMdeATmonthyearsep}{#1}}
812 \DTMdefkey{de-AT}{datetimesep}{\renewcommand*{\DTMdeATdatetimesep}{#1}}
813 \DTMdefkey{de-AT}{timezonesep}{\renewcommand*{\DTMdeATtimezonesep}{#1}}
814 \DTMdefkey{de-AT}{datesep}{\renewcommand*{\DTMdeATdatesep}{#1}}
815 \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 in the text format.

```
816 \DTMdefbooleankey{de-AT}{abbr}[true]{}
```

The default is full name

```
817 \DTMsetboolean{de-AT}{abbr}{false}
```

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

```
818 \DTMdefbooleankey{de-AT}{mapzone}[true]{}
```

The default is to use mappings.

```
819 \DTMsetboolean{de-AT}{mapzone}{true}
```

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

```
820 \DTMdefbooleankey{de-AT}{showdayofmonth}[true]{}
```

The default is to show the day of month.

```
821 \DTMsetboolean{de-AT}{showdayofmonth}{true}
```


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

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

The default is to show the year.

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

Define the de-AT style

```
824 \DTMnewstyle
825 {de-AT}% label
826 {% date style
827   \renewcommand*\DTMdisplaydate[4]{%
828     \ifDTMshowdow
829       \ifnum##4>-1
830         \DTMifbool{de-AT}{abbr}%
831         {\DTMgermanshortweekdayname{##4}}%
832         {\DTMgermanweekdayname{##4}}%
833         \DTMdeATdowdaysep
834       \fi
835     \fi
836     %
837     \DTMifbool{de-AT}{showdayofmonth}%
838     {\DTMgermanordinal{##3}\DTMdeATdaymonthsep}%
839     }%
840     %
841     \DTMifbool{de-AT}{abbr}%
842     {\DTMdeATshortmonthname{##2}}%
843     {\DTMdeATmonthname{##2}}%
844     %
845     \DTMifbool{de-AT}{showyear}%
846     {%
847       \DTMdeATmonthyearsep%
848       \number##1 % space intended
849     }%
850   }%
851 }%
852 \renewcommand*\DTMdisplaydate[4]{%
853   \ifDTMshowdow
854     \ifnum##4>-1
855       \DTMifbool{de-AT}{abbr}%
856       {\DTMgermanshortweekdayname{##4}}%
857       {\DTMgermanweekdayname{##4}}%
858       \DTMdeATdowdaysep
859     \fi
860   \fi
861   %
862   \DTMifbool{de-AT}{showdayofmonth}%
863   {\DTMgermanordinal{##3}\DTMdeATdaymonthsep}%
864   }%
865   %
866   \DTMifbool{de-AT}{abbr}%
867   {\DTMdeATshortmonthname{##2}}%
868   {\DTMdeATmonthname{##2}}%
869   %
870   \DTMifbool{de-AT}{showyear}%
871   {%
872     \DTMdeATmonthyearsep%
873     \number##1 % space intended
```

```

874   }%
875   {}%
876   }%
877 }%
878 {% time style (use default)
879   \renewcommand*{\DTMdisplaytime[3]}{%
880     \DTMtwdigits{##1}%
881     \DTMdeATtimesep\DTMtwdigits{##2}%
882     \ifDTMshowseconds\DTMdeATtimesep\DTMtwdigits{##3}\fi
883   }%
884 }%
885 {% zone style
886   \DTMresetzones
887   \DTMgermanzonemaps
888   \renewcommand*{\DTMdisplayzone}[2]{%
889     \DTMifbool{de-AT}{mapzone}%
890     {\DTMusezonemapordefault{##1}{##2}}%
891     {%
892       \ifnum##1<0\else+\fi\DTMtwdigits{##1}%
893       \ifDTMshowzoneminutes\DTMdeATtimesep\DTMtwdigits{##2}\fi
894     }%
895   }%
896 }%
897 {% full style
898   \renewcommand*{\DTMdisplay}[9]{%
899     \ifDTMshowdate
900       \DTMdisplaydate{##1}{##2}{##3}{##4}%
901       \DTMdeATdatetimesep
902     \fi
903     \DTMdisplaytime{##5}{##6}{##7}%
904     \ifDTMshowzone
905       \DTMdeATtimezonesep
906       \DTMdisplayzone{##8}{##9}%
907     \fi
908   }%
909   \renewcommand*{\DTMDisplay}[9]{%
910     \ifDTMshowdate
911       \DTMDisplaydate{##1}{##2}{##3}{##4}%
912       \DTMdeATdatetimesep
913     \fi
914     \DTMdisplaytime{##5}{##6}{##7}%
915     \ifDTMshowzone
916       \DTMdeATtimezonesep
917       \DTMdisplayzone{##8}{##9}%
918     \fi
919   }%
920 }%

```

Define numeric style.

```

921 \DTMnewstyle
922 {de-AT-numeric}% label
923 {% date style
924   \renewcommand*{\DTMdisplaydate[4]}{%
925     \DTMifbool{de-AT}{showyear}%
926     {%
927       \number##1 % space intended
928       \DTMdeATdatesep%

```

```

929 }%
930 {}%
931 %
932 \DTMtwdigits{##2}%
933 %
934 \DTMifbool{de-AT}{showdayofmonth}%
935 {%
936     \DTMdeATdatesep%
937     \DTMtwdigits{##3}%
938 }%
939 {}%
940 }%
941 \renewcommand*\DTMdisplaydate[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
942 }%
943 {% time style
944 \renewcommand*\DTMdisplaytime[3]{%
945     \DTMtwdigits{##1}%
946     \DTMdeATtimesep\DTMtwdigits{##2}%
947     \ifDTMshowseconds\DTMdeATtimesep\DTMtwdigits{##3}\fi
948 }%
949 }%
950 {% zone style
951 \DTMresetzones
952 \DTMgermanzonemaps
953 \renewcommand*\DTMdisplayzone[2]{%
954     \DTMifbool{de-AT}{mapzone}%
955     {\DTMusedzonemapordefault{##1}{##2}}%
956     {%
957         \ifnum##1<0\else+\fi\DTMtwdigits{##1}%
958         \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwdigits{##2}\fi
959     }%
960 }%
961 }%
962 {% full style
963 \renewcommand*\DTMdisplay[9]{%
964     \ifDTMshowdate
965         \DTMdisplaydate{##1}{##2}{##3}{##4}%
966         \DTMdeATdatetimesep
967         \fi
968         \DTMdisplaytime{##5}{##6}{##7}%
969         \ifDTMshowzone
970             \DTMdeATtimezonesep
971             \DTMdisplayzone{##8}{##9}%
972         \fi
973 }%
974 \renewcommand*\DTMdisplay{\DTMdisplay}%
975 }

```

Switch style according to the useregional setting.

```

976 \DTMifcaseregional
977 {}% do nothing
978 {\DTMsetstyle{de-AT}}%
979 {\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.)

```

980 \ifcsundef{date\CurrentTrackedDialect}

```

```

981 {%
982 \ifundef\dategerman
983 {% do nothing
984 }%
985 {%
986 \def\dategerman{%
987 \DTMifcaseregional
988 }% do nothing
989 {\DTMsetstyle{german}}%
990 {\DTMsetstyle{german-numeric}}%
991 }%
992 }%
993 }%
994 {%
995 \csdef{date\CurrentTrackedDialect}{%
996 \DTMifcaseregional
997 }% do nothing
998 {\DTMsetstyle{de-AT}}%
999 {\DTMsetstyle{de-AT-numeric}}%
1000 }%
1001 }%

```

9 Swiss German localization (de-CH, datetime2-de-CH.1df)

Identify Module

```
1002 \ProvidesDateTimeModule{de-CH}[2017/11/13 v2.1]
```

Require the basic German module

```
1003 \RequireDateTimeModule{german}
```

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

`\DTMdeCHdowdaysep` The separator between weekday and day

```
1004 \newcommand*{\DTMdeCHdowdaysep}{, \space}
```

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

```
1005 \newcommand*{\DTMdeCHdaymonthsep}{.\DTMtexorpdfstring{\protect~}{\space}}
```

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

```
1006 \newcommand*{\DTMdeCHmonthyearsep}{\space}
```

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

```
1007 \newcommand*{\DTMdeCHdatetimesep}{, \space}
```

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

```
1008 \newcommand*{\DTMdeCHtimezonesep}{\space}
```

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

```
1009 \newcommand*{\DTMdeCHdatesep}{.}
```

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

```
1010 \newcommand*{\DTMdeCHtimesep}{.}
```

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

```
1011 \DTMdefkey{de-CH}{dowdaysep}{\renewcommand*\DTMdeCHdowdaysep}{#1}}
1012 \DTMdefkey{de-CH}{daymonthsep}{\renewcommand*\DTMdeCHdaymonthsep}{#1}}
1013 \DTMdefkey{de-CH}{monthyearsep}{\renewcommand*\DTMdeCHmonthyearsep}{#1}}
1014 \DTMdefkey{de-CH}{datetimesep}{\renewcommand*\DTMdeCHdatetimesep}{#1}}
1015 \DTMdefkey{de-CH}{timezonesep}{\renewcommand*\DTMdeCHtimezonesep}{#1}}
1016 \DTMdefkey{de-CH}{datesep}{\renewcommand*\DTMdeCHdatesep}{#1}}
1017 \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 in the text format.

```
1018 \DTMdefboolkey{de-CH}{abbr}[true]{}
```

The default is full name

```
1019 \DTMsetbool{de-CH}{abbr}{false}
```

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

```
1020 \DTMdefboolkey{de-CH}{mapzone}[true]{}
```

The default is to use mappings.

```
1021 \DTMsetbool{de-CH}{mapzone}{true}
```

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

```
1022 \DTMdefboolkey{de-CH}{showdayofmonth}[true]{}
```

The default is to show the day of month.

```
1023 \DTMsetbool{de-CH}{showdayofmonth}{true}
```

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

```
1024 \DTMdefboolkey{de-CH}{showyear}[true]{}
```

The default is to show the year.

```
1025 \DTMsetbool{de-CH}{showyear}{true}
```

Define the de-CH style

```
1026 \DTMnewstyle
1027 {de-CH}% label
1028 {% date style
1029   \renewcommand*\DTMdisplaydate[4]{%
1030     \ifDTMshowdow
1031       \ifnum##4>-1
1032         \DTMifbool{de-CH}{abbr}%
1033         {\DTMgermanshortweekdayname{##4}}}%
1034         {\DTMgermanweekdayname{##4}}}%
1035         \DTMdeCHdowdaysep
1036     \fi
1037   \fi
1038   %
1039   \DTMifbool{de-CH}{showdayofmonth}%
1040   {\DTMgermanordinal{##3}\DTMdeCHdaymonthsep}%
1041   }%
1042   %
1043   \DTMifbool{de-CH}{abbr}%
1044   {\DTMdeCHshortmonthname{##2}}}%
1045   {\DTMgermanmonthname{##2}}}%
1046   %
1047   \DTMifbool{de-CH}{showyear}%
1048   {%
1049     \DTMdeCHmonthyearsep%
1050     \number##1 % space intended
```

```

1051 }%
1052 {}%
1053 }%
1054 \renewcommand*\DTMdisplaydate[4]{%
1055   \ifDTMshowdow
1056     \ifnum##4>-1
1057       \DTMifbool{de-CH}{abbr}%
1058       {\DTMgermanshortweekdayname{##4}}%
1059       {\DTMgermanweekdayname{##4}}%
1060       \DTMdeCHdowdaysep
1061     \fi
1062   \fi
1063   %
1064   \DTMifbool{de-CH}{showdayofmonth}%
1065   {\DTMgermanordinal{##3}\DTMdeCHdaymonthsep}%
1066   {}%
1067   %
1068   \DTMifbool{de-CH}{abbr}%
1069   {\DTMdeCHshortmonthname{##2}}%
1070   {\DTMgermanmonthname{##2}}%
1071   %
1072   \DTMifbool{de-CH}{showyear}%
1073   {%
1074     \DTMdeCHmonthyearsep%
1075     \number##1 % space intended
1076   }%
1077   {}%
1078 }
1079 }%
1080 {% time style (use default)
1081 \renewcommand*\DTMdisplaytime[3]{%
1082   \DTMtwodigits{##1}%
1083   \DTMdeCHtimesep\DTMtwodigits{##2}%
1084   \ifDTMshowseconds\DTMdeCHtimesep\DTMtwodigits{##3}\fi\space%
1085   Uhr%
1086 }%
1087 }%
1088 {% zone style
1089 \DTMresetzones
1090 \DTMgermanzonemaps
1091 \renewcommand*\DTMdisplayzone}[2]{%
1092   \DTMifbool{de-CH}{mapzone}%
1093   {\DTMusezonemapordefault{##1}{##2}}%
1094   {%
1095     \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
1096     \ifDTMshowzoneminutes\DTMdeCHtimesep\DTMtwodigits{##2}\fi
1097   }%
1098 }%
1099 }%
1100 {% full style
1101 \renewcommand*\DTMdisplay}[9]{%
1102   \ifDTMshowdate
1103     \DTMdisplaydate{##1}{##2}{##3}{##4}%
1104     \DTMdeCHdatetimesep
1105   \fi
1106   \DTMdisplaytime{##5}{##6}{##7}%

```

```

1107 \ifDTMshowzone
1108 \DTMdeCHtimezonesep
1109 \DTMdisplayzone{##8}{##9}%
1110 \fi
1111 }%
1112 \renewcommand*\DTMdisplay}[9]{%
1113 \ifDTMshowdate
1114 \DTMdisplaydate{##1}{##2}{##3}{##4}%
1115 \DTMdeCHdatetimesep
1116 \fi
1117 \DTMdisplaytime{##5}{##6}{##7}%
1118 \ifDTMshowzone
1119 \DTMdeCHtimezonesep
1120 \DTMdisplayzone{##8}{##9}%
1121 \fi
1122 }%
1123 }%

Define numeric style.
1124 \DTMnewstyle
1125 {de-CH-numeric}% label
1126 {% date style
1127 \renewcommand*\DTMdisplaydate[4]{%
1128 \ifDTMshowdow
1129 \ifnum##4>-1
1130 \DTMifbool{de-CH}{abbr}%
1131 {\DTMgermanshortweekdayname{##4}}%
1132 {\DTMgermanweekdayname{##4}}%
1133 \DTMdeCHdowdaysep
1134 \fi
1135 \fi
1136 %
1137 \DTMifbool{de-CH}{showdayofmonth}%
1138 {%
1139 \DTMtwodigits{##3}%
1140 \DTMdeCHdatesep
1141 }%
1142 }%
1143 \DTMtwodigits{##2}%
1144 \DTMdeCHdatesep%
1145 \DTMifbool{de-CH}{showyear}%
1146 {%
1147 \number##1 % space intended
1148 }%
1149 }%
1150 }%
1151 \renewcommand*\DTMdisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1152 }%
1153 {% time style
1154 \renewcommand*\DTMdisplaytime[3]{%
1155 \DTMtwodigits{##1}%
1156 \DTMdeCHtimesep\DTMtwodigits{##2}%
1157 \ifDTMshowseconds\DTMdeCHtimesep\DTMtwodigits{##3}\fi\space%
1158 Uhr%
1159 }%
1160 }%
1161 {% zone style

```

```

1162 \DTMresetzones
1163 \DTMgermanzonemaps
1164 \renewcommand*{\DTMdisplayzone}[2]{%
1165   \DTMifbool{de-CH}{mapzone}%
1166   {\DTMusezonemapordefault{##1}{##2}}%
1167   {%
1168     \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
1169     \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwodigits{##2}\fi
1170   }%
1171 }%
1172 }%
1173 {% full style
1174 \renewcommand*{\DTMdisplay}[9]{%
1175   \ifDTMshowdate
1176     \DTMdisplaydate{##1}{##2}{##3}{##4}%
1177     \DTMdeCHdatetimesep
1178     \fi
1179     \DTMdisplaytime{##5}{##6}{##7}%
1180     \ifDTMshowzone
1181       \DTMdeCHtimezonesep
1182       \DTMdisplayzone{##8}{##9}%
1183     \fi
1184   }%
1185 \renewcommand*{\DTMDisplay}{\DTMdisplay}%
1186 }

```

Switch style according to the useregional setting.

```

1187 \DTMifcaseregional
1188 {}% do nothing
1189 {\DTMsetstyle{de-CH}}%
1190 {\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.)

```

1191 \ifcsundef{date\CurrentTrackedDialect}
1192 {%
1193   \ifundef\dategerman
1194     {}% do nothing
1195   }%
1196   {%
1197     \def\dategerman{%
1198       \DTMifcaseregional
1199       {}% do nothing
1200       {\DTMsetstyle{german}}%
1201       {\DTMsetstyle{german-numeric}}%
1202     }%
1203   }%
1204 }%
1205 {%
1206 \csdef{date\CurrentTrackedDialect}{%
1207   \DTMifcaseregional
1208   {}% do nothing
1209   {\DTMsetstyle{de-CH}}%
1210   {\DTMsetstyle{de-CH-numeric}}%
1211 }%
1212 }%

```


Change History

1.0	General: Initial release	7, 10, 14	\DTMdeATshortmonthname: Austrian short month names implemented	9, 12	
1.1	General: fixed bug in \DTMDisplaydate . . .	15	\DTMdeCHshortmonthname: Swiss German short month names implemented . .	9, 13	
1.2	\DTMgermanshortmonthname: Short month names implemented	8, 12	\DTMgermanshortmonthname: Short month names fixed	8, 12	
	\DTMgermanshortweekdayname: Short weekday names implemented	10, 14	\DTMgermanshortweekdayname: Short weekday names fixed	10, 14	
	\DTMgermanzonemaps: German time zone names (ME[S]Z)	18	General: Austrian German localization added	24	
	General: Day of week implemented . . .	15, 17	Bugfix: month-year-separator	17	
	Short month names implemented	15	German localization added	19	
	Short weekday names implemented	15	Swiss German localization added	28	
2.0	\DTMdeATmonthname: Austrian month names implemented	7, 11	2.1	General: Fixed strange spacing when switching languages	15

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