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 MT_EX over the file datetime2-german.ins: latex datetime2-german.ins
- 2. Move all \star .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 sorce 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 Dienstag, 3. Oktober 2017, 12:51:04 MESZ

Di, 3. Okt. '17, 12:51:04 MESZ

abbreviated version with showdow option

abbreviated version with showdow option

• Numeric style:

03.10.2017, 12:51:04 MESZ 03.10.17, 12:51:04 MESZ Dienstag, 03.10.2017, 12:51:04 MESZ Di, 03.10.17, 12:51:04 MESZ

abbreviated version with showdow option 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

Dienstag, 3. Oktober 2017, 12:51:04 MESZ

Di, 3. Okt. '17, 12:51:04 MESZ

abbreviated version with showdow option abbreviated version with showdow option

abbreviated version

• Numeric style:

03.10.2017, 12:51:04 MESZ 03.10.17, 12:51:04 MESZ

Dienstag, 03.10.2017, 12:51:04 MESZ

Di, 03.10.17, 12:51:04 MESZ

with showdow option 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

Dienstag, 3. Oktober 2017, 12:51:04 MESZ

Di, 3. Okt. 2017, 12:51:04 MESZ

abbreviated version with showdow option 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 Dienstag, 3. Oktober 2017, 12.51.04 Uhr MESZ Di, 3. Okt. 2017, 12.51.04 Uhr MESZ abbreviated version with showdow option abbreviated version with showdow option

Numeric style:
 03.10.2017, 12.51.04 Uhr MESZ
 03.10.17, 12.51.04 Uhr MESZ
 Dienstag, 03.10.2017, 12.51.04 Uhr MESZ
 Di, 03.10.17, 12.51.04 Uhr MESZ

abbreviated version with showdow option abbreviated version with showdow option

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

This material is subject to the MEX Project Public License, Version 1.3c or later. See the copyright headers of the single files for further details.

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.

Weekday and month names (UTF-8)

This file contains the settings that use UTF-8 characters. This file is loaded if X7ETFX or LuaETFX 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}[2017/10/03 v2.0]

\DTMgermanordinal

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

4 }

\DTMgermanmonthname

German month names.

```
5 \newcommand*{\DTMgermanmonthname}[1]{%
```

- \ifcase#1
- \or
- Januar%
- \or
- 10 Februar%
- \or
- 12 März%
- 13 \or
- April% 14
- \or 15
- Mai% 16
- 17 \or
- 18 Juni%
- 19 Juli%
- 20 \or 21
- 22 August%
- 23 \or
- September%
- Oktober% 26
- 27 \or
- November% 28
- \or 29
- Dezember% 30
- 32 }

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

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

```
\ifcase#1
```

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

\DTMgermanshortmonthname

Abbreviated German month names.

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

\DTMdeATshortmonthname Abbreviated Austrian German month names.

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

\DTMdeCHshortmonthname Abbreviated Swiss German month names.

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

```
142 Dez.%
                                 \fi
                             143
     \DTMgermanweekdayname
                             Provides weekday names
                             145 \newcommand*{\DTMgermanweekdayname}[1]{%
                                  \ifcase#1
                                  Montag%
                             147
                             148
                                  \or
                                  Dienstag%
                             150
                                  Mittwoch%
                             151
                             152
                                  Donnerstag%
                             153
                             154
                                  \or
                                  Freitag%
                             155
                                  \or
                             157
                                  Samstag%
                             158
                                  \or
                                  Sonntag%
                             159
                                  \fi
                             160
                             161 }
\DTMgermanshortweekdayname
                             Provides abbreviated weekday names
                             162 \newcommand*{\DTMgermanshortweekdayname}[1]{%
                                  \ifcase#1
                                  Mo%
                             164
                             165
                                  \or
                                  Di%
                             166
                             167
                                  \or
                             168
                                  Mi%
                             169
                             170
                             171
                                  \or
                             172
                                  Fr%
```

173

174

175

176

177 178 } \or

Sa%

\or

So%

6.2 Weekday and month names (ASCII)

This file contains the settings that use MEX commands for non-ASCII characters. This should be input if neither XHMEX nor LualMEX 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}[2017/10/03 v2.0]

\DTMgermanordinal

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

$\verb|\DTMgermanmonthname| German month names. \\$

- 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

```
\fi
                          237
                          238 }
\DTMgermanshortmonthname Abbreviated German month names.
                          239 \newcommand*{\DTMgermanshortmonthname}[1]{%
                              \ifcase#1
                          240
                               \or
                          241
                               Jan.%
                          242
                          243
                               \or
                               Feb.%
                          245
                               \or
                              M\protect\"arz%
                          246
                          247
                              \or
                          248
                              Apr.%
                          249
                              \or
                          250
                              Mai%
                              \or
                          252 Juni%
                          253
                              \or
                              Juli%
                          254
                               \or
                          255
                              Aug.%
                          256
                          257
                               \or
                          258
                               Sept.%
                              \or
                          259
                          260
                              Okt.%
                          261
                              \or
                          262
                              Nov.%
                          263
                              \or
                              Dez.%
                          264
                          265
                              \fi
                          266 }
 \DTMdeATshortmonthname Abbreviated Austrian German month names.
                          267 \ensuremath{\mbox{\mbox{$\sim$}}} 1]{\%}
                          268
                              \ifcase#1
                          269
                              \or
                              J\protect\"an.%
                          271
                               \or
                              Feb.%
                          272
                              \or
                          273
                              M\protect\"arz%
                          274
                          275
                               \or
                          276
                              Apr.%
                          277
                               \or
                          278
                              Mai%
                          279
                               \or
                          280
                              Juni%
                          281
                              \or
                          282
                              Juli%
                              \or
                          284
                              Aug.%
                               \or
                          285
                               Sept.%
                          286
```

\or

287

236 Dezember%

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

$\verb|\DTMdeCHshortmonthname| \\$

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

Provides weekday names

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

348 Do% 349 \or

350 Fr%

351 \or

352 Sa% 353 \or

354 So%

355 \fi

356 }

6.3 Basic German Module (datetime2-german.ldf)

Identify Module

357 \ProvidesDateTimeModule{german}[2017/10/03 v2.0]

Need to find out if X-T-X or LuaT-X are being used.

358 \RequirePackage{ifxetex,ifluatex}

X_fI_EX and LuaT_EX 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.

\DTMgermandowdaysep

The separator between weekday and day

368 \newcommand*{\DTMgermandowdaysep}{,\space}

\DTMgermandaymonthsep

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

\DTMgermanmonthyearsep

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

370 \newcommand*{\DTMgermanmonthyearsep}{\space}

\DTMgermandatetimesep

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

371 \newcommand*{\DTMgermandatetimesep}{,\space}

\DTMgermantimezonesep

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

372 \newcommand*{\DTMgermantimezonesep}{\space}

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

406 407

\DTMifbool{german}{abbr}%

```
{\tt \{\DTMgermanshortmonthname{\#42}}\%
408
409
        {\DTMgermanmonthname{\##2}}%
410
        \DTMifbool{german}{showyear}%
411
       {%
412
          \verb|\DTMgermanmonthyearsep||%
413
          \DTMifbool{german}{abbr}%
414
          {'\DTMtwodigits{##1}}%
415
          {\number##1 }% space intended
416
417
       }%
418
       {}%
     }%
419
      \renewcommand*\DTMDisplaydate[4]{%
420
       \ifDTMshowdow
421
422
          \ifnum##4>-1
            \DTMifbool{german}{abbr}%
423
            {\tt \{\DTMgermanshortweekdayname\{\#44\}\}\%}
424
            {\tt \{\DTMgermanweekdayname{\#4}}}\%
425
            \DTMgermandowdaysep
426
          \fi
427
       \fi
428
429
430
        \DTMifbool{german}{showdayofmonth}%
        {\DTMgermanordinal{##3}\DTMgermandaymonthsep}%
431
       {}%
432
433
        \DTMifbool{german}{abbr}%
434
        {\DTMgermanshortmonthname{##2}}%
        {\DTMgermanmonthname{##2}}%
436
437
        \DTMifbool{german}{showyear}%
438
       {%
439
          440
          \DTMifbool{german}{abbr}%
441
          {'\DTMtwodigits{##1}}%
442
443
          {\number##1 }% space intended
       }%
444
       {}%
445
446
      }
     }%
447
   {% time style (use default)
448
      \renewcommand*\DTMdisplaytime[3]{%
449
       \DTMtwodigits{##1}%
450
      \DTMgermantimesep\DTMtwodigits{##2}%
451
452
      }%
453
454 }%
   {% zone style
455
456
     \DTMresetzones
457
      \DTMgermanzonemaps
458
      \renewcommand*{\DTMdisplayzone}[2]{%
        \DTMifbool{german}{mapzone}%
459
        {\tt \{\DTMusezone maporde fault \{\#1\} \{\#2\}\}\%}
460
461
       {%
462
          \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
463
          \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwodigits{##2}\fi
```

```
}%
464
      }%
465
466 }%
   {% full style
467
      \renewcommand*{\DTMdisplay}[9]{%
468
       469
        \label{lower} $$ DTMdisplaydate{##1}{##2}{##3}{##4}% $$
470
        \verb|\DTMgermandatetimesep||
471
472
473
       \DTMdisplaytime{##5}{##6}{##7}%
       \ifDTMshowzone
474
        \DTMgermantimezonesep
475
        \DTMdisplayzone{##8}{##9}%
476
       \fi
477
478
      \renewcommand*{\DTMDisplay}[9]{%
479
       \ifDTMshowdate
480
        \DTMDisplaydate{##1}{##2}{##3}{##4}%
481
        \verb|\DTMgermandatetimesep| \\
482
483
       \DTMdisplaytime{##5}{##6}{##7}%
484
485
       \ifDTMshowzone
486
        \DTMgermantimezonesep
        \DTMdisplayzone{##8}{##9}%
487
       \fi
488
      }%
489
490 }%
Define numeric style.
491 \DTMnewstyle
492 {german-numeric}% label
493 {% date style
       \renewcommand*\DTMdisplaydate[4]{%
494
495
         \ifDTMshowdow
           \ifnum##4>-1
496
              \DTMifbool{german}{abbr}%
497
498
              {\tt \{\DTMgermanshortweekdayname\{\#44\}\}\%}
499
              {\DTMgermanweekdayname{##4}}%
              \DTMgermandowdaysep
500
           \fi
501
         \fi
502
         %
503
         \DTMifbool{german}{showdayofmonth}%
504
         {%
505
           \DTMtwodigits{##3}%
506
           \DTMgermandatesep
507
508
         }%
509
         {}%
         \verb|\DTMtwodigits{##2}||
510
511
         \DTMgermandatesep%
         \DTMifbool{german}{showyear}%
512
513
         {%
           \DTMifbool{german}{abbr}%
514
           {\DTMtwodigits{##1}}%
515
           {\number##1 }% space intended
516
         }%
517
         {}%
518
```

```
}%
519
      520
521 }%
522 {% time style
      \renewcommand*\DTMdisplaytime[3]{%
523
        \DTMtwodigits{##1}%
524
        \DTMgermantimesep\DTMtwodigits{##2}%
525
        \ifDTMshowseconds\DTMgermantimesep\DTMtwodigits{##3}\fi
526
      }%
527
528 }%
529 {% zone style
     \DTMresetzones
530
531
     \DTMgermanzonemaps
     \renewcommand*{\DTMdisplayzone}[2]{%
532
533
       \DTMifbool{german}{mapzone}%
       {\DTMusezonemapordefault{##1}{##2}}%
534
535
         \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
536
         \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwodigits{##2}\fi
537
538
       }%
539
     }%
540 }%
541 {% full style
     \renewcommand*{\DTMdisplay}[9]{%
      \ifDTMshowdate
543
       DTMdisplaydate{##1}{##2}{##3}{##4}%
544
       \DTMgermandatetimesep
545
546
      \DTMdisplaytime{##5}{##6}{##7}%
547
548
      \ifDTMshowzone
549
       \DTMgermantimezonesep
       \DTMdisplayzone{##8}{##9}%
550
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 $\del{dialect}$ to prevent babel from resetting $\del{dialect}$. (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
    {%
       \def\dategerman{%
569
         \DTMifcaseregional
570
         {}% do nothing
571
572
         {\DTMsetstyle{german}}%
         {\DTMsetstyle{german-numeric}}%
573
574
       }%
575
    }%
576 }%
577 {%
     \csdef{date\CurrentTrackedDialect}{%
578
       \DTMifcaseregional
579
       {}% do nothing
580
       {\DTMsetstyle{german}}%
581
582
       {\DTMsetstyle{german-numeric}}
583
584 }%
```

7 German localization (de-DE, datetime2-de-DE.ldf)

```
Identify Module
```

```
585 \ProvidesDateTimeModule{de-DE}[2017/10/03 v2.0]
```

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

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

```
\DTMdisplayzone{##8}{##9}%
695
      \fi
696
    }%
697
    \renewcommand*{\DTMDisplay}[9]{%
698
      \ifDTMshowdate
699
        700
        \DTMdeDEdatetimesep
701
      \fi
702
703
      \DTMdisplaytime{##5}{##6}{##7}%
704
      \ifDTMshowzone
        \DTMdeDEtimezonesep
705
        \DTMdisplayzone{##8}{##9}%
706
      \fi
707
    }%
708
709 }%
Define numeric style.
710 \DTMnewstyle
711 {de-DE-numeric}% label
712 {% date style
713
    \renewcommand*\DTMdisplaydate[4]{%
714
      \ifDTMshowdow
        \ifnum##4>-1
715
716
          \DTMifbool{de-DE}{abbr}%
717
          {\DTMgermanshortweekdayname{##4}}%
          {\DTMgermanweekdayname{##4}}%
718
          \DTMdeDEdowdaysep
719
        \fi
720
      \fi
721
722
      \DTMifbool{de-DE}{showdayofmonth}%
723
724
        \DTMtwodigits{##3}%
725
        \DTMdeDEdatesep
726
727
      }%
728
      {}%
729
      \DTMtwodigits{##2}%
730
      \DTMdeDEdatesep%
731
      \DTMifbool{de-DE}{showyear}%
732
      {%
        \DTMifbool{de-DE}{abbr}%
733
        {\DTMtwodigits{##1}}%
734
        {\text{number##1 }}\% \text{ space intended}
735
      }%
736
737
      {}%
738
739
    740 }%
741\,{% time style
    \renewcommand*\DTMdisplaytime[3]{%
742
743
      \DTMtwodigits{##1}%
      \DTMdeDEtimesep\DTMtwodigits{##2}%
744
      \ifDTMshowseconds\DTMdeDEtimesep\DTMtwodigits{##3}\fi
745
746
   }%
747 }%
748{% zone style
749 \DTMresetzones
```

```
\DTMgermanzonemaps
750
     \renewcommand*{\DTMdisplayzone}[2]{%
751
       \DTMifbool{de-DE}{mapzone}%
752
       {\DTMusezonemapordefault{##1}{##2}}%
753
754
         \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
755
         \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwodigits{##2}\fi
756
757
       }%
758
    }%
759 }%
760 {% full style
     \renewcommand*{\DTMdisplay}[9]{%
       \ifDTMshowdate
762
         \DTMdisplaydate{##1}{##2}{##3}{##4}%
763
         \DTMdeDEdatetimesep
764
765
       \DTMdisplaytime{##5}{##6}{##7}%
766
767
       \ifDTMshowzone
         \DTMdeDEtimezonesep
768
         \DTMdisplayzone{##8}{##9}%
769
       \fi
770
771
    }%
772
     \renewcommand*{\DTMDisplay}{\DTMdisplay}%
773 }
Switch style according to the useregional setting.
774 \DTMifcaseregional
775 {}% do nothing
    {\DTMsetstyle{de-DE}}
    {\DTMsetstyle{de-DE-numeric}}
Redefine \dategerman (or \date\langle dialect \rangle) 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
    {% do nothing
781
782
    }%
783
     {%
784
       \def\dategerman{%
         \DTMifcaseregional
785
         {}% do nothing
786
         {\DTMsetstyle{german}}%
787
         {\DTMsetstyle{german-numeric}}%
788
       }%
789
790
    }%
791 }%
792 { %
    \csdef{date\CurrentTrackedDialect}{%
793
794
       \DTMifcaseregional
       {}% do nothing
795
796
       {\DTMsetstyle{de-DE}}%
       {\DTMsetstyle{de-DE-numeric}}
    }%
798
799 }%
```

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

Identify Module

800 \ProvidesDateTimeModule{de-AT}[2017/10/03 v2.0]

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.

\DTMdeATdowdaysep The separator between weekday and day

802 \newcommand*{\DTMdeATdowdaysep}{,\space}

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

 $803 \end{\{\DTMdeATdaymonthsep} \{.\DTMtexorpdfstring{\protect\{\space}\}}$

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

804 \newcommand*{\DTMdeATmonthyearsep}{\space}

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

805 \newcommand*{\DTMdeATdatetimesep}{,\space}

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

806 \newcommand*{\DTMdeATtimezonesep}{\space}

\DTMdeATdatesep The separator for the numeric date format.

807 \newcommand*{\DTMdeATdatesep}{-}

\DTMdeATtimesep 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}}

 $812 \DTMdefkey{de-AT}{datetimesep}{\renewcommand} * {\DTMdeATdatetimesep}{\#1}}$

813 \DTMdefkey{de-AT}{timezonesep}{\renewcommand*{\DTMdeATtimezonesep}{#1}}

814 \DTMdefkey{de-AT}{datesep}{\renewcommand*{\DTMdeATdatesep}{#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 \DTMdefboolkey{de-AT}{abbr}[true]{}

The default is full name

817 \DTMsetbool{de-AT}{abbr}{false}

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

The default is to use mappings.

819 \DTMsetbool{de-AT}{mapzone}{true}

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

820 \DTMdefboolkey{de-AT}{showdayofmonth}[true]{}

The default is to show the day of month.

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

\number##1 % space intended

873

```
}%
874
875
      {}%
876
   }
877 }%
878 {% time style (use default)
    \renewcommand*\DTMdisplaytime[3]{%
      \DTMtwodigits{##1}%
880
      \DTMdeATtimesep\DTMtwodigits{##2}%
881
882
      \ifDTMshowseconds\DTMdeATtimesep\DTMtwodigits{##3}\fi
883
    }%
884 }%
885 {% zone style
    \verb|\DTMresetzones||
886
    \DTMgermanzonemaps
887
    \renewcommand*{\DTMdisplayzone}[2]{%
888
      \DTMifbool{de-AT}{mapzone}%
889
      {\DTMusezonemapordefault{##1}{##2}}%
890
      {%
891
         \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
892
         \ifDTMshowzoneminutes\DTMdeATtimesep\DTMtwodigits{##2}\fi
893
894
      }%
895
    }%
896 }%
897 {% full style
    \renewcommand*{\DTMdisplay}[9]{%
      \ifDTMshowdate
899
         \label{lower} $$ DTMdisplaydate{##1}{##2}{##3}{##4}% $$
900
         \DTMdeATdatetimesep
901
902
      \DTMdisplaytime{##5}{##6}{##7}%
903
      \ifDTMshowzone
904
         \DTMdeATtimezonesep
905
         \DTMdisplayzone{##8}{##9}%
906
907
      \fi
908
    }%
909
    \renewcommand*{\DTMDisplay}[9]{%
      \ifDTMshowdate
910
         911
         \DTMdeATdatetimesep
912
913
      \DTMdisplaytime{##5}{##6}{##7}%
914
915
      \ifDTMshowzone
         \DTMdeATtimezonesep
916
917
         \DTMdisplayzone{##8}{##9}%
918
      \fi
    }%
919
920 }%
Define numeric style.
921 \DTMnewstyle
922 {de-AT-numeric}% label
923 {% date style
    \renewcommand*\DTMdisplaydate[4]{%
      \DTMifbool{de-AT}{showyear}%
925
926
         \number##1 % space intended
927
         \DTMdeATdatesep%
928
```

```
}%
929
930
                {}%
931
                \DTMtwodigits{##2}%
932
933
                \DTMifbool{de-AT}{showdayofmonth}%
934
935
                      \DTMdeATdatesep%
936
                     \DTMtwodigits{##3}%
937
938
                }%
939
                {}%
           }%
940
           941
942 }%
943{% time style
           \renewcommand*\DTMdisplaytime[3]{%
                 \DTMtwodigits{##1}%
945
                \DTMdeATtimesep\DTMtwodigits{##2}%
946
                \verb|\ifDTMshowseconds|| DTMdeATtimesep|| DTMtwodigits{##3} \\ | fi | | Instrumental transfer for the context of 
947
948 }%
949 }%
950 {% zone style
           \DTMresetzones
           \DTMgermanzonemaps
           \renewcommand*{\DTMdisplayzone}[2]{%
953
                \DTMifbool{de-AT}{mapzone}%
954
                {\DTMusezonemapordefault{##1}{##2}}%
955
956
                      \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
957
                     \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwodigits{##2}\fi
958
959
                }%
          }%
960
961 }%
962{% full style
           \renewcommand*{\DTMdisplay}[9]{%
964
                \ifDTMshowdate
                      \DTMdisplaydate{##1}{##2}{##3}{##4}%
965
                     \DTMdeATdatetimesep
966
                \fi
967
                \DTMdisplaytime{##5}{##6}{##7}%
968
969
                \ifDTMshowzone
970
                     \DTMdeATtimezonesep
                     \DTMdisplayzone{##8}{##9}%
971
972
                \fi
973
           }%
           \renewcommand*{\DTMDisplay}{\DTMdisplay}%
974
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\langle dialect \rangle) 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 {%
     \ifundef\dategerman
     {% do nothing
     }%
984
985
     {%
        \def\dategerman{%
986
         \DTMifcaseregional
987
988
         {}% do nothing
         {\DTMsetstyle{german}}%
989
990
         {\DTMsetstyle{german-numeric}}%
991
       }%
     }%
992
993 }%
994 {%
     \csdef{date\CurrentTrackedDialect}{%
995
       \DTMifcaseregional
       {}% do nothing
997
998
       {\DTMsetstyle{de-AT}}%
       {\DTMsetstyle{de-AT-numeric}}
999
    }%
1000
1001 }%
```

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

```
Identify Module
```

```
1002 \ProvidesDateTimeModule{de-CH}[2017/10/03 v2.0]
```

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

\number##1 % space intended

1050

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

```
\ifDTMshowzone
1107
1108
         \DTMdeCHtimezonesep
         \DTMdisplayzone{##8}{##9}%
1109
1110
       \fi
     }%
1111
     \renewcommand*{\DTMDisplay}[9]{%
1112
       \ifDTMshowdate
1113
         \label{lower} $$ DTMDisplaydate{##1}{##2}{##3}{##4}% $
1114
1115
         \DTMdeCHdatetimesep
1116
       \DTMdisplaytime{##5}{##6}{##7}%
1117
       \ifDTMshowzone
1118
         \verb|\DTMdeCHtimezonesep| \\
1119
         \DTMdisplayzone{##8}{##9}%
1120
1121
       \fi
1122
    }%
1123 }%
Define numeric style.
1124 \DTMnewstyle
1125 {de-CH-numeric}% label
1126 {% date style
     \verb|\command*\DTMdisplaydate[4]{%}|
1127
1128
       \ifDTMshowdow
         \ifnum##4>-1
           \DTMifbool{de-CH}{abbr}%
1130
           {\DTMgermanshortweekdayname{##4}}%
1131
           {\DTMgermanweekdayname{##4}}%
1132
1133 \DTMdeCHdowdaysep
         \fi
1134
       \fi
1135
1136
       \DTMifbool{de-CH}{showdayofmonth}%
1137
1138
1139
         \DTMtwodigits{##3}%
         \DTMdeCHdatesep
1140
1141
       }%
1142
       {}%
1143
       \DTMtwodigits{##2}%
       \DTMdeCHdatesep%
1144
       \DTMifbool{de-CH}{showyear}%
1145
       {%
1146
         \number##1 % space intended
1147
       }%
1148
1149
       {}%
1150
     1151
1152 }%
1153 {% time style
1154
     \renewcommand*\DTMdisplaytime[3]{%
       \DTMtwodigits{##1}%
       \DTMdeCHtimesep\DTMtwodigits{##2}%
1156
       \verb|\ifDTMshowseconds|DTMdeCHtimesep|DTMtwodigits{##3}\fi\space%|
1157
       Uhr%
1158
    }%
1159
1160 }%
1161 {% zone style
```

```
\DTMresetzones
1162
1163
      \DTMgermanzonemaps
      \renewcommand*{\DTMdisplayzone}[2]{%
1164
        \DTMifbool{de-CH}{mapzone}%
1165
        {\DTMusezonemapordefault{##1}{##2}}%
1166
        {%
1167
          \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
1168
          \ifDTMshowzoneminutes\DTMgermantimesep\DTMtwodigits{##2}\fi
1169
1170
        }%
1171
     }%
1172 }%
1173 {% full style
     \renewcommand*{\DTMdisplay}[9]{%
1174
        \ifDTMshowdate
1175
          DTMdisplaydate{##1}{##2}{##3}{##4}%
1176
          \DTMdeCHdatetimesep
1177
1178
        \DTMdisplaytime{##5}{##6}{##7}%
1179
        \ifDTMshowzone
1180
          \DTMdeCHtimezonesep
1181
          \DTMdisplayzone{##8}{##9}%
1182
1183
        \fi
1184
     }%
      \renewcommand*{\DTMDisplay}{\DTMdisplay}%
1185
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\langle dialect \rangle) 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
     {% do nothing
1194
1195
     }%
1196
     {%
        \def\dategerman{%
1197
          \DTMifcaseregional
1198
          {}% do nothing
1199
          {\DTMsetstyle{german}}%
1200
          {\DTMsetstyle{german-numeric}}%
1201
1202
        }%
1203
     }%
1204 }%
1205 { %
     \csdef{date\CurrentTrackedDialect}{%
1206
        \DTMifcaseregional
1207
1208
        {}% do nothing
        {\DTMsetstyle{de-CH}}%
1209
        {\DTMsetstyle{de-CH-numeric}}
1210
1211
     }%
1212 }%
```

Change History

1.0		names implemented
Genera	al: Initial release 7, 10, 14	\DTMdeATshortmonthname: Austrian short
1.1		month names implemented 9, 12
Genera	al: fixed bug in <code>\DTMDisplaydate</code> 15	\DTMdeCHshortmonthname: Swiss German
1.2		short month names implemented 9, 13
_	ermanshortmonthname: Short month	\DTMgermanshortmonthname: Short month
	mes implemented 8, 12	names fixed
_	ermanshortweekdayname: Short	\DTMgermanshortweekdayname: Short
	ekday names implemented 10, 14 ermanzonemaps: German time zone	weekday names fixed 10, 1
_	mes (ME[S]Z)	•
	al: Day of week implemented 15, 17	General: Austrian German localization
	rt month names implemented 15, 17	added
	rt weekday names implemented 15	Bugfix: month-year-separator 1
2.0	r i i i i i i i i i i i i i i i i i i i	German localization added 19
\DTMde	eATmonthname: Austrian month	Swiss German localization added 28
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	-	\DTMdeDEtimesep
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\DTMdeATd \DTMdeATd \DTMdeATd	atesep 24 atetimesep 24 aymonthsep 24 owdaysep 24	\DTMdeDEtimesep
\DTMdeATd \DTMdeATd \DTMdeATd \DTMdeATm	atesep 24 atetimesep 24 aymonthsep 24 owdaysep 24 onthname 7,11	\DTMdeDEtimesep
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\DTMdeATd \DTMdeATd \DTMdeATm \DTMdeATm \DTMdeATs \DTMdeATt \DTMdeATt \DTMdeCHd \DTMdeCHd \DTMdeCHd \DTMdeCHd	atesep 24 atetimesep 24 aymonthsep 24 owdaysep 24 onthname 7, 11 onthyearsep 24 hortmonthname 9, 12 imesep 24 imezonesep 24 atesep 28 atetimesep 28 aymonthsep 28 owdaysep 28	\DTMdeDEtimesep
\DTMdeATd \DTMdeATd \DTMdeATm \DTMdeATm \DTMdeATs \DTMdeATt \DTMdeATt \DTMdeCHd \DTMdeCHd \DTMdeCHd \DTMdeCHd \DTMdeCHd \DTMdeCHd	atesep 24 atetimesep 24 aymonthsep 24 owdaysep 24 onthname 7, 11 onthyearsep 24 hortmonthname 9, 12 imesep 24 imezonesep 24 atesep 28 atetimesep 28 aymonthsep 28 owdaysep 28 onthyearsep 28	\DTMdeDEtimesep 19 \DTMdeDEtimezonesep 18 \DTMgermandatesep 18 \DTMgermandatetimesep 14 \DTMgermandaymonthsep 14 \DTMgermandowdaysep 16 \DTMgermanmonthname 7, 1 \DTMgermanordinal 7, 10 \DTMgermanshortmonthname 8, 12 \DTMgermanshortweekdayname 10, 14 \DTMgermantimesep 15 \DTMgermantimezonesep 14 \DTMgermanweekdayname 10, 13
\DTMdeATd \DTMdeATd \DTMdeATm \DTMdeATm \DTMdeATs \DTMdeATt \DTMdeATt \DTMdeCHd \DTMdeCHd \DTMdeCHd \DTMdeCHd \DTMdeCHd \DTMdeCHd \DTMdeCHd \DTMdeCHd	atesep 24 atetimesep 24 aymonthsep 24 owdaysep 24 onthname 7, 11 onthyearsep 24 hortmonthname 9, 12 imesep 24 imezonesep 24 atesep 28 atetimesep 28 aymonthsep 28 owdaysep 28 onthyearsep 28 hortmonthname 9, 13	\DTMdeDEtimesep
\DTMdeATd \DTMdeATd \DTMdeATm \DTMdeATm \DTMdeATs \DTMdeATt \DTMdeCHd \DTMdeCHd \DTMdeCHd \DTMdeCHd \DTMdeCHd \DTMdeCHd \DTMdeCHd	atesep 24 atetimesep 24 aymonthsep 24 owdaysep 24 onthname 7, 11 onthyearsep 24 hortmonthname 9, 12 imesep 24 imezonesep 24 atesep 28 atetimesep 28 aymonthsep 28 owdaysep 28 onthyearsep 28 hortmonthname 9, 13	\DTMdeDEtimesep 19 \DTMdeDEtimezonesep 18 \DTMgermandatesep 18 \DTMgermandatetimesep 14 \DTMgermandaymonthsep 14 \DTMgermandowdaysep 16 \DTMgermanmonthname 7, 1 \DTMgermanordinal 7, 10 \DTMgermanshortmonthname 8, 12 \DTMgermanshortweekdayname 10, 14 \DTMgermantimesep 15 \DTMgermantimezonesep 14 \DTMgermanweekdayname 10, 13
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