

English Module for datetime2 Package

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Abstract

This is the English 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 on (`text` or `numeric`) for the language styles to be set. Alternatively, you can set them in the document using `\DTMsetstyle`, but without the `useregional` setting on the style will be changed by `\date<language>`.

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1 Introduction

This bundle provides the English modules for `datetime2`. The basic `english` module is used when `english` has been detected as one of the document's language settings but no regional variant has been detected. Note that the `tracklang` package can't detect the variant passed to `polyglossia` unless it's been passed as a document class option or passed to `tracklang`. See the `tracklang` documentation for further details.

Here are some examples for British English with `polyglossia`:

1. Pass `british` in the document class option list:

```
\documentclass[british]{article}

\usepackage{fontspec}
\usepackage{polyglossia}
\setmainlanguage[variant=uk]{english}
\usepackage{datetime2}
```

(You need to set the `useregional` option to either `text` or `numeric` to enable the `en-GB` or `en-GB-numeric` styles.)

2. Pass `en-GB` in the document class option list:

```
\documentclass[en-GB]{article}

\usepackage{fontspec}
\usepackage{polyglossia}
\setDefaultlanguage[variant=uk]{english}

\usepackage{datetime2}
```

(You need to set the `useregional` option to either `text` or `numeric` to enable the `en-GB` or `en-GB-numeric` styles.)

3. Pass `en-GB` to `datetime2`:

```
\documentclass{article}

\usepackage{fontspec}
\usepackage{polyglossia}
\setDefaultlanguage[variant=uk]{english}

\usepackage[en-GB]{datetime2}
```

In this last example, the style is automatically switched to `en-GB`.

Note that if you pass the language setting through the `datetime2` package option list (as in the above example) this will also set the `useregional` option to `text`.

If you’re not using `babel` or `polyglossia` but still want to use the English modules, you can similarly use the language or regional setting in the document class or `datetime2` package options. Note that since `datetime2` loads `tracklang`, this setting will be remembered by any subsequently loaded packages that use `tracklang` to determine the document language settings.

For example, to use the `en-GB` date style without loading `babel` or `polyglossia`:

```
\documentclass{article}
\usepackage[en-GB]{datetime2}
\begin{document}
\today
\end{document}
```

If you want to change the settings for a particular module, you must use the module’s name (such as `en-GB`) rather than a `babel` or `polyglossia` synonym (such as `british` or `uk`). For example:

```
\DTMlangsetup[en-GB]{ord=raise}
```

2 Base module

The `english-base` module is loaded by all the English modules. It provides the commands that produce text, such as the month names. It also provides a 12 hour time style called `englishampm`.

3 English (no region)

The default `english` module is used when English has been set as one of the document languages, but no regional variant has been detected or there is no support for the given region.

This basic module provides the date-time style `english` which uses the same style as L^AT_EX’s default `\today`. (That is, the middle-endian date style.) This style ignores most of the settings, including `showdow` and the date separators. The time style uses the `englishampm` style defined in the base module which uses the package-wide `hourminsep` setting. The zone style is the same as that provided by the `default` style. (That is, numerical ISO or just “Z”.) The full date, time and zone style (used by `\DTMdisplay`) have spaces between each block. The `showdate`, `showzone`, `showseconds`, `showzoneminutes` and `showisoZ` `datetime2` settings are honoured.

This module checks for the existence of `\dateenglish` or `\date<dialect>` (in the case of an unknown English variant that doesn’t match any of the supplied English dialect modules). If it exists, the command will be redefined so that it sets the date, time and zone styles to `english` if the `useregional` setting is set to `text`. If the setting is `numeric` the `default` numeric style will be used as the lack of region makes it ambiguous.

4 English (GB)

The `en-GB` module is loaded if British English has been specified. This may be specified through options such as `british`, `en-GB` or `UKenglish`. (See the note on polyglossia in §1.)

This module defines the text style `en-GB` and the numeric style `en-GB-numeric` style. The `en-GB` style will automatically be set if the `useregional` option is set to `text`. The `en-GB-numeric` style will automatically be set if the `useregional` option is set to `numeric`.

The `en-GB` time style uses the base `englishampm` style.

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. This defaults to `\space`. Ignored if the `showdow` option is `false`.

`daymonthsep` The separator between the day and the month name in the `en-GB` style. This defaults to `\space`.

`monthyearsep` The separator between the month name and year in the `en-GB` style. This defaults to `\space`.

`datesep` The separator between the date numbers in the `en-GB-numeric` style. This defaults to `/` (slash).

`timesep` The separator between the hours and minutes in the `en-GB-numeric` style. This defaults to `:` (colon).

`datetimesep` The separator between the date and time for the full date-time format (as used by `\DTMdisplay`) for both the `en-GB` and `en-GB-numeric` styles. This defaults to `\space`.

`timezonesep` The separator between the time and zone for the full date-time format (as used by `\DTMdisplay`) for both the `en-GB` and `en-GB-numeric` styles. This defaults to `\space`.

`abbr` This is a boolean key. If `true`, the month (and week day name if shown) is abbreviated for the `en-GB` style. The default is `false`.

`mapzone` This is a boolean key. If `true` the time zone mappings are applied. (The default is `true`.) The `en-GB` and `en-GB-numeric` styles set the mappings `GMT` (`UTC+0`) and `BST` (`UTC+1`). Other time zone mappings that have previously been set (for example, by another regional style) will remain unchanged unless you redefine `\DTMresetzones` to reset or unset them.

`ord` This may take one of the following values: `level` (ordinal suffix level with

the number), `raise` (ordinal suffix as a superscript¹), `omit` (omit the ordinal suffix) and `sc` (small caps ordinal suffix). If you want a different style you can redefine `\DTMEnGBfmtordsuffix` which takes one argument (the suffix). Take care if `\DTMEnGBfmtordsuffix` contains fragile commands, as they will need to be protected against expansion.

`showdayofmonth` A boolean key that determines whether or not to show the day of the month. The default value is `true`. If `false` the day-month separator is also omitted.

`showyear` A boolean key that determines whether or not to show the year. The default value is `true`. If `false` the month-year separator is also omitted.

The above settings are specific to this module. In addition, the `showdow` boolean option provided by the `datetime2` package is also checked to determine whether or not to show the day of the week in the `en-GB` style.

The time zone checks the `mapzone` setting (described above). If it's set, then `\DTMusezonemapordefault` is used otherwise a numeric $\langle TZH \rangle \langle sep \rangle \langle TZM \rangle$ is displayed. (The minute part will be omitted if the `datetime2` package option `showzoneminutes` is set to `false`. The zone style ignores the `showisoZ` option.

5 English (US)

The `en-US` module is loaded if US English has been specified. This may be done through options such as `american`, `en-US` or `USenglish`. (See the note on polyglossia in §1.)

This module defines the styles `en-US` and `en-US-numeric`. There a number of settings that can be used in `\DTMlangsetup` to modify these styles. They are:

`monthdaysep` The separator between the month name and the day in the `en-US` style. The default is `\space`

`dayyearsep` The separator between the day and the year in the `en-US` style. The default is `,\space`

`dowmonthsep` The separator between the day-of-week name and the month name in the `en-US` style. The default is `\space`. This is new to version 1.02, which now supports the `showdow` package option.

`datesep` The separator between the date numbers in the `en-US-numeric` format.

¹Just in case you plan to send me an irate email on this issue, the superscript is a regional handwriting style not an invention of word processors although they have adopted the style. I was using this style in school in the 1970s before I'd ever heard of a word processor so please don't tell me I've picked up the habit from Word. I'm not a time-traveller, nor were my primary school teachers—that I know of! If, conversely, you want to know why the default is `level` rather than `raise`, it's because the main purpose of the `datetime2` package is to provide an *expandable* text format and `\textsuperscript` isn't expandable.

timesep The separator between the hour and minutes in the **en-US-numeric** format.

datetimesep The separator between the date and the time for the full style used by `\DTMdisplay` for the **en-US** and **en-US-numeric**. The default is `\space`

timezonesep The separator between the times and zone for the full style used by `\DTMdisplay`. The default is `\space`

abbr This is a boolean key. If **true**, the month is abbreviated. The default is **false**.

ord The same as the **en-GB** style except that the default value is **omit**.

showdayofmonth A boolean key that determines whether or not to show the day of the month. The default value is **true**. If **false** the day-year separator is also omitted.

showyear A boolean key that determines whether or not to show the year. The default value is **true**. If **false** the day-year separator is also omitted if the day of the month is shown otherwise both the day-year and month-day separators are omitted.

mapzone This is a boolean key. If **true** the time zone mappings are applied. (The default is **false**.) The **en-US** style sets the mappings ADT (UTC-3), AST (UTC-4), EST (UTC-5), CST (UTC-6), MST (UTC-7) and PST (UTC-8). If you want to use different mappings, you can redefine `\DTMUSzonemaps`. Other time zone mappings that have previously been set (for example, by another regional style) will remain unchanged unless you redefine `\DTMresetzones` to reset or unset them.

zone (new to v1.03) As mentioned above, if the **mapzone** option is set, the time zone mappings are set using `\DTMUSzonemaps`. This option can be used to both append to `\DTMUSzonemaps` and set the new mappings. The **zone** option may take one of the following values:

- **std** or **standard**: set the standard time zone mappings AST (UTC-4), EST (UTC-5), CST (UTC-6), MST (UTC-7), PST (UTC-8), AKST (UTC-9), HAST (UTC-10), SST (UTC-10), ChST (UTC+10).
- **dst** or **daylight**: set the daylight savings time zone mappings ADT (UTC-3), EDT (UTC-4), CDT (UTC-6), MDT (UTC-6), PDT (UTC-7), AKDT (UTC-8), HADT (UTC-9).
- **atlantic**: set the Atlantic standard and daylight saving mappings AST (UTC-4) and ADT (UTC-3).
- **eastern**: set the Eastern standard and daylight saving mappings EST (UTC-5) and EDT (UTC-4).
- **central**: set the Central standard and daylight saving mappings CST (UTC-6) and CDT (UTC-5).

- **mountain**: set the Mountain standard and daylight saving mappings MST (UTC−7) and MDT (UTC−6).
- **pacific**: set the Pacific standard and daylight saving mappings PST (UTC−8) and PDT (UTC−7).
- **alaska**: set the Alaska standard and daylight saving mappings AKST (UTC−9) and AKDT (UTC−8).
- **hawaii-aleutian** or **hawaii** or **aleutian**: set the Hawaii-Aleutian standard and daylight saving mappings HAST (UTC−10) and HADT (UTC−9).
- **samoa**: set the Samoa Standard Time mapping SST (UTC−11).
- **chamorro**: set the Chamorro Standard Time mapping ChST (UTC−10).
- **clear**: redefines `\DTMenzonemaps` to empty and clears the mappings (using `\DTMclearmap`) for UTC−3, UTC−4, UTC−5, UTC−6, UTC−7, UTC−8, UTC−9, UTC−10, UTC−11 and UTC+10.

Other existing mappings are unchanged. For example,

```
\DTMlangsetup[en-US]{zone=atlantic,zone=pacific}
```

will set the mappings AST (UTC−4), ADT (UTC−3), PST (UTC−8) and PDT (UTC−7). Any other time zone offset mappings that were previously set will remain the same. However:

```
\DTMlangsetup[en-US]{zone=atlantic,zone=eastern}
```

will result in the mappings ADT (UTC−3), EST (UTC−5) and EDT (UTC−4), since the EDT mapping will overwrite the AST mapping. Again, any other time zone offset mappings that were previously set remain the same.

Another example:

```
\DTMlangsetup[en-US]{zone=dst,zone=atlantic,zone=pacific}
```

This will first set the daylight saving mappings and then set the Atlantic mappings, which means that UTC−4 will now be mapped to AST instead of EDT, and then it will set the Pacific mappings, which means that UTC−8 will now be mapped to PST instead of AKDT.

The `en-US` time style uses the `englishampm` style. The `en-US-numeric` uses a 24 hour style. The time zone checks the `mapzone` setting (described above). If it's set, then `\DTMusezonemapordefault` is used otherwise a numeric $\langle TZH \rangle : \langle TZM \rangle$ is displayed. (The minute part will be omitted if the `datetime2` package option `showzoneminutes` is set to `false`. The zone style ignores the `showisoZ` option.

6 English (CA)

The `en-CA` module is loaded if Canadian English has been specified. This may be done through options such as `en-CA` or `canadian`. (See the note on polyglossia in §1.)

This module provides the `en-CA` and `en-CA-numeric` styles that are virtually identical to the `en-US` and `en-US-numeric` style. These have the same options as for the US styles but the zone maps are provided by `\DTMenzonemaps`, which can be redefined as required. As from v1.03, there's also a `zone` setting that works in a similar manner to the `zone` setting for the `en-US` module described above. For `en-CA`, the available values are:

- `std` or `standard`: set the standard time zone mappings NST (UTC−3:30), AST (UTC−4), EST (UTC−5), CST (UTC−6), MST (UTC−7), PST (UTC−8).
- `dst` or `daylight`: set the daylight savings time zone mappings NDT (UTC−2:30), ADT (UTC−3), EDT (UTC−4), CDT (UTC−6), MDT (UTC−6), PDT (UTC−7).
- `newfoundland`: set the Newfoundland standard and daylight saving mappings NST (UTC−3:30) and NDT (UTC−2:30).
- `atlantic`: set the Atlantic standard and daylight saving mappings AST (UTC−4) and ADT (UTC−3).
- `eastern`: set the Eastern standard and daylight saving mappings EST (UTC−5) and EDT (UTC−4).
- `central`: set the Central standard and daylight saving mappings CST (UTC−6) and CDT (UTC−5).
- `mountain`: set the Mountain standard and daylight saving mappings MST (UTC−7) and MDT (UTC−6).
- `pacific`: set the Pacific standard and daylight saving mappings PST (UTC−8) and PDT (UTC−7).
- `clear`: redefines `\DTMenzonemaps` to empty and clears the mappings (using `\DTMclearmap`) for UTC−2:30, UTC−3:30, UTC−3, UTC−4, UTC−5, UTC−6, UTC−7 and UTC−8.

For example, if you live in a region that doesn't implement daylight saving:

```
\DTMlangsetup[en-CA]{zone=std}
```

7 English (AU)

The `en-AU` module is loaded if Australian English has been specified. This may be done through options such as `en-AU` or `australian`. (See the note on polyglossia in §1.)

This module provides the `en-AU` and `en-AU-numeric` styles that are virtually identical to the `en-GB` and `en-GB-numeric` styles. These have the same options as the GB styles (except that the default value of `ord` is `omit` rather than `level` and the default value of `mapzone` is `false`) but the zone maps are provided by `\DTM{en-AU}{zonemaps}`, which can be redefined as required. This doesn't take all zones into account, but as from v1.03, there is now the `zone` option, which modifies `\DTM{en-AU}{zonemaps}`. This works in much the same way as for the `en-US` and `en-CA` options of the same name, described above. Available values for the `en-AU` module:

- `std` or `standard`: set the standard time zone mappings CCT (UTC+6:30), CXT (UTC+7), AWST (UTC+8), ACWST (UTC+8:45), ACST (UTC+9:30), AEST (UTC+10), LHST (UTC+10:30), NFT (UTC+11).
- `dst` or `daylight`: set the daylight savings time zone mappings AWDT (UTC+9), ACDT (UTC+10:30), AEDT (UTC+11). Note that conflicting zones are missing, such as LHDT (UTC+11) which coincides with AEDT.
- `central`: set the Australian Central standard and daylight saving mappings ACST (UTC+9:30) and ACDT (UTC+10:30).
- `central-western`: set the Australian Central Western Standard Time mapping ACWST (UTC+8:45).
- `western`: set the Australian Western standard and daylight saving mappings AWST (UTC+8) and AWDT (UTC+9).
- `eastern`: set the Australian Eastern standard and daylight saving mappings AEST (UTC+10) and AEDT (UTC+11).
- `christmas`: set the Christmas Island Time mapping CXT (UTC+7).
- `lord-howe`: set the Lord Howe Island standard and daylight saving mappings LHST (UTC+10:30) and LHDT (UTC+11).
- `norfolk`: set the Norfolk Island time mapping NFT (UTC+11).
- `cocos` or `keeling`: set the Cocos (Keeling) island time mapping CCT (UTC+6:30).
- `clear`: redefines `\DTM{en-AU}{zonemaps}` to empty and clears the mappings (using `\DTM{clearmap}`) for UTC+6:30, UTC+7, UTC+8, UTC+8:45, UTC+9, UTC+9:30, UTC+10, UTC+10:30, UTC+11.

Example:

```
\DTM{lang}{setup}[en-AU] {zone=cocos,zone=christmas}
```

8 English (NZ)

The `en-NZ` module is loaded if New Zealand English has been specified. This may be done through options such as `en-NZ` or `newzealand`. (See the note on polyglossia in §1.)

This module provides the `en-NZ` and `en-NZ-numeric` styles that are virtually identical to the `AU` styles but the zone maps are provided by `\DTMenNZzonemaps`, which can be redefined as required. The default NZ mappings are NZST (UTC+12), CHAST (UTC+12:45), NZDT (UTC+13), CHADT (UTC+13:45).

9 English (GG)

The Guernsey English `en-GG` and `en-GG-numeric` styles are like the British English `en-GB` and `en-GB-numeric` styles, but replace `enGB` with `enGG` in the command names. This style can be loaded by using `en-GG` as a document class option or as a package option for either `tracklang` or `datetime2`.

10 English (JE)

The Jersey English `en-JE` and `en-JE-numeric` styles are like the British English `en-GB` and `en-GB-numeric` styles, but replace `enGB` with `enJE` in the command names. This style can be loaded by using `en-JE` as a document class option or as a package option for either `tracklang` or `datetime2`.

11 English (IM)

The Isle of Man `en-IM` and `en-IM-numeric` styles are like the British English `en-GB` and `en-GB-numeric` styles, but replace `enGB` with `enIM` in the command names. This style can be loaded by using `en-IM` as a document class option or as a package option for either `tracklang` or `datetime2`.

12 English (MT)

The Malta English `en-MT` and `en-MT-numeric` styles are like the British English `en-GB` and `en-GB-numeric` styles, but replace `enGB` with `enMT` in the command names. This style can be loaded by using `en-MT` as a document class option or as a package option for either `tracklang` or `datetime2`.

There are two main differences in the `en-GB/en-GB-numeric` and `en-MT/en-MT-numeric` styles: the `ord` option (for the text styles) defaults to `omit` and the CET (UTC+1) and CEST (UTC+2) time zone mappings are added (for both the text and numeric styles).

13 English (IE)

The Republic of Ireland English `en-IE` and `en-IE-numeric` styles are like the British English `en-GB` and `en-GB-numeric` styles, but replace `enGB` with `enIE` in the command names. This style can be loaded by using `en-IE` as a document class option or as a package option for either `tracklang` or `datetime2`. You will need at least version 1.2 of the `tracklang` package installed.

The only difference in the `en-GB/en-GB-numeric` and `en-IE/en-IE-numeric` styles is that the UTC+1 time zone is mapped to IST instead of BST. If you prefer WET/WEST time zones, you can do:

```
\renewcommand*{\DTMenglishzonemaps}{%
  \DTMdefzonemap{00}{00}{WET}%
  \DTMdefzonemap{01}{00}{WEST}%
}
```

For Irish Gaelic you need the `irish` module instead.

14 The Code

14.1 Base Code (`datetime2-english-base.1df`)

This file contains the code common to all the English regional variations. Identify module

```
1 \ProvidesDateTimeModule{english-base}[2019/10/21 v1.05 (NLCT)]
```

Since the main emphasize of the `datetime2` package is to provide expandable dates where possible, the commands here need to be expandable. (Anything that wasn't expandable would need to be protected.) Therefore the default ordinal format is a simple expandable format (which is why `fmtcount` isn't being used).

```
\DTMenglishordinal
1 \newcommand*{\DTMenglishordinal}[1]{%
2   \number#1 % space intended
3   \DTMenglishfmtordsuffix{%
4     \ifcase#1
5       \or \DTMenglishst
6       \or \DTMenglishnd
7       \or \DTMenglishrd
8       \or \DTMenglishth
9       \or \DTMenglishth
10      \or \DTMenglishth
11      \or \DTMenglishth
12      \or \DTMenglishth
13      \or \DTMenglishth
14      \or \DTMenglishth
15      \or \DTMenglishth
16      \or \DTMenglishth
17      \or \DTMenglishth
18      \or \DTMenglishth}
```

```

19   \or \DTMenglishth
20   \or \DTMenglishth
21   \or \DTMenglishth
22   \or \DTMenglishth
23   \or \DTMenglishth
24   \or \DTMenglishth
25   \or \DTMenglishth
26   \or \DTMenglishst
27   \or \DTMenglishnd
28   \or \DTMenglishrd
29   \or \DTMenglishth
30   \or \DTMenglishth
31   \or \DTMenglishth
32   \or \DTMenglishth
33   \or \DTMenglishth
34   \or \DTMenglishth
35   \or \DTMenglishth
36   \or \DTMenglishst
37   \fi
38 }
39

```

Just in case a user has some need to change the ordinal suffixes, these are provided as commands.

```

\DTMenglishst
40 \newcommand*{\DTMenglishst}{st}

\DTMenglishnd
41 \newcommand*{\DTMenglishnd}{nd}

\DTMenglishrd
42 \newcommand*{\DTMenglishrd}{rd}

\DTMenglishth
43 \newcommand*{\DTMenglishth}{th}

```

`\DTMenglishfmtordsuffix` The suffix can have a format applied to it (for example, made a superscript or converted to small caps). The default ignores the argument, which makes it consistent with TeX's default date format. This can be changed by regional modules.

```
44 \newcommand*{\DTMenglishfmtordsuffix}[1]{}
```

`\DTMenglishmonthname` English month names.

```

45 \newcommand*{\DTMenglishmonthname}[1]{%
46   \ifcase#1
47   \or
48   January%
49   \or
50   February%

```

```

51   \or
52   March%
53   \or
54   April%
55   \or
56   May%
57   \or
58   June%
59   \or
60   July%
61   \or
62   August%
63   \or
64   September%
65   \or
66   October%
67   \or
68   November%
69   \or
70   December%
71   \fi
72 }

```

\DTMenglishshortmonthname Abbreviated English month names.

```

73 \newcommand*{\DTMenglishshortmonthname}[1]{%
74   \ifcase#1
75     \or
76     Jan%
77     \or
78     Feb%
79     \or
80     Mar%
81     \or
82     Apr%
83     \or
84     May%
85     \or
86     Jun%
87     \or
88     Jul%
89     \or
90     Aug%
91     \or
92     Sep%
93     \or
94     Oct%
95     \or
96     Nov%
97     \or
98     Dec%

```

```

99    \fi
100 }

\DTMenglishweekdayname English day of week names.
101 \newcommand*{\DTMenglishweekdayname}[1]{%
102   \ifcase#1
103     Monday%
104   \or
105     Tuesday%
106   \or
107     Wednesday%
108   \or
109     Thursday%
110   \or
111     Friday%
112   \or
113     Saturday%
114   \or
115     Sunday%
116   \fi
117 }

```

```

\DTMenglishweekdayname English abbreviated day of week names.
118 \newcommand*{\DTMenglishshortweekdayname}[1]{%
119   \ifcase#1
120     Mon%
121   \or
122     Tue%
123   \or
124     Wed%
125   \or
126     Thu%
127   \or
128     Fri%
129   \or
130     Sat%
131   \or
132     Sun%
133   \fi
134 }

```

12 hour time tags.

```

\DTMenglisham
135 \newcommand*{\DTMenglisham}{am}%

\DTMenglishpm
136 \newcommand*{\DTMenglishpm}{pm}%

```

```

\DTMenglishmidnight
137 \newcommand*\DTMenglishmidnight{midnight}%

\DTMenglishnoon
138 \newcommand*\DTMenglishnoon{noon}%
      am/pm time style.

\DTMenglishampmfmt
139 \newcommand*\{\DTMenglishampmfmt}[1]{#1}

\DTMenglishtimesep
140 \newcommand*\{\DTMenglishtimesep}{\DTMsep{hourmin}>

      This style ignores seconds.

141 \DTMnewtimestyle
142 {englishampm}%
143 {%
144   \renewcommand*\DTMdisplaytime[3]{%
145     \ifnum##2=0
146     \ifnum##1=12
147       \DTMtexorpdfstring
148         {\DTMenglishampmfmt{\DTMenglishnoon}}%
149         {\DTMenglishnoon}%
150     \else
151     \ifnum##1=0
152       \DTMtexorpdfstring
153         {\DTMenglishampmfmt{\DTMenglishmidnight}}%
154         {\DTMenglishmidnight}%
155     \else
156     \ifnum##1=24
157       \DTMtexorpdfstring
158         {\DTMenglishampmfmt{\DTMenglishmidnight}}%
159         {\DTMenglishmidnight}%
160     \else
161     \ifnum##1<12
162       \number##1
163       \DTMtexorpdfstring
164         {\DTMenglishampmfmt{\DTMenglisham}}%
165         {\DTMenglisham}%
166     \else
167       \number\numexpr##1-12\relax
168       \DTMtexorpdfstring
169         {\DTMenglishampmfmt{\DTMenglishpm}}%
170         {\DTMenglishpm}%
171     \fi
172     \fi
173   \fi
174 }

```

```

175      \else
176          \ifnum##1<13
177              \ifnum##1=0
178                  12%
179              \else
180                  \number##1
181          \fi
182          \DTMenglishtimesep\DTMtwodigits{##2}%
183          \ifnum##1=12
v1.03 bug fixed replaced \DTMenglisham with \DTMenglishpm
184          \DTMtexorpdfstring
185              {\DTMenglishampfmt{\DTMenglishpm}}%
186              {\DTMenglishpm}%
187          \else
188              \DTMtexorpdfstring
189                  {\DTMenglishampfmt{\DTMenglisham}}%
190                  {\DTMenglisham}%
191          \fi
192      \else
193          \number\numexpr##1-12\relax
194          \DTMenglishtimesep\DTMtwodigits{##2}%
195          \ifnum##1=24
v1.03 bug fixed replaced \DTMenglishpm with \DTMenglisham
196          \DTMtexorpdfstring
197              {\DTMenglishampfmt{\DTMenglisham}}%
198              {\DTMenglisham}%
199          \else
200              \DTMtexorpdfstring
201                  {\DTMenglishampfmt{\DTMenglishpm}}%
202                  {\DTMenglishpm}%
203          \fi
204      \fi
205  \fi
206 }%
207 }%

```

14.2 Default English Code (`datetime2-english.ldf`)

This file contains the style used if English is requested without a known region. It uses TeX's default date style. This style ignores the `showdow` (show day of week) setting.

Identify Module

```
208 \ProvidesDateTimeModule{english}[2019/10/21 v1.05 (NLCT)]
```

Load the base English module.

```
209 \RequireDateTimeModule{english-base}
```

Define default English text style (TeX's default) labelled `english`. The time zone is just the `default` style (no mappings applied) but `showisoZ` setting checked.

The full style places a space between each block (date, time and zone). The numeric setting is ambiguous without a region so it will use the `default` style.

```

210 \DTMnewstyle
211 {english}%
212 {%
213   \renewcommand*{\DTMenglishfmtordsuffix}[1]{}
214   \renewcommand*{\DTMdisplaydate}[4]{%
215     \DTMenglishmonthname{##2}\space\number##3, \number##1
216   }%
217   \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
218 }%
219 {%
220   \renewcommand*{\DTMenglishtimesep}{\DTMsep{hourmin}}%
221   \DTMsettimestyle{englishampm}%
222 }%
223 {%
224   \DTMsetzonestyle{default}%
225 }%
226 {%
227   \renewcommand*{\DTMdisplay}[9]{%
228     \ifDTMshowdate
229       \DTMdisplaydate{##1}{##2}{##3}{##4}%
230       \space
231     \fi
232     \DTMdisplaytime{##5}{##6}{##7}%
233     \ifDTMshowzone
234       \space
235     \DTMdisplayzone{##8}{##9}%
236   \fi
237 }%
238   \renewcommand*{\DTMDisplay}{\DTMdisplay}%
239 }%

```

Switch the style according to the `useregional` setting.

```

240 \DTMifcaseregional
241 {}% do nothing
242 {\DTMsetstyle{english}}%
243 {\DTMsetstyle{default}}%

```

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

```

244 \ifcsundef{date\CurrentTrackedDialect}
245 {%
246   \ifundef{\dateenglish}
247   {}% do nothing
248 }%
249 {%
250   \def{\dateenglish}{%
251     \DTMifcaseregional
252   }% do nothing

```

```

253      {\DTMsetstyle{english}}%
254      {\DTMsetstyle{default}}%
255  }%
256 }%
257 }%
258 {%
259   \csdef{date\CurrentTrackedDialect}{%
260     \DTMifcaseregional
261     {}% do nothing
262     {\DTMsetstyle{english}}%
263     {\DTMsetstyle{default}}%
264   }%
265 }%

```

14.3 English (GB) Code (`datetime2-en-GB.ldf`)

This file contains the British English style. Identify this module.

```
266 \ProvidesDateTimeModule{en-GB}[2019/10/21 v1.05 (NLCT)]
```

Load base English module.

```
267 \RequireDateTimeModule{english-base}
```

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

`\DTMEnGBdowdaysep` The separator between the day of week name and the day of month number for the text format.

```
268 \newcommand*{\DTMEnGBdowdaysep}{\space}
```

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

```
269 \newcommand*{\DTMEnGBdaymonthsep}{\space}
```

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

```
270 \newcommand*{\DTMEnGBmonthyearsep}{\space}
```

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

```
271 \newcommand*{\DTMEnGBdatetimesep}{\space}
```

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

```
272 \newcommand*{\DTMEnGBtimezonesep}{\space}
```

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

```
273 \newcommand*{\DTMEnGBdatesep}{/}
```

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

```
274 \newcommand*{\DTMEnGBTimesep}{:}
```

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

```
275 \DTMdefkey{en-GB}{dowdaysep}{\renewcommand*\{\DTMendBdowdaysep\}{#1}}
276 \DTMdefkey{en-GB}{daymonthsep}{\renewcommand*\{\DTMendBdaymonthsep\}{#1}}
277 \DTMdefkey{en-GB}{monthyearsep}{\renewcommand*\{\DTMendBmonthyearsep\}{#1}}
278 \DTMdefkey{en-GB}{datetimesep}{\renewcommand*\{\DTMendBdatetimesep\}{#1}}
279 \DTMdefkey{en-GB}{timezonesep}{\renewcommand*\{\DTMendBtimezonesep\}{#1}}
280 \DTMdefkey{en-GB}{datesep}{\renewcommand*\{\DTMendBdatesep\}{#1}}
281 \DTMdefkey{en-GB}{timesep}{\renewcommand*\{\DTMendBtimesep\}{#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.

```
282 \DTMdefboolkey{en-GB}{abbr}[true]{}
```

The default is the full name.

```
283 \DTMsetbool{en-GB}{abbr}{false}
```

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

```
284 \DTMdefboolkey{en-GB}{mapzone}[true]{}
```

The default is to use mappings.

```
285 \DTMsetbool{en-GB}{mapzone}{true}
```

Define a boolean key that determines whether to show or hide the day of the month. (Called `showdayofmonth` instead of `showday` to avoid confusion with the day of the week.)

```
286 \DTMdefboolkey{en-GB}{showdayofmonth}[true]{}
```

The default is to show the day of the month.

```
287 \DTMsetbool{en-GB}{showdayofmonth}{true}
```

Define a boolean key that determines whether to show or hide the year.

```
288 \DTMdefboolkey{en-GB}{showyear}[true]{}
```

The default is to show the year.

```
289 \DTMsetbool{en-GB}{showyear}{true}
```

\DTMendBfmtordsuffix Define the ordinal suffix to be used by this style.

```
290 \newcommand*\{\DTMendBfmtordsuffix\}[1]{#1}
```

Define a setting to change the ordinal suffix style.

```
291 \DTMdefchoicekey{en-GB}{ord}[@dtm@val@dtm@nr]{level,raise,omit,sc}{%
292   \ifcase@dtm@nr\relax
293     \renewcommand*\{\DTMendBfmtordsuffix\}[1]{##1}%
294   \or
295     \renewcommand*\{\DTMendBfmtordsuffix\}[1]{%
296       \DTMtexorpdfstring{\protect\textrightsquigarrow}{##1}{}{##1}}%
297   \or
298     \renewcommand*\{\DTMendBfmtordsuffix\}[1]{\textsuperscript{##1}}%
299   \or
300     \renewcommand*\{\DTMendBfmtordsuffix\}[1]{%
301       \DTMtexorpdfstring{\protect\textrightsquigarrow}{##1}{}{##1}}%
```

```

302 \fi
303 }

Define the en-GB style.

304 \DTMnewstyle
305 {en-GB}%
306 {%
307   \renewcommand*\{\DTMenglishfmtordsuffix\}{\DTMenGBfmtordsuffix}%
308   \renewcommand*\{\DTMdisplaydate[4]\}{%
309     \ifDTMshowdow
310       \ifnum##4>-1
311         \DTMifbool{en-GB}{abbr}%
312         {\DTMenglishshortweekdayname{##4}}%
313         {\DTMenglishweekdayname{##4}}%
314         \DTMenGBdowdaysep
315       \fi
316     \fi
317     \DTMifbool{en-GB}{showdayofmonth}%
318     {%
319       \DTMenglishordinal{##3}%
320       \DTMenGBdaymonthsep
321     }%
322     {%
323       \DTMifbool{en-GB}{abbr}%
324       {\DTMenglishshortmonthname{##2}}%
325       {\DTMenglishmonthname{##2}}%
326       \DTMifbool{en-GB}{showyear}%
327     }%
328       \DTMenGBmonthyearsep\number##1 % space intended
329     }%
330     {%
331   }%
332   \renewcommand*\{\DTMDisplaydate\}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
333 }%
334 {%
335   \renewcommand*\{\DTMenglishtimesep\}{\DTMenGBTimesep}%
336   \DTMsettimestyle{englishampm}%
337 }%
338 {%
339   \DTMresetzones
340   \DTMenGBzonemaps
341   \renewcommand*\{\DTMdisplayzone\}[2]{%
342     \DTMifbool{en-GB}{mapzone}%
343     {\DTMusezonemapordefault{##1}{##2}}%
344   }%
345     \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
346     \ifDTMshowzoneminutes\DTMenGBTimesep\DTMtwodigits{##2}\fi
347   }%
348 }%
349 }%

```

```

350  {%
351   \renewcommand*\DTMdisplay}[9]{%
352   \ifDTMshowdate
353     \DTMdisplaydate{##1}{##2}{##3}{##4}%
354     \DTMendatetimesep
355   \fi
356   \DTMdisplaytime{##5}{##6}{##7}%
357   \ifDTMshowzone
358     \DTMendbtimezonesep
359     \DTMdisplayzone{##8}{##9}%
360   \fi
361 }
362 \renewcommand*\DTMDisplay}{\DTMdisplay}%
363 }%

```

Define numeric style.

```

364 \DTMnewstyle
365 {en-GB-numeric}%
366 {%
367   \renewcommand*\DTMdisplaydate[4]{%
368     \DTMifbool{en-GB}{showdayofmonth}%
369   }%
370     \number##3 % space intended
371     \DTMendbdatesep
372   }%
373   {}%
374   \number##2 % space intended
375   \DTMifbool{en-GB}{showyear}%
376   {}%
377     \DTMendbdatesep
378     \number##1 % space intended
379   }%
380   {}%
381 }%
382 \renewcommand*\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
383 }%
384 {%
385   \renewcommand*\DTMdisplaytime[3]{%
386     \number##1
387     \DTMendbtimesep\DTMtwodigits{##2}%
388     \ifDTMshowseconds\DTMendbtimesep\DTMtwodigits{##3}\fi
389   }%
390 }%
391 {%
392   \DTMresetzones
393   \DTMendbzonemaps
394   \renewcommand*\DTMdisplayzone}[2]{%
395     \DTMifbool{en-GB}{mapzone}%
396     {\DTMusezonemapdefault{##1}{##2}}%
397   }%

```

```

398      \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
399      \ifDTMshowzoneminutes\DTMenGBtimesep\DTMtwodigits{##2}\fi
400      }%
401  }%
402 }%
403 {%
404     \renewcommand*\{\DTMdisplay}[9]{%
405         \ifDTMshowdate
406             \DTMdisplaydate{##1}{##2}{##3}{##4}%
407             \DTMenGBdatetimesep
408         \fi
409         \DTMdisplaytime{##5}{##6}{##7}%
410         \ifDTMshowzone
411             \DTMenGBtimezonesep
412             \DTMdisplayzone{##8}{##9}%
413         \fi
414     }%
415     \renewcommand*\{\DTMDisplay}{\DTMdisplay}%
416 }

```

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

```

417 \newcommand*\{\DTMenGBzonemaps}{%
418     \DTMdefzonemap{00}{00}{GMT}%
419     \DTMdefzonemap{01}{00}{BST}%
420 }

```

Switch style according to the `useregional` setting.

```

421 \DTMifcaseregional
422 {}% do nothing
423 {\DTMsetstyle{en-GB}}%
424 {\DTMsetstyle{en-GB-numeric}}%

```

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

```

425 \ifcsundef{date\CurrentTrackedDialect}
426 {}% do nothing
427 \ifundef\dateenglish
428 {}%
429 }%
430 {}%
431     \def\dateenglish{%
432         \DTMifcaseregional
433         {}% do nothing
434         {\DTMsetstyle{en-GB}}%
435         {\DTMsetstyle{en-GB-numeric}}%
436     }%
437 }%
438 }%
439 {}

```

```

440 \csdef{date\CurrentTrackedDialect}{%
441   \DTMifcaseregional
442   {}% do nothing
443   {\DTMsetstyle{en-GB}}%
444   {\DTMsetstyle{en-GB-numeric}}%
445 }%
446 }%

```

14.4 English (US) Code (datetime2-en-US.1df)

This file contains the US English style.

Identify this module.

```
447 \ProvidesDateTimeModule{en-US}[2019/10/21 v1.05 (NLCT)]
```

Load base English module.

```
448 \RequireDateTimeModule{english-base}
```

Allow the user a way of configuring the en-US date format. This doesn't use the package wide separators such as \dtm@datetimesep in case other date formats are also required.

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

```
449 \newcommand*{\DTMenUSmonthdaysep}{\space}
```

\DTMenUSdownmonthsep The separator between the day of week name and the month for the text format.
(New to version 1.02.)

```
450 \newcommand*{\DTMenUSdownmonthsep}{\space}
```

\DTMenUSdayyearsep The separator between the day and year for the text format.

```
451 \newcommand*{\DTMenUSdayyearsep}{\space}
```

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

```
452 \newcommand*{\DTMenUSdatetimesep}{\space}
```

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

```
453 \newcommand*{\DTMenUStimezonesep}{\space}
```

\DTMenUSdatesep The separator for the numeric date format.

```
454 \newcommand*{\DTMenUSdatesep}{/}
```

\DTMenUStimesep The separator for the numeric time format.

```
455 \newcommand*{\DTMenUStimesep}{:}
```

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

```
456 \DTMdefkey{en-US}{monthdaysep}{\renewcommand*{\DTMenUSmonthdaysep}{#1}}
```

```
457 \DTMdefkey{en-US}{downmonthsep}{\renewcommand*{\DTMenUSdownmonthsep}{#1}}
```

```
458 \DTMdefkey{en-US}{dayyearsep}{\renewcommand*{\DTMenUSdayyearsep}{#1}}
```

```

459 \DTMdefkey{en-US}{datetimesep}{\renewcommand*{\DTMenUSdatetimesep}{#1}}
460 \DTMdefkey{en-US}{timezonesep}{\renewcommand*{\DTMenUStimezonesep}{#1}}
461 \DTMdefkey{en-US}{datesep}{\renewcommand*{\DTMenUSdatesep}{#1}}
462 \DTMdefkey{en-US}{timesep}{\renewcommand*{\DTMenUStimesep}{#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.
463 \DTMdefboolkey{en-US}{abbr}[true]{}
    The default is the full name.
464 \DTMsetbool{en-US}{abbr}{false}
    Define a boolean key that determines if the time zone mappings should be
    used.
465 \DTMdefboolkey{en-US}{mapzone}[true]{}
    The default is no mappings.
466 \DTMsetbool{en-US}{mapzone}{false}
    Define a boolean key that determines whether to show or hide the day of the
    month. (Called showdayofmonth instead of showday to avoid confusion with the
    day of the week.)
467 \DTMdefboolkey{en-US}{showdayofmonth}[true]{}
    The default is to show the day of the month.
468 \DTMsetbool{en-US}{showdayofmonth}{true}
    Define a boolean key that determines whether to show or hide the year.
469 \DTMdefboolkey{en-US}{showyear}[true]{}
    The default is to show the year.
470 \DTMsetbool{en-US}{showyear}{true}

\DTMenUSfmtordsuffix Define the ordinal suffix to be used by this style.
471 \newcommand*{\DTMenUSfmtordsuffix}[1]{}

    Define a setting to change the ordinal suffix style.
472 \DTMdefchoicekey{en-US}{ord}{@\dtm@val@\dtm@nr}{level,raise,omit,sc}{%
473   \ifcase@\dtm@nr\relax
474     \renewcommand*{\DTMenUSfmtordsuffix}[1]{##1}%
475   \or
476     \renewcommand*{\DTMenUSfmtordsuffix}[1]{%
477       \DTMtexorpdfstring{\protect\textsuperscript{##1}}{##1}}%
478   \or
479     \renewcommand*{\DTMenUSfmtordsuffix}[1]{%}
480   \or
481     \renewcommand*{\DTMenUSfmtordsuffix}[1]{%
482       \DTMtexorpdfstring{\protect\textsc{##1}}{##1}}%
483   \fi
484 }

```

Define a setting to change zone mappings.

```
485 \DTMdefchoicekey{en-US}{zone}[@dtm@val@dtm@nr]%
486   {std,standard,dst,daylight,atlantic,eastern,central,mountain,%
487   pacific,alaska,hawaii-aleutian,hawaii,aleutian,samoa,charmorro,clear}%
488 {%
489   \ifcase@dtm@nr\relax
490     % std
491     \appto\DTMenUSzonemaps{\DTMenUSstdzonemaps}%
492     \DTMenUSstdzonemaps
493   \or
494     % standard
495     \appto\DTMenUSzonemaps{\DTMenUSstdzonemaps}%
496     \DTMenUSstdzonemaps
497   \or
498     % dst
499     \appto\DTMenUSzonemaps{\DTMenUSdstzonemaps}%
500     \DTMenUSdstzonemaps
501   \or
502     % daylight
503     \appto\DTMenUSzonemaps{\DTMenUSdstzonemaps}%
504     \DTMenUSdstzonemaps
505   \or
506     % atlantic
507     \appto\DTMenUSzonemaps{\DTMenUSatlanticzonemaps}%
508     \DTMenUSatlanticzonemaps
509   \or
510     % eastern
511     \appto\DTMenUSzonemaps{\DTMenUSEasternzonemaps}%
512     \DTMenUSEasternzonemaps
513   \or
514     % central
515     \appto\DTMenUSzonemaps{\DTMenUScentralzonemaps}%
516     \DTMenUScentralzonemaps
517   \or
518     % mountain
519     \appto\DTMenUSzonemaps{\DTMenUSmountainzonemaps}%
520     \DTMenUSmountainzonemaps
521   \or
522     % pacific
523     \appto\DTMenUSzonemaps{\DTMenUSpacificzonemaps}%
524     \DTMenUSpacificzonemaps
525   \or
526     % alaska
527     \appto\DTMenUSzonemaps{\DTMenUSalaskazonemaps}%
528     \DTMenUSalaskazonemaps
529   \or
530     % hawaii-aleutian
531     \appto\DTMenUSzonemaps{\DTMenUShawaiialeutianzonemaps}%
532     \DTMenUShawaiialeutianzonemaps
```

```

533 \or
534 % hawaii
535 \appto\DTMenUSzonemaps{\DTMenUShawaiialeutianzonemaps}%
536 \DTMenUShawaiialeutianzonemaps
537 \or
538 % aleutian
539 \appto\DTMenUSzonemaps{\DTMenUShawaiialeutianzonemaps}%
540 \DTMenUShawaiialeutianzonemaps
541 \or
542 % samoa
543 \appto\DTMenUSzonemaps{\DTMenUSSamoazonemaps}%
544 \DTMenUSSamoazonemaps
545 \or
546 % chamorro
547 \appto\DTMenUSzonemaps{\DTMenUSchamorrozonemaps}%
548 \DTMenUSchamorrozonemaps
549 \or
550 % clear
551 \renewcommand*{\DTMenUSzonemaps}{}%
552 \DTMclearmap{-3}{0}%
553 \DTMclearmap{-4}{0}%
554 \DTMclearmap{-5}{0}%
555 \DTMclearmap{-6}{0}%
556 \DTMclearmap{-7}{0}%
557 \DTMclearmap{-8}{0}%
558 \DTMclearmap{-9}{0}%
559 \DTMclearmap{-10}{0}%
560 \DTMclearmap{-11}{0}%
561 \DTMclearmap{10}{0}%
562 \fi
563 }

```

Define the `en-US` style. Hiding the day of month is a bit awkward as the default day-year separator has a comma that should disappear if the day number is missing so the month-day separator is used as the month-year separator if the day is missing.

```

564 \DTMnewstyle
565 {en-US}%
566 {%
567   \renewcommand*{\DTMenglishfmtordsuffix}{\DTMenUSfmtordsuffix}%
568   \renewcommand*\DTMdisplaydate[4]{%

```

Support for `showdow` added in v1.02 (thanks to Alan Munn).

```

569   \ifDTMshowdow
570     \ifnum##4>-1 % space intended
571       \DTMifbool{en-US}{abbr}%
572       {\DTMenglishshortweekdayname{##4}}%
573       {\DTMenglishweekdayname{##4}}%
574       \DTMenUSdownmonthsep
575   \fi

```

```

576     \fi
577     \DTMifbool{en-US}{abbr}%
578     {\DTMenglishshortmonthname{\##2}}%
579     {\DTMenglishmonthname{\##2}}%
580     \DTMifbool{en-US}{showdayofmonth}%
581     {%
582         \DTMEnUSmonthdaysep
583         \DTMenglishordinal{\##3}%
584         \DTMifbool{en-US}{showyear}%
585         {%
586             \DTMEnUSdayyearsep
587             \number{\##1} % space intended
588         }%
589         {}%
590     }%
591     {}%
592     \DTMifbool{en-US}{showyear}%
593     {%
594         \DTMEnUSmonthdaysep
595         \number{\##1} % space intended
596     }%
597     {}%
598     {}%
599     {}%
600     \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{\##1}{\##2}{\##3}{\##4}}%
601 }%
602 {%
603     \renewcommand*{\DTMenglishtimesep}{\DTMEnUSTimesep}%
604     \DTMsettimestyle{englishampm}%
605 }%
606 {%
607     \DTMresetzones
608     \DTMEnUSzonemaps
609     \renewcommand*{\DTMdisplayzone}[2]{%
610         \DTMifbool{en-US}{mapzone}%
611         {\DTMusezonemapordefault{\##1}{\##2}}%
612         {%
613             \ifnum{\##1}<0 \else+\fi\DTMtwodigits{\##1}%
614             \ifDTMshowzoneminutes\DTMEnUSTimesep\DTMtwodigits{\##2}\fi
615         }%
616     }%
617 }%
618 {%
619     \renewcommand*{\DTMdisplay}[9]{%
620         \ifDTMshowdate
621             \DTMdisplaydate{\##1}{\##2}{\##3}{\##4}%
622             \DTMEnUSdatetimesep
623             \fi
624             \DTMdisplaytime{\##5}{\##6}{\##7}%
625             \ifDTMshowzone

```

```

626      \DTMenUStimezonesep
627      \DTMdisplayzone{##8}{##9}%
628      \fi
629  }%
630  \renewcommand*\DTMDisplay}{\DTMdisplay}%
631 }%

```

Define numeric style.

```

632 \DTMnewstyle
633 {en-US-numeric}%
634 {%
635   \renewcommand*\DTMdisplaydate[4]{%
636     \number##2 % space intended
637     \DTMifbool{en-US}{showdayofmonth}%
638   }%
639   \DTMenUSdatesep
640   \number##3 % space intended
641 }%
642 }%
643 \DTMifbool{en-US}{showyear}%
644 }%
645   \DTMenUSdatesep
646   \number##1 % space intended
647 }%
648 }%
649 }%
650 \renewcommand*\DTMDisplaydate[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
651 }%
652 {%
653   \renewcommand*\DTMdisplaytime[3]{%
654     \number##1
655     \DTMenUStimesep\DTMtwodigits{##2}%
656     \ifDTMshowseconds\DTMenUStimesep\DTMtwodigits{##3}\fi
657   }%
658 }%
659 {%
660   \DTMresetzones
661   \DTMenUSzonemaps
662   \renewcommand*\DTMdisplayzone[2]{%
663     \DTMifbool{en-US}{mapzone}%
664     {\DTMusezonemapordefault{##1}{##2}}%
665   }%
666   \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
667   \ifDTMshowzoneminutes\DTMenUStimesep\DTMtwodigits{##2}\fi
668 }%
669 }%
670 }%
671 {%
672   \renewcommand*\DTMdisplay[9]{%
673     \ifDTMshowdate

```

```

674     \DTMdisplaydate{##1}{##2}{##3}{##4}%
675     \DTMendatetimesep
676     \fi
677     \DTMdisplaytime{##5}{##6}{##7}%
678     \ifDTMshowzone
679         \DTMendstimesep
680         \DTMdisplayzone{##8}{##9}%
681     \fi
682 }
683 \renewcommand*\{\DTMDisplay}{\DTMdisplay}
684 }

```

\DTMendatetimesep The time zone mappings are set through this command, which can be redefined if extra mappings are required or mappings need to be removed. (These don't take daylight saving into account.)

```

685 \newcommand*\{\DTMendatetimesep}{%
686     \DTMdefzonemap{-3}{00}{ADT}%
687     \DTMdefzonemap{-4}{00}{AST}%
688     \DTMdefzonemap{-5}{00}{EST}%
689     \DTMdefzonemap{-6}{00}{CST}%
690     \DTMdefzonemap{-7}{00}{MST}%
691     \DTMdefzonemap{-8}{00}{PST}%
692 }

```

\DTMendstimesep Just the standard time zone mappings.

```

693 \newcommand*\{\DTMendstimesep}{%
694     \DTMdefzonemap{-4}{00}{AST}%
695     \DTMdefzonemap{-5}{00}{EST}%
696     \DTMdefzonemap{-6}{00}{CST}%
697     \DTMdefzonemap{-7}{00}{MST}%
698     \DTMdefzonemap{-8}{00}{PST}%
699     \DTMdefzonemap{-9}{00}{AKST}%
700     \DTMdefzonemap{-10}{00}{HAST}%
701     \DTMdefzonemap{-11}{00}{SST}%
702     \DTMdefzonemap{10}{00}{ChST}%
703 }

```

\DTMenddsttimesep Just daylight saving mappings.

```

704 \newcommand*\{\DTMenddsttimesep}{%
705     \DTMdefzonemap{-3}{00}{ADT}%
706     \DTMdefzonemap{-4}{00}{EDT}%
707     \DTMdefzonemap{-5}{00}{CDT}%
708     \DTMdefzonemap{-6}{00}{MDT}%
709     \DTMdefzonemap{-7}{00}{PDT}%
710     \DTMdefzonemap{-8}{00}{AKDT}%
711     \DTMdefzonemap{-9}{00}{HADT}%
712 }

```

\DTMendatlanticsep Just the Atlantic zone mappings (AST and ADT).

```

713 \newcommand*{\DTMenUSatlanticzonemaps}{%
714   \DTMdefzonemap{-4}{00}{AST}%
715   \DTMdefzonemap{-3}{00}{ADT}%
716 }

\DTMenUSeasternzonemaps Just the Eastern zone mappings (EST and EDT).
717 \newcommand*{\DTMenUSeasternzonemaps}{%
718   \DTMdefzonemap{-5}{00}{EST}%
719   \DTMdefzonemap{-4}{00}{EDT}%
720 }

\DTMenUScentralzonemaps Just the Central zone mappings (CST and CDT).
721 \newcommand*{\DTMenUScentralzonemaps}{%
722   \DTMdefzonemap{-6}{00}{CST}%
723   \DTMdefzonemap{-5}{00}{CDT}%
724 }

\DTMenUSmountainzonemaps Just the Mountain zone mappings (MST and MDT).
725 \newcommand*{\DTMenUSmountainzonemaps}{%
726   \DTMdefzonemap{-7}{00}{MST}%
727   \DTMdefzonemap{-6}{00}{MDT}%
728 }

\DTMenUSpacificzonemaps Just the Pacific zone mappings (PST and PDT).
729 \newcommand*{\DTMenUSpacificzonemaps}{%
730   \DTMdefzonemap{-8}{00}{PST}%
731   \DTMdefzonemap{-7}{00}{PDT}%
732 }

\DTMenUSalaskazonemaps Just the Alaska zone mappings (AKST and AKDT).
733 \newcommand*{\DTMenUSalaskazonemaps}{%
734   \DTMdefzonemap{-9}{00}{AKST}%
735   \DTMdefzonemap{-8}{00}{AKDT}%
736 }

\DTMenUShawaiialeutianzonemaps Just the Hawaii-Aleutian zone mappings (HAST and HADT).
737 \newcommand*{\DTMenUShawaiialeutianzonemaps}{%
738   \DTMdefzonemap{-10}{00}{HAST}%
739   \DTMdefzonemap{-9}{00}{HADT}%
740 }

\DTMenUSSamoazonemaps Just the Samoa standard time (SST).
741 \newcommand*{\DTMenUSSamoazonemaps}{%
742   \DTMdefzonemap{-11}{00}{SST}%
743 }

\DTMenUSchamorrozonemaps Just the Chamorro standard time (ChST).
744 \newcommand*{\DTMenUSchamorrozonemaps}{%
745   \DTMdefzonemap{10}{00}{ChST}%
746 }

```

Switch style according to the `useregional` setting.

```

747 \DTMifcaseregional
748 {}% do nothing
749 {\DTMsetstyle{en-US}}%
750 {\DTMsetstyle{en-US-numeric}}%

```

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

```

751 \ifcsundef{date\CurrentTrackedDialect}
752 {}% do nothing
753 \ifundef{\dateenglish}
754 {}%
755 {}%
756 {}%
757 \def{\dateenglish}{%
758 \DTMifcaseregional
759 {}% do nothing
760 {\DTMsetstyle{en-US}}%
761 {\DTMsetstyle{en-US-numeric}}%
762 }%
763 }%
764 }%
765 {}%
766 \csdef{date\CurrentTrackedDialect}{%
767 \DTMifcaseregional
768 {}% do nothing
769 {\DTMsetstyle{en-US}}%
770 {\DTMsetstyle{en-US-numeric}}%
771 }%
772 }%

```

14.5 English (Canada) Code (`datetime2-en-CA.1df`)

This file contains the Canadian English style. This is very similar to the US style.

Identify this module.

```
773 \ProvidesDateTimeModule{en-CA}[2019/10/21 v1.05 (NLCT)]
```

Load base English module.

```
774 \RequireDateTimeModule{english-base}
```

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

`\DTM{en-CA}{monthdaysep}` The separator between the month and day for the text format.

```
775 \newcommand*{\DTM{en-CA}{monthdaysep}}{\space}
```

`\DTM{en-CA}{downmonthsep}` The separator between the day of week name and the month for the text format.
(New to version 1.02.)

```
776 \newcommand*{\DTM{en-CA}{downmonthsep}}{\space}
```

\DTMnCAdayyearsep The separator between the day and year for the text format.
 777 \newcommand*\{\DTMnCAdayyearsep\}{, \space}

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

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

\DTMnCAdatesep The separator for the numeric date format.
 780 \newcommand*\{\DTMnCAdatesep\}{/}

\DTMnCATimesep The separator for the numeric time format.
 781 \newcommand*\{\DTMnCATimesep\}{:}

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

782 \DTMdefkey{en-CA}{monthdaysep}{\renewcommand*\{\DTMnCAmonthdaysep\}{#1}}
 783 \DTMdefkey{en-CA}{dowmonthsep}{\renewcommand*\{\DTMnCADowmonthsep\}{#1}}
 784 \DTMdefkey{en-CA}{dayyearsep}{\renewcommand*\{\DTMnCAdayyearsep\}{#1}}
 785 \DTMdefkey{en-CA}{datetimesep}{\renewcommand*\{\DTMnCADatetimesep\}{#1}}
 786 \DTMdefkey{en-CA}{timezonesep}{\renewcommand*\{\DTMnCATimezonesep\}{#1}}
 787 \DTMdefkey{en-CA}{datesep}{\renewcommand*\{\DTMnCAdatesep\}{#1}}
 788 \DTMdefkey{en-CA}{timesep}{\renewcommand*\{\DTMnCATimesep\}{#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.

789 \DTMdefboolkey{en-CA}{abbr}[true]{}

The default is the full name.

790 \DTMsetbool{en-CA}{abbr}{false}

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

791 \DTMdefboolkey{en-CA}{mapzone}[true]{}

The default is no mappings.

792 \DTMsetbool{en-CA}{mapzone}{false}

Define a boolean key that determines whether to show or hide the day of the month. (Called `showdayofmonth` instead of `showday` to avoid confusion with the day of the week.)

793 \DTMdefboolkey{en-CA}{showdayofmonth}[true]{}

The default is to show the day of the month.

794 \DTMsetbool{en-CA}{showdayofmonth}{true}

Define a boolean key that determines whether to show or hide the year.

795 \DTMdefboolkey{en-CA}{showyear}[true]{}

The default is to show the year.

```
796 \DTMsetbool{en-CA}{showyear}{true}
```

\DTMnCAfmtordsuffix Define the ordinal suffix to be used by this style.

```
797 \newcommand*\{\DTMnCAfmtordsuffix}[1]{}
```

Define a setting to change the ordinal suffix style.

```
798 \DTMdefchoicekey{en-CA}{ord}{\@dtm@val\@dtm@nr}{level,raise,omit,sc}{%
799   \ifcase\@dtm@nr\relax
800     \renewcommand*\{\DTMnCAfmtordsuffix}[1]{##1}%
801   \or
802     \renewcommand*\{\DTMnCAfmtordsuffix}[1]{%
803       \DTMtexorpdfstring{\protect\textrsuperscript{##1}}{##1}}%
804   \or
805     \renewcommand*\{\DTMnCAfmtordsuffix}[1]{%
806       \DTMtexorpdfstring{\protect\textrsc{##1}}{##1}}%
807   \or
808     \renewcommand*\{\DTMnCAfmtordsuffix}[1]{%
809       \fi
810 }
```

Define a setting to change zone mappings.

```
811 \DTMdefchoicekey{en-CA}{zone}{\@dtm@val\@dtm@nr}{%
812   std,standard,dst,daylight,newfoundland,atlantic,eastern,central,mountain,%
813   pacific,clear}%
814 {%
815   \ifcase\@dtm@nr\relax
816     % std
817     \appto\DTMnCAzonemaps{\DTMnCAstdzonemaps}%
818     \DTMnCAstdzonemaps
819   \or
820     % standard
821     \appto\DTMnCAzonemaps{\DTMnCAstdzonemaps}%
822     \DTMnCAstdzonemaps
823   \or
824     % dst
825     \appto\DTMnCAzonemaps{\DTMnCAdstzonemaps}%
826     \DTMnCAdstzonemaps
827   \or
828     % daylight
829     \appto\DTMnCAzonemaps{\DTMnCAdstzonemaps}%
830     \DTMnCAdstzonemaps
831   \or
832     % newfoundland
833     \appto\DTMnCAzonemaps{\DTMnCAnewfoundlandzonemaps}%
834     \DTMnCAnewfoundlandzonemaps
835   \or
836     % atlantic
837     \appto\DTMnCAzonemaps{\DTMnCAatlanticzonemaps}%
838     \DTMnCAatlanticzonemaps
```

```

839 \or
840 % eastern
841 \appto\DTMenCAzonemaps{\DTMenCAeasternzonemaps}%
842 \DTMenCAeasternzonemaps
843 \or
844 % central
845 \appto\DTMenCAzonemaps{\DTMenCAcentralzonemaps}%
846 \DTMenCAcentralzonemaps
847 \or
848 % mountain
849 \appto\DTMenCAzonemaps{\DTMenCAmountainzonemaps}%
850 \DTMenCAmountainzonemaps
851 \or
852 % pacific
853 \appto\DTMenCAzonemaps{\DTMenCApacificzonemaps}%
854 \DTMenCApacificzonemaps
855 \or
856 % clear
857 \renewcommand*{\DTMenCAzonemaps}{}%
858 \DTMclearmap{-2}{30}%
859 \DTMclearmap{-3}{30}%
860 \DTMclearmap{-3}{0}%
861 \DTMclearmap{-4}{0}%
862 \DTMclearmap{-5}{0}%
863 \DTMclearmap{-6}{0}%
864 \DTMclearmap{-7}{0}%
865 \DTMclearmap{-8}{0}%
866 \fi
867 }

```

Define the en-CA style (similar to en-US).

```

868 \DTMnewstyle
869 {en-CA}%
870 {%
871 % date style
872 \renewcommand*{\DTMenglishfmtordsuffix}{\DTMenCAFmtordsuffix}%
873 \renewcommand*{\DTMdisplaydate}[4]{%

```

Support for showdow added in v1.02 (thanks to Alan Munn).

```

873 \ifDTMshowdow
874 \ifnum##4>-1 % space intended
875 \DTMifbool{en-CA}{abbr}%
876 {\DTMenglishshortweekdayname{##4}}%
877 {\DTMenglishweekdayname{##4}}%
878 \DTMenCadowmonthsep
879 \fi
880 \fi
881 \DTMifbool{en-CA}{abbr}%
882 {\DTMenglishshortmonthname{##2}}%
883 {\DTMenglishmonthname{##2}}%
884 \DTMifbool{en-CA}{showdayofmonth}%
885 \f%

```

```

886     \DTMendAmonthdaysep
887     \DTMenglishordinal{##3}%
888     \DTMifbool{en-CA}{showyear}%
889     {%
890         \DTMendAdayyearsep
891         \number##1 % intended
892     }%
893     {}%
894 }%
895 f%
896     \DTMifbool{en-CA}{showyear}%
897     {%
898         \DTMendAmonthdaysep
899         \number##1 % intended
900     }%
901     {}%
902     }%
903     }%
904     \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
905 }%
906 {%
907     \renewcommand*{\DTMenglishtimesep}{\DTMendAtimesep}%
908     \DTMsettimestyle{englishampm}%
909 }%
910 {%
911     \DTMresetzones
912     \DTMendAZonemaps
913     \renewcommand*{\DTMdisplayzone}[2]{%
914         \DTMifbool{en-CA}{mapzone}%
915         {\DTMusezonemapordefault{##1}{##2}}%
916         {%
917             \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
918             \ifDTMshowzoneminutes\DTMendAtimesep\DTMtwodigits{##2}\fi
919         }%
920     }%
921 }%
922 {%
923     \renewcommand*{\DTMdisplay}[9]{%
924         \ifDTMshowdate
925             \DTMdisplaydate{##1}{##2}{##3}{##4}%
926             \DTMendAdatetimesep
927         \fi
928         \DTMdisplaytime{##5}{##6}{##7}%
929         \ifDTMshowzone
930             \DTMendATimezonesep
931             \DTMdisplayzone{##8}{##9}%
932         \fi
933     }%
934     \renewcommand*{\DTMDisplay}{\DTMdisplay}%
935 }%

```

Define numeric style.

```
936 \DTMnewstyle
937 {en-CA-numeric}%
938 {%
939   \renewcommand*\DTMdisplaydate[4]{%
940     \number##2 % space intended
941     \DTMifbool{en-CA}{showdayofmonth}%
942     {%
943       \DTMenCAdatesep
944       \number##3 % space intended
945     }%
946     {%
947       \DTMifbool{en-CA}{showyear}%
948       {%
949         \DTMenCAdatesep
950         \number##1 % space intended
951       }%
952     }%
953   }%
954   \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
955 }%
956 {%
957   \renewcommand*\DTMdisplaytime[3]{%
958     \number##1
959     \DTMenCAtimesep\DTMtwodigits{##2}%
960     \ifDTMshowseconds\DTMenCAtimesep\DTMtwodigits{##3}\fi
961   }%
962 }%
963 {%
964   \DTMresetzones
965   \DTMenCAzonemaps
966   \renewcommand*{\DTMdisplayzone}[2]{%
967     \DTMifbool{en-CA}{mapzone}%
968     {\DTMusezonemapordefault{##1}{##2}}%
969     {%
970       \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
971       \ifDTMshowzoneminutes\DTMenCAtimesep\DTMtwodigits{##2}\fi
972     }%
973   }%
974 }%
975 {%
976   \renewcommand*{\DTMdisplay}[9]{%
977     \ifDTMshowdate
978       \DTMdisplaydate{##1}{##2}{##3}{##4}%
979       \DTMenCAdatetimesep
980     \fi
981     \DTMdisplaytime{##5}{##6}{##7}%
982     \ifDTMshowzone
983       \DTMenCAtimezonesep
```

```

984     \DTMdisplayzone{##8}{##9}%
985     \fi
986   }%
987   \renewcommand*\{\DTMDisplay\}{\DTMdisplay}%
988 }

```

\DTMenCAzonemaps The time zone mappings are set through this command, which can be redefined if extra mappings are required or mappings need to be removed. (These don't take daylight saving into account, except for NDT.)

```

989 \newcommand*\{\DTMenCAzonemaps\}{%
990   \DTMdefzonemap{-2}{30}{NDT}%
991   \DTMdefzonemap{-3}{30}{NST}%
992   \DTMdefzonemap{-4}{00}{AST}%
993   \DTMdefzonemap{-5}{00}{EST}%
994   \DTMdefzonemap{-6}{00}{CST}%
995   \DTMdefzonemap{-7}{00}{MST}%
996   \DTMdefzonemap{-8}{00}{PST}%
997 }

```

\DTMenCAstdzonemaps Just the standard time zone mappings.

```

998 \newcommand*\{\DTMenCAstdzonemaps\}{%
999   \DTMdefzonemap{-3}{30}{NST}%
1000  \DTMdefzonemap{-4}{00}{AST}%
1001  \DTMdefzonemap{-5}{00}{EST}%
1002  \DTMdefzonemap{-6}{00}{CST}%
1003  \DTMdefzonemap{-7}{00}{MST}%
1004  \DTMdefzonemap{-8}{00}{PST}%
1005 }

```

\DTMenCADstzonemaps Just daylight saving mappings.

```

1006 \newcommand*\{\DTMenCADstzonemaps\}{%
1007  \DTMdefzonemap{-2}{30}{NDT}%
1008  \DTMdefzonemap{-3}{00}{ADT}%
1009  \DTMdefzonemap{-4}{00}{EDT}%
1010  \DTMdefzonemap{-5}{00}{CDT}%
1011  \DTMdefzonemap{-6}{00}{MDT}%
1012  \DTMdefzonemap{-7}{00}{PDT}%
1013 }

```

\DTMenCAnewfoundlandzonemaps Just the Newfoundland zone mappings (NST and NDT).

```

1014 \newcommand*\{\DTMenCAnewfoundlandzonemaps\}{%
1015  \DTMdefzonemap{-3}{30}{NST}%
1016  \DTMdefzonemap{-2}{30}{NDT}%
1017 }

```

\DTMenCAatlanticzonemaps Just the Atlantic zone mappings (AST and ADT).

```

1018 \newcommand*\{\DTMenCAatlanticzonemaps\}{%
1019  \DTMdefzonemap{-4}{00}{AST}%
1020  \DTMdefzonemap{-3}{00}{ADT}%
1021 }

```

```

\DTMenCAeasternzonemaps Just the Eastern zone mappings (EST and EDT).
1022 \newcommand*{\DTMenCAeasternzonemaps}{%
1023   \DTMdefzonemap{-5}{00}{EST}%
1024   \DTMdefzonemap{-4}{00}{EDT}%
1025 }

\DTMenCAcentralzonemaps Just the Central zone mappings (CST and CDT).
1026 \newcommand*{\DTMenCAcentralzonemaps}{%
1027   \DTMdefzonemap{-6}{00}{CST}%
1028   \DTMdefzonemap{-5}{00}{CDT}%
1029 }

\DTMenCAmountainzonemaps Just the Mountain zone mappings (MST and MDT).
1030 \newcommand*{\DTMenCAmountainzonemaps}{%
1031   \DTMdefzonemap{-7}{00}{MST}%
1032   \DTMdefzonemap{-6}{00}{MDT}%
1033 }

\DTMenCApacificzonemaps Just the Pacific zone mappings (PST and PDT).
1034 \newcommand*{\DTMenCApacificzonemaps}{%
1035   \DTMdefzonemap{-8}{00}{PST}%
1036   \DTMdefzonemap{-7}{00}{PDT}%
1037 }

Switch style according to the useregional setting.
1038 \DTMifcaseregional
1039 {}% do nothing
1040 {\DTMsetstyle{en-CA}}%
1041 {\DTMsetstyle{en-CA-numeric}}%

Redefine \dateenglish (or \date<dialect>) to prevent babel from resetting
\today. (For this to work, babel must already have been loaded if it's required.)
1042 \ifcsundef{date\CurrentTrackedDialect}
1043 {}% do nothing
1044   \ifundef{\dateenglish}
1045     {}%
1046   {}%
1047   {}%
1048     \def{\dateenglish}{%
1049       \DTMifcaseregional
1050         {}% do nothing
1051         {\DTMsetstyle{en-CA}}%
1052         {\DTMsetstyle{en-CA-numeric}}%
1053       }%
1054     }%
1055   }%
1056   {}%
1057   \csdef{date\CurrentTrackedDialect}{%
1058     \DTMifcaseregional

```

```

1059      {}% do nothing
1060      {\DTMsetstyle{en-CA}}%
1061      {\DTMsetstyle{en-CA-numeric}}%
1062  }%
1063 }%

```

14.6 English (Australia) Code (datetime2-en-AU.1df)

This file contains the Australian English style.

Identify this module.

```
1064 \ProvidesDateTimeModule{en-AU}[2019/10/21 v1.05 (NLCT)]
```

Load base English module.

```
1065 \RequireDateTimeModule{english-base}
```

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

`\DTMenAUdowdaysep` The separator between the day of week name and the day of month number for the text format.

```
1066 \newcommand*{\DTMenAUdowdaysep}{\space}
```

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

```
1067 \newcommand*{\DTMenAdaymonthsep}{\space}
```

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

```
1068 \newcommand*{\DTMenAmonthyearsep}{\space}
```

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

```
1069 \newcommand*{\DTMenAUdatetimesep}{\space}
```

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

```
1070 \newcommand*{\DTMenAUtimezonesep}{\space}
```

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

```
1071 \newcommand*{\DTMenAUdatesep}{/}
```

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

```
1072 \newcommand*{\DTMenAUtimesep}{:}
```

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

```

1073 \DTMdefkey{en-AU}{dowdaysep}{\renewcommand*{\DTMenAUdowdaysep}{#1}}
1074 \DTMdefkey{en-AU}{daymonthsep}{\renewcommand*{\DTMenAdaymonthsep}{#1}}
1075 \DTMdefkey{en-AU}{monthyearsep}{\renewcommand*{\DTMenAmonthyearsep}{#1}}
1076 \DTMdefkey{en-AU}{datetimesep}{\renewcommand*{\DTMenAUdatetimesep}{#1}}
1077 \DTMdefkey{en-AU}{timezonesep}{\renewcommand*{\DTMenAUtimezonesep}{#1}}
1078 \DTMdefkey{en-AU}{datesep}{\renewcommand*{\DTMenAUdatesep}{#1}}
1079 \DTMdefkey{en-AU}{timesep}{\renewcommand*{\DTMenAUtimesep}{#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.

```
1080 \DTMdefboolkey{en-AU}{abbr}{true}{}{}
```

The default is the full name.

```
1081 \DTMsetbool{en-AU}{abbr}{false}
```

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

```
1082 \DTMdefboolkey{en-AU}{mapzone}{true}{}{}
```

The default is no mappings.

```
1083 \DTMsetbool{en-AU}{mapzone}{false}
```

Define a boolean key that determines whether to show or hide the day of the month. (Called `showdayofmonth` instead of `showday` to avoid confusion with the day of the week.)

```
1084 \DTMdefboolkey{en-AU}{showdayofmonth}{true}{}{}
```

The default is to show the day of the month.

```
1085 \DTMsetbool{en-AU}{showdayofmonth}{true}
```

Define a boolean key that determines whether to show or hide the year.

```
1086 \DTMdefboolkey{en-AU}{showyear}{true}{}{}
```

The default is to show the year.

```
1087 \DTMsetbool{en-AU}{showyear}{true}
```

`\DTMdefboolkey{en-AU}{fmtordsuffix}` Define the ordinal suffix to be used by this style.

```
1088 \newcommand*{\DTMdefboolkey{en-AU}{fmtordsuffix}}[1]{}{}
```

Define a setting to change the ordinal suffix style.

```
1089 \DTMdefchoicekey{en-AU}{ord}{\@dtm@val\@dtm@nr}{level,raise,omit,sc}{%
1090   \ifcase\@dtm@nr\relax
1091     \renewcommand*{\DTMdefboolkey{en-AU}{fmtordsuffix}}[1]{##1}%
1092   \or
1093     \renewcommand*{\DTMdefboolkey{en-AU}{fmtordsuffix}}[1]{%
1094       \DTMtexorpdfstring{\protect\textsuperscript{##1}}{##1}%
1095     }%
1096   \renewcommand*{\DTMdefboolkey{en-AU}{fmtordsuffix}}[1]{%
1097     \renewcommand*{\DTMdefboolkey{en-AU}{fmtordsuffix}}[1]{%
1098       \DTMtexorpdfstring{\protect\textsc{##1}}{##1}%
1099     }%
1100   \fi
1101 }
```

Define a setting to change zone mappings.

```
1102 \DTMdefchoicekey{en-AU}{zone}{\@dtm@val\@dtm@nr}{%
1103   std,standard,dst,daylight,central,central-western,western%
1104   eastern,christmas,lord-howe,cocos,keeling,clear}%
1105 }%
1106 \ifcase\@dtm@nr\relax
```

```

1107  % std
1108  \appto\DTMenAUzonemaps{\DTMenAUstdzonemaps}%
1109  \DTMenAUstdzonemaps
1110 \or
1111 % standard
1112 \appto\DTMenAUzonemaps{\DTMenAUstdzonemaps}%
1113 \DTMenAUstdzonemaps
1114 \or
1115 % dst
1116 \appto\DTMenAUzonemaps{\DTMenAUdstzonemaps}%
1117 \DTMenAUdstzonemaps
1118 \or
1119 % daylight
1120 \appto\DTMenAUzonemaps{\DTMenAUdstzonemaps}%
1121 \DTMenAUdstzonemaps
1122 \or
1123 % central
1124 \appto\DTMenAUzonemaps{\DTMenAUcentralzonemaps}%
1125 \DTMenAUcentralzonemaps
1126 \or
1127 % central-western
1128 \appto\DTMenAUzonemaps{\DTMenAUcentralwesternzonemaps}%
1129 \DTMenAUcentralwesternzonemaps
1130 \or
1131 % western
1132 \appto\DTMenAUzonemaps{\DTMenAUwesternzonemaps}%
1133 \DTMenAUwesternzonemaps
1134 \or
1135 % eastern
1136 \appto\DTMenAUzonemaps{\DTMenAUeasternzonemaps}%
1137 \DTMenAUeasternzonemaps
1138 \or
1139 % christmas
1140 \appto\DTMenAUzonemaps{\DTMenAUchristmaszonemaps}%
1141 \DTMenAUchristmaszonemaps
1142 \or
1143 % lord-howe
1144 \appto\DTMenAUzonemaps{\DTMenAUlordhowezonemaps}%
1145 \DTMenAUlordhowezonemaps
1146 \or
1147 % norfolk
1148 \appto\DTMenAUzonemaps{\DTMenAUnorfolkzonemaps}%
1149 \DTMenAUnorfolkzonemaps
1150 \or
1151 % cocos
1152 \appto\DTMenAUzonemaps{\DTMenAUCocoszonemaps}%
1153 \DTMenAUCocoszonemaps
1154 \or
1155 % keeling
1156 \appto\DTMenAUzonemaps{\DTMenAUCocoszonemaps}%

```

```

1157   \DTMendAUcocoszonemaps
1158   \or
1159   % clear
1160   \renewcommand*\{\DTMendAUzonemaps\}%
1161   \DTMclearmap{6}{30}%
1162   \DTMclearmap{7}{00}%
1163   \DTMclearmap{8}{00}%
1164   \DTMclearmap{8}{45}%
1165   \DTMclearmap{9}{00}%
1166   \DTMclearmap{9}{30}%
1167   \DTMclearmap{10}{00}%
1168   \DTMclearmap{10}{30}%
1169   \DTMclearmap{11}{00}%
1170 \fi
1171 }

```

Define the en-AU style.

```

1172 \DTMnewstyle
1173 {en-AU}%
1174 {%
1175   \renewcommand*\{\DTMenglishfmtordsuffix\}{\DTMendAUfmtordsuffix}%
1176   \renewcommand*\DTMdisplaydate[4]{%
1177     \ifDTMshowdow
1178       \ifnum##4>-1 % space intended
1179         \DTMifbool{en-AU}{abbr}%
1180         {\DTMenglishshortweekdayname{##4}}%
1181         {\DTMenglishweekdayname{##4}}%
1182         \DTMendAUdaysep
1183     \fi
1184   \fi
1185   \DTMifbool{en-AU}{showdayofmonth}%
1186   {%
1187     \DTMenglishordinal{##3}%
1188     \DTMendAUdaymonthsep
1189   }%
1190   {}%
1191   \DTMifbool{en-AU}{abbr}%
1192   {\DTMenglishshortmonthname{##2}}%
1193   {\DTMenglishmonthname{##2}}%
1194   \DTMifbool{en-AU}{showyear}%
1195   {%
1196     \DTMendAUmonthyearsep\number##1 % space intended
1197   }%
1198   {}%
1199 }%
1200   \renewcommand*\{\DTMDisplaydate\}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1201 }%
1202 {%
1203   \renewcommand*\DTMenglishtimesep{\DTMendAUtimesep}%
1204   \DTMsettimestyle{englishampm}%

```

```

1205 }%
1206 {%
1207   \DTMresetzones
1208   \DTMenaUzonemaps
1209   \renewcommand*{\DTMdisplayzone}[2]{%
1210     \DTMifbool{en-AU}{\mapzone}{%
1211       {\DTMusezonemapordefault{\#1}{\#2}}%
1212     }%
1213     \ifnum##1<0 \else+\fi \DTMtwodigits{\#1}%
1214     \ifDTMshowzoneminutes\DTMenaUtimesep\DTMtwodigits{\#2}\fi
1215   }%
1216 }%
1217 }%
1218 {%
1219   \renewcommand*{\DTMdisplay}[9]{%
1220     \ifDTMshowdate
1221       \DTMdisplaydate{\#1}{\#2}{\#3}{\#4}%
1222       \DTMenaUdatetimesep
1223       \fi
1224       \DTMdisplaytime{\#5}{\#6}{\#7}%
1225       \ifDTMshowzone
1226         \DTMenaUtimezonesep
1227         \DTMdisplayzone{\#8}{\#9}%
1228       \fi
1229   }%
1230   \renewcommand*{\DTMDisplay}{\DTMdisplay}%
1231 }%
1232 Define numeric style.
1233 \DTMnewstyle
1234 {en-AU-numeric}%
1235 {%
1236   label
1237   {%
1238     \renewcommand*{\DTMdisplaydate}[4]{%
1239       \DTMifbool{en-AU}{\showdayofmonth}{%
1240         \{}%
1241         \number##3 % space intended
1242         \DTMenaUdatesep
1243         \}%
1244         \{}%
1245         \number##2 % space intended
1246         \DTMifbool{en-AU}{\showyear}{%
1247           \DTMenaUdatesep
1248           \number##1 % space intended
1249         \}%
1250         \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{\#1}{\#2}{\#3}{\#4}}%
1251   }%
1252   {%
1253     time style

```

```

1253     \renewcommand*\DTMdisplaytime[3]{%
1254         \number##1
1255         \DTMenAUtimesep\DTMtwodigits{##2}%
1256         \ifDTMshowseconds\DTMenAUtimesep\DTMtwodigits{##3}\fi
1257     }%
1258 }%
1259 {%
1260     \DTMresetzones
1261     \DTMenAUzonemaps
1262     \renewcommand*{\DTMdisplayzone}[2]{%
1263         \DTMifbool{en-AU}{mapzone}%
1264         {\DTMusezonemapordefault{##1}{##2}}%
1265     }%
1266         \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
1267         \ifDTMshowzoneminutes\DTMenAUtimesep\DTMtwodigits{##2}\fi
1268     }%
1269 }%
1270 }%
1271 {%
1272     \renewcommand*{\DTMdisplay}[9]{%
1273         \ifDTMshowdate
1274             \DTMdisplaydate{##1}{##2}{##3}{##4}%
1275             \DTMenAUdatetimesep
1276             \fi
1277             \DTMdisplaytime{##5}{##6}{##7}%
1278             \ifDTMshowzone
1279                 \DTMenAUtimezonesep
1280                 \DTMdisplayzone{##8}{##9}%
1281             \fi
1282     }%
1283     \renewcommand*{\DTMDisplay}{\DTMdisplay}%
1284 }

```

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

```

1285 \newcommand*{\DTMenAUzonemaps}{%
1286     \DTMdefzonemap{10}{30}{ACDT}%
1287     Australian Central Daylight Time
1288     \DTMdefzonemap{11}{00}{AEDT}%
1289     Australian Eastern Daylight Time
1290     \DTMdefzonemap{9}{30}{ACST}%
1291     Australian Central Standard Time
1292     \DTMdefzonemap{8}{45}{ACWST}%
1293     Australian Central Western Standard Time
1294     \DTMdefzonemap{9}{00}{ACWDT}%
1295     Australian Central Western Daylight Time
1296     \DTMdefzonemap{10}{00}{AEDT}%
1297     Australian Eastern Standard Time
1298     \DTMdefzonemap{8}{00}{AWDT}%
1299     Australian Western Standard Time
1300     \DTMdefzonemap{7}{00}{CXT}%
1301     Christmas Island Time
1302     \DTMdefzonemap{11}{30}{NFT}%
1303     Norfolk Island Time
1304 }

```

\DTMenAUstdzonemaps Just the standard time zone mappings.

```

1305 \newcommand*{\DTMenAUstdzonemaps}{%
1306     \DTMdefzonemap{6}{30}{CCT}%

```

```

1298  \DTMdefzonemap{7}{00}{CXT}%
1299  \DTMdefzonemap{9}{30}{ACST}%
1300  \DTMdefzonemap{8}{00}{AWST}%
1301  \DTMdefzonemap{8}{45}{ACWST}%
1302  \DTMdefzonemap{10}{00}{AEST}%
1303  \DTMdefzonemap{10}{30}{LHST}%
1304  \DTMdefzonemap{11}{00}{NFT}%
1305 }

```

\DTMenAUdstzonemaps Just daylight saving mappings. (Conflicts omitted.)

```

1306 \newcommand*{\DTMenAUdstzonemaps}{%
1307   \DTMdefzonemap{9}{00}{AWDT}%
1308   \DTMdefzonemap{10}{30}{ACDT}%
1309   \DTMdefzonemap{11}{00}{AEDT}%
1310 }

```

\DTMenAUcentralzonemaps Just the Australian Central zone mappings (ACST and ACDT).

```

1311 \newcommand*{\DTMenAUcentralzonemaps}{%
1312   \DTMdefzonemap{9}{30}{ACST}%
1313   \DTMdefzonemap{10}{30}{ACDT}%
1314 }

```

\DTMenAUcentralwesternzonemaps Just the Australian Central Western zone mapping (ACWST).

```

1315 \newcommand*{\DTMenAUcentralwesternzonemaps}{%
1316   \DTMdefzonemap{8}{45}{ACWST}%
1317 }

```

\DTMenAUwesternzonemaps Just the Australian Western zone mappings (AWST and AWDT).

```

1318 \newcommand*{\DTMenAUwesternzonemaps}{%
1319   \DTMdefzonemap{8}{00}{AWST}%
1320   \DTMdefzonemap{9}{00}{AWDT}%
1321 }

```

\DTMenAueasternzonemaps Just the Australian Eastern zone mappings (AEST and AEDT).

```

1322 \newcommand*{\DTMenAueasternzonemaps}{%
1323   \DTMdefzonemap{10}{00}{AEST}%
1324   \DTMdefzonemap{11}{00}{AEDT}%
1325 }

```

\DTMenAUchristmaszonemaps Just the Christmas Island zone mapping (CXT).

```

1326 \newcommand*{\DTMenAUchristmaszonemaps}{%
1327   \DTMdefzonemap{7}{00}{CXT}%
1328 }

```

\DTMenAUlordhowezonemaps Just the Lord Howe Island zone mappings (LHST and LHDT).

```

1329 \newcommand*{\DTMenAUlordhowezonemaps}{%
1330   \DTMdefzonemap{10}{30}{LHST}%
1331   \DTMdefzonemap{11}{00}{LHDT}%
1332 }

```

```
\DTMdefzoneinfo{Norfolk}{NFT}
```

```
1333 \newcommand*{\DTMdefzoneinfo}[2]{%
1334   \DTMdefzonemap{#1}{#2}{#3}%
1335 }
```

```
\DTMdefzoneinfo{Cocos}{CCT}
```

```
1336 \newcommand*{\DTMdefzoneinfo}[2]{%
1337   \DTMdefzonemap{#1}{#2}{#3}%
1338 }
```

Switch style according to the `useregional` setting.

```
1339 \DTMifcaseregional
1340 {}% do nothing
1341 {\DTMsetstyle{en-AU}}%
1342 {\DTMsetstyle{en-AU-numeric}}%
```

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

```
1343 \ifcsundef{date\CurrentTrackedDialect}%
1344 {}% do nothing
1345 \ifundef{\dateenglish}%
1346 {}%
1347 {}%
1348 {}%
1349 \def{\dateenglish}{%
1350   \DTMifcaseregional
1351   {}% do nothing
1352   {\DTMsetstyle{en-AU}}%
1353   {\DTMsetstyle{en-AU-numeric}}%
1354 }%
1355 }%
1356 }%
1357 {}%
1358 \csdef{date\CurrentTrackedDialect}{%
1359   \DTMifcaseregional
1360   {}% do nothing
1361   {\DTMsetstyle{en-AU}}%
1362   {\DTMsetstyle{en-AU-numeric}}%
1363 }%
1364 }
```

14.7 English (New Zealand) Code (`datetime2-en-NZ.1df`)

This file contains the New Zealand English style.

Identify this module.

```
1365 \ProvidesDateTimeModule{en-NZ}[2019/10/21 v1.05 (NLCT)]
```

Load base English module.

```
1366 \RequireDateTimeModule{english-base}
```

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

`\DTMenzdowdaysep` The separator between the day of week name and the day of month number for the text format.

1367 `\newcommand*{\DTMenzdowdaysep}{\space}`

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

1368 `\newcommand*{\DTMenzdaymonthsep}{\space}`

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

1369 `\newcommand*{\DTMenzmonthyearsep}{\space}`

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

1370 `\newcommand*{\DTMenzdatetimesep}{\space}`

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

1371 `\newcommand*{\DTMenztimezonesep}{\space}`

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

1372 `\newcommand*{\DTMenzdatesep}{/}`

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

1373 `\newcommand*{\DTMenztimesep}{:}`

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

1374 `\DTMdefkey{en-NZ}{dowdaysep}{\renewcommand*{\DTMenzdowdaysep}{#1}}`

1375 `\DTMdefkey{en-NZ}{daymonthsep}{\renewcommand*{\DTMenzdaymonthsep}{#1}}`

1376 `\DTMdefkey{en-NZ}{monthyearsep}{\renewcommand*{\DTMenzmonthyearsep}{#1}}`

1377 `\DTMdefkey{en-NZ}{datetimesep}{\renewcommand*{\DTMenzdatetimesep}{#1}}`

1378 `\DTMdefkey{en-NZ}{timezonesep}{\renewcommand*{\DTMenztimezonesep}{#1}}`

1379 `\DTMdefkey{en-NZ}{datesep}{\renewcommand*{\DTMenzdatesep}{#1}}`

1380 `\DTMdefkey{en-NZ}{timesep}{\renewcommand*{\DTMenztimesep}{#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.

1381 `\DTMdefboolkey{en-NZ}{abbr}[true]{}`

The default is the full name.

1382 `\DTMsetbool{en-NZ}{abbr}{false}`

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

1383 `\DTMdefboolkey{en-NZ}{mapzone}[true]{}`

The default is no mappings.

1384 `\DTMsetbool{en-NZ}{mapzone}{false}`

Define a boolean key that determines whether to show or hide the day of the month. (Called `showdayofmonth` instead of `showday` to avoid confusion with the day of the week.)

```
1385 \DTMdefboolkey{en-NZ}{showdayofmonth}[true]{}
```

The default is to show the day of the month.

```
1386 \DTMsetbool{en-NZ}{showdayofmonth}{true}
```

Define a boolean key that determines whether to show or hide the year.

```
1387 \DTMdefboolkey{en-NZ}{showyear}[true]{}
```

The default is to show the year.

```
1388 \DTMsetbool{en-NZ}{showyear}{true}
```

`\DTMenNZfmtordsuffix` Define the ordinal suffix to be used by this style.

```
1389 \newcommand*{\DTMenNZfmtordsuffix}[1]{}
```

Define a setting to change the ordinal suffix style.

```
1390 \DTMdefchoicekey{en-NZ}{ord}[@dtm@val@dtm@nr]{level,raise,omit,sc}{%
1391   \ifcase@dtm@nr\relax
1392     \renewcommand*{\DTMenNZfmtordsuffix}[1]{##1}%
1393   \or
1394     \renewcommand*{\DTMenNZfmtordsuffix}[1]{%
1395       \DTMtexorpdfstring{\protect\textsuperscript{##1}}{##1}}%
1396   \or
1397     \renewcommand*{\DTMenNZfmtordsuffix}[1]{%
1398       \or
1399         \renewcommand*{\DTMenNZfmtordsuffix}[1]{%
1400           \DTMtexorpdfstring{\protect\textsc{##1}}{##1}}%
1401     \fi
1402 }
```

Define the `en-NZ` style.

```
1403 \DTMnewstyle
1404 {en-NZ}%
1405 % label
1406 % date style
1407 \renewcommand*{\DTMenglishfmtordsuffix}{\DTMenNZfmtordsuffix}%
1408 \renewcommand*\DTMdisplaydate[4]{%
1409   \ifDTMshowdow
1410     \ifnum##4>-1 % space intended
1411       \DTMifbool{en-NZ}{abbr}{%
1412         {\DTMenglishshortweekdayname{##4}}%
1413         {\DTMenglishweekdayname{##4}}%
1414         \DTMenNZdowdaysep
1415       \fi
1416     \DTMifbool{en-NZ}{showdayofmonth}{%
1417       \%
1418       \DTMenglishordinal{##3}%
1419       \DTMenNZdaymonthsep
1420     }%
```

```

1421      {}%
1422      \DTMifbool{en-NZ}{abbr}%
1423      {\DTMenglishshortmonthname{\#2}}%
1424      {\DTMenglishmonthname{\#2}}%
1425      \DTMifbool{en-NZ}{showyear}%
1426      {}%
1427      \DTMenzmonthyearsep\number##1 % space intended
1428      }%
1429      {}%
1430  }%
1431  \renewcommand*\{\DTMDisplaydate}[4]{\DTMdisplaydate{\#1}{\#2}{\#3}{\#4}}%
1432 }%
1433 {%
1434   \renewcommand*\DTMenglishtimesep{\DTMenztimesep}%
1435   \DTMsettimestyle{englishampm}%
1436 }%
1437 {%
1438   \DTMresetzones
1439   \DTMenzzonemaps
1440   \renewcommand*\{\DTMdisplayzone}[2]{%
1441     \DTMifbool{en-NZ}{mapzone}%
1442     {\DTMusezonemapordefault{\#1}{\#2}}%
1443     {}%
1444     \ifnum##1<0 \else+\fi\DTMtwodigits{\#1}%
1445     \ifDTMshowzoneminutes\DTMenztimesep\DTMtwodigits{\#2}\fi
1446   }%
1447 }%
1448 }%
1449 {%
1450   \renewcommand*\{\DTMdisplay}[9]{%
1451     \ifDTMshowdate
1452     \DTMdisplaydate{\#1}{\#2}{\#3}{\#4}%
1453     \DTMenzdatetimesep
1454     \fi
1455     \DTMdisplaytime{\#5}{\#6}{\#7}%
1456     \ifDTMshowzone
1457     \DTMenztimezonesep
1458     \DTMdisplayzone{\#8}{\#9}%
1459     \fi
1460   }%
1461   \renewcommand*\{\DTMDisplay}{\DTMdisplay}%
1462 }%

```

Define numeric style.

```

1463 \DTMnewstyle
1464 {en-NZ-numeric}%
1465 {%
1466   \renewcommand*\DTMdisplaydate[4]{%
1467     \DTMifbool{en-NZ}{showdayofmonth}%
1468     {}%

```

```

1469      \number##3 % space intended
1470      \DTMenzdatesep
1471  }%
1472  {}%
1473  \number##2 % space intended
1474  \DTMifbool{en-NZ}{showyear}%
1475  {%
1476      \DTMenzdatesep
1477      \number##1 % space intended
1478  }%
1479  {}%
1480  }%
1481  \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1482 }%
1483 {%
1484     \renewcommand*{\DTMdisplaytime}[3]{%
1485         \number##1
1486         \DTMenztimesep\DTMtwodigits{##2}%
1487         \ifDTMshowseconds\DTMenztimesep\DTMtwodigits{##3}\fi
1488     }%
1489 }%
1490 {%
1491     \DTMresetzones
1492     \DTMenzzonemaps
1493     \renewcommand*{\DTMdisplayzone}[2]{%
1494         \DTMifbool{en-NZ}{mapzone}%
1495         {\DTMusezonemapordefault{##1}{##2}}%
1496     }%
1497         \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
1498         \ifDTMshowzoneminutes\DTMenztimesep\DTMtwodigits{##2}\fi
1499     }%
1500 }%
1501 }%
1502 {%
1503     \renewcommand*{\DTMdisplay}[9]{%
1504         \ifDTMshowdate
1505             \DTMdisplaydate{##1}{##2}{##3}{##4}%
1506             \DTMenzdatetimesep
1507         \fi
1508         \DTMdisplaytime{##5}{##6}{##7}%
1509         \ifDTMshowzone
1510             \DTMenztimezonesep
1511             \DTMdisplayzone{##8}{##9}%
1512         \fi
1513     }%
1514     \renewcommand*{\DTMDisplay}{\DTMdisplay}%
1515 }

```

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

```

1516 \newcommand*{\DTMenzzonemaps}{%
1517   \DTMdefzonemap{12}{00}{NZST}%
1518   \DTMdefzonemap{12}{45}{CHAST}%
1519   \DTMdefzonemap{13}{00}{NZDT}%
1520   \DTMdefzonemap{13}{45}{CHADT}%
1521 }

Switch style according to the useregional setting.

1522 \DTMifcaseregional
1523 {}% do nothing
1524 {\DTMsetstyle{en-NZ}}%
1525 {\DTMsetstyle{en-NZ-numeric}}%

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

1526 \ifcsundef{date\CurrentTrackedDialect}
1527 {}% do nothing
1528   \ifundef{\dateenglish}
1529   {}%
1530   {}%
1531   {}%
1532   \def{\dateenglish}{%
1533     \DTMifcaseregional
1534     {}% do nothing
1535     {\DTMsetstyle{en-NZ}}%
1536     {\DTMsetstyle{en-NZ-numeric}}%
1537   }%
1538 }%
1539 }%
1540 {}%
1541 \csdef{date\CurrentTrackedDialect}{%
1542   \DTMifcaseregional
1543   {}% do nothing
1544   {\DTMsetstyle{en-NZ}}%
1545   {\DTMsetstyle{en-NZ-numeric}}%
1546 }%
1547 }%

```

14.8 English (GG) Code (`datetime2-en-GG.1df`)

This file contains the `en-GG` style.

Identify this module.

```
1548 \ProvidesDateTimeModule{en-GG}[2019/10/21 v1.05 (NLCT)]
```

Load base English module.

```
1549 \RequireDateTimeModule{english-base}
```

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

\DTMendowdaysep The separator between the day of week name and the day of month number for the text format.

```
1550 \newcommand*{\DTMendowdaysep}{\space}
```

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

```
1551 \newcommand*{\DTMendaymonthsep}{\space}
```

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

```
1552 \newcommand*{\DTMendonthyearsep}{\space}
```

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

```
1553 \newcommand*{\DTMendatetimesep}{\space}
```

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

```
1554 \newcommand*{\DTMendtimezonesep}{\space}
```

\DTMendatesep The separator for the numeric date format.

```
1555 \newcommand*{\DTMendatesep}{/}
```

\DTMendtimesep The separator for the numeric time format.

```
1556 \newcommand*{\DTMendtimesep}{:}
```

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

```
1557 \DTMdefkey{en-GG}{dowdaysep}{\renewcommand*{\DTMendowdaysep}{#1}}
1558 \DTMdefkey{en-GG}{daymonthsep}{\renewcommand*{\DTMendaymonthsep}{#1}}
1559 \DTMdefkey{en-GG}{monthyearsep}{\renewcommand*{\DTMendonthyearsep}{#1}}
1560 \DTMdefkey{en-GG}{datetimesep}{\renewcommand*{\DTMendatetimesep}{#1}}
1561 \DTMdefkey{en-GG}{timezonesep}{\renewcommand*{\DTMendtimezonesep}{#1}}
1562 \DTMdefkey{en-GG}{datesep}{\renewcommand*{\DTMendatesep}{#1}}
1563 \DTMdefkey{en-GG}{timesep}{\renewcommand*{\DTMendtimesep}{#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.

```
1564 \DTMdefboolkey{en-GG}{abbr}{true}{}
```

The default is the full name.

```
1565 \DTMsetbool{en-GG}{abbr}{false}
```

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

```
1566 \DTMdefboolkey{en-GG}{mapzone}{true}{}
```

The default is to use mappings.

```
1567 \DTMsetbool{en-GG}{mapzone}{true}
```

Define a boolean key that determines whether to show or hide the day of the month. (Called `showdayofmonth` instead of `showday` to avoid confusion with the day of the week.)

```
1568 \DTMdefboolkey{en-GG}{showdayofmonth}{true}{}
```

The default is to show the day of the month.

```
1569 \DTMsetbool{en-GG}{showdayofmonth}{true}
```

Define a boolean key that determines whether to show or hide the year.

```
1570 \DTMdefboolkey{en-GG}{showyear}[true]{}
```

The default is to show the year.

```
1571 \DTMsetbool{en-GG}{showyear}{true}
```

\DTMenGGfmtordsuffix Define the ordinal suffix to be used by this style.

```
1572 \newcommand*{\DTMenGGfmtordsuffix}[1]{#1}
```

Define a setting to change the ordinal suffix style.

```
1573 \DTMdefchoicekey{en-GG}{ord}[@dtm@val@dtm@nr]{level,raise,omit,sc}{%
1574   \ifcase@dtm@nr\relax
1575     \renewcommand*{\DTMenGGfmtordsuffix}[1]{##1}%
1576   \or
1577     \renewcommand*{\DTMenGGfmtordsuffix}[1]{%
1578       \DTMtexorpdfstring{\protect\textrightsuper{##1}}{##1}}%
1579   \or
1580     \renewcommand*{\DTMenGGfmtordsuffix}[1]{%
1581       \DTMtexorpdfstring{\protect\textrightsc{##1}}{##1}}%
1582   \or
1583     \renewcommand*{\DTMenGGfmtordsuffix}[1]{%
1584       \DTMtexorpdfstring{\protect\textrightsc{##1}}{##1}}%
1585 }
```

Define the en-GG style.

```
1586 \DTMnewstyle
1587 {en-GG}%
1588 {%
1589   \renewcommand*{\DTMenglishfmtordsuffix}{\DTMenGGfmtordsuffix}%
1590   \renewcommand*\DTMdisplaydate[4]{%
1591     \ifDTMshowdow
1592       \ifnum##4>-1 % space intended
1593         \DTMifbool{en-GG}{abbr}{%
1594           {\DTMenglishshortweekdayname{##4}}%
1595           {\DTMenglishweekdayname{##4}}%
1596         \DTMenGGdowdaysep
1597       \fi
1598     \fi
1599     \DTMifbool{en-GG}{showdayofmonth}{%
1600       {%
1601         \DTMenglishordinal{##3}%
1602         \DTMenGGdaymonthsep
1603       }%
1604     }%
1605     \DTMifbool{en-GG}{abbr}{%
1606       {\DTMenglishshortmonthname{##2}}%
1607       {\DTMenglishmonthname{##2}}%
1608     }%
1609   }%
1610 }
```

```

1608     \DTMifbool{en-GG}{showyear}%
1609     {%
1610         \DTMenGGmonthyearsep\number##1 % space intended
1611     }%
1612     {}%
1613 }
1614 \renewcommand*\{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1615 }%
1616 {%
1617     \renewcommand*\DTMenglishtimesep{\DTMenGGtimesep}%
1618     \DTMsetimestyle{englishampm}%
1619 }%
1620 {%
1621     \DTMresetzones
1622     \DTMenGGzonemaps
1623     \renewcommand*\{\DTMdisplayzone}[2]{%
1624         \DTMifbool{en-GG}{mapzone}%
1625         {\DTMusezonemapordefault{##1}{##2}}%
1626     }%
1627         \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
1628         \ifDTMshowzoneminutes\DTMenGGtimesep\DTMtwodigits{##2}\fi
1629     }%
1630 }%
1631 }%
1632 {%
1633     \renewcommand*\{\DTMdisplay}[9]{%
1634         \ifDTMshowdate
1635             \DTMdisplaydate{##1}{##2}{##3}{##4}%
1636             \DTMenGGdatetimesep
1637             \fi
1638             \DTMdisplaytime{##5}{##6}{##7}%
1639             \ifDTMshowzone
1640                 \DTMenGGtimezonesep
1641                 \DTMdisplayzone{##8}{##9}%
1642             \fi
1643     }%
1644     \renewcommand*\{\DTMDisplay}{\DTMdisplay}%
1645 }%

```

Define numeric style.

```

1646 \DTMnewstyle
1647 {en-GG-numeric}%
1648 {%
1649     \renewcommand*\{\DTMdisplaydate}[4]{%
1650         \DTMifbool{en-GG}{showdayofmonth}%
1651     }%
1652         \number##3 % space intended
1653         \DTMenGGdatesep
1654     }%
1655 }%

```

```

1656     \number##2 % space intended
1657     \DTMifbool{en-GG}{showyear}%
1658     {%
1659         \DTMenGGdatesep
1660         \number##1 % space intended
1661     }%
1662     {}%
1663 }
1664 \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1665 }%
1666 {%
1667     \renewcommand*{\DTMdisplaytime}[3]{%
1668         \number##1
1669         \DTMenGGtimesep\DTMtwodigits{##2}%
1670         \ifDTMshowseconds\DTMenGGtimesep\DTMtwodigits{##3}\fi
1671     }%
1672 }%
1673 {%
1674     \DTMresetzones
1675     \DTMenGGzonemaps
1676     \renewcommand*{\DTMdisplayzone}[2]{%
1677         \DTMifbool{en-GG}{mapzone}%
1678         {\DTMusezonemapordefault{##1}{##2}}%
1679     }%
1680         \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
1681         \ifDTMshowzoneminutes\DTMenGGtimesep\DTMtwodigits{##2}\fi
1682     }%
1683 }%
1684 }%
1685 {%
1686     \renewcommand*{\DTMdisplay}[9]{%
1687         \ifDTMshowdate
1688             \DTMdisplaydate{##1}{##2}{##3}{##4}%
1689             \DTMenGGdatetimesep
1690         \fi
1691         \DTMdisplaytime{##5}{##6}{##7}%
1692         \ifDTMshowzone
1693             \DTMenGGtimezonesep
1694             \DTMdisplayzone{##8}{##9}%
1695         \fi
1696     }%
1697     \renewcommand*{\DTMDisplay}{\DTMdisplay}%
1698 }

```

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

```

1699 \newcommand*{\DTMenGGzonemaps}{}%
1700   \DTMdefzonemap{00}{00}{GMT}%
1701   \DTMdefzonemap{01}{00}{BST}%
1702 }

```

Switch style according to the `useregional` setting.

```
1703 \DTMifcaseregional
1704 {}% do nothing
1705 {\DTMsetstyle{en-GG}}%
1706 {\DTMsetstyle{en-GG-numeric}}%
Redefine \dateenglish (or \date<dialect>) to prevent babel from resetting
\today. (For this to work, babel must already have been loaded if it's required.)
1707 \ifcsundef{date\CurrentTrackedDialect}
1708 {}% do nothing
1709 \ifundef{\dateenglish}
1710 {}%
1711 {}%
1712 {}%
1713 \def{\dateenglish}{%
1714 \DTMifcaseregional
1715 {}% do nothing
1716 {\DTMsetstyle{en-GG}}%
1717 {\DTMsetstyle{en-GG-numeric}}%
1718 }%
1719 }%
1720 }%
1721 {}%
1722 \csdef{date\CurrentTrackedDialect}{%
1723 \DTMifcaseregional
1724 {}% do nothing
1725 {\DTMsetstyle{en-GG}}%
1726 {\DTMsetstyle{en-GG-numeric}}%
1727 }%
1728 }%
```

14.9 English (JE) Code (datetime2-en-JE.ldf)

This file contains the `en-JE` style.

Identify this module.

```
1729 \ProvidesDateTimeModule{en-JE}[2019/10/21 v1.05 (NLCT)]
```

Load base English module.

```
1730 \RequireDateTimeModule{english-base}
```

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

`\DTMEnJEdowdaysep` The separator between the day of week name and the day of month number for the text format.

```
1731 \newcommand*{\DTMEnJEdowdaysep}{\space}
```

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

```
1732 \newcommand*{\DTMEnJEdaymonthsep}{\space}
```

\DTMnJEmonthyearsep The separator between the month and year for the text format.
1733 \newcommand*\{\DTMnJEmonthyearsep\}{\space}

\DTMnJEdatetimesep The separator between the date and time blocks in the full format (either text or numeric).
1734 \newcommand*\{\DTMnJEdatetimesep\}{\space}

\DTMnJEtimezonesep The separator between the time and zone blocks in the full format (either text or numeric).
1735 \newcommand*\{\DTMnJEtimezonesep\}{\space}

\DTMnJEdatesep The separator for the numeric date format.
1736 \newcommand*\{\DTMnJEdatesep\}{/}

\DTMnJEtimesep The separator for the numeric time format.
1737 \newcommand*\{\DTMnJEtimesep\}{:}

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

1738 \DTMdefkey{en-JE}{dowdaysep}{\renewcommand*\{\DTMnJEdowdaysep\}{#1}}
1739 \DTMdefkey{en-JE}{daymonthsep}{\renewcommand*\{\DTMnJEdaymonthsep\}{#1}}
1740 \DTMdefkey{en-JE}{monthyearsep}{\renewcommand*\{\DTMnJEmonthyearsep\}{#1}}
1741 \DTMdefkey{en-JE}{datetimesep}{\renewcommand*\{\DTMnJEdatetimesep\}{#1}}
1742 \DTMdefkey{en-JE}{timezonesep}{\renewcommand*\{\DTMnJEtimezonesep\}{#1}}
1743 \DTMdefkey{en-JE}{datesep}{\renewcommand*\{\DTMnJEdatesep\}{#1}}
1744 \DTMdefkey{en-JE}{timesep}{\renewcommand*\{\DTMnJEtimesep\}{#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.

1745 \DTMdefboolkey{en-JE}{abbr}[true]{}

The default is the full name.

1746 \DTMsetbool{en-JE}{abbr}{false}

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

1747 \DTMdefboolkey{en-JE}{mapzone}[true]{}

The default is to use mappings.

1748 \DTMsetbool{en-JE}{mapzone}{true}

Define a boolean key that determines whether to show or hide the day of the month. (Called `showdayofmonth` instead of `showday` to avoid confusion with the day of the week.)

1749 \DTMdefboolkey{en-JE}{showdayofmonth}[true]{}

The default is to show the day of the month.

1750 \DTMsetbool{en-JE}{showdayofmonth}{true}

Define a boolean key that determines whether to show or hide the year.

1751 \DTMdefboolkey{en-JE}{showyear}[true]{}

The default is to show the year.

```
1752 \DTMsetbool{en-JE}{showyear}{true}
```

\DTMnJEfmtordsuffix Define the ordinal suffix to be used by this style.

```
1753 \newcommand*{\DTMnJEfmtordsuffix}[1]{#1}
```

Define a setting to change the ordinal suffix style.

```
1754 \DTMdefchoicekey{en-JE}{ord}{\@dtm@val\@dtm@nr}{level,raise,omit,sc}{%
1755   \ifcase\@dtm@nr\relax
1756     \renewcommand*{\DTMnJEfmtordsuffix}[1]{##1}%
1757   \or
1758     \renewcommand*{\DTMnJEfmtordsuffix}[1]{%
1759       \DTMtexorpdfstring{\protect\textsuperscript{##1}}{##1}}%
1760   \or
1761     \renewcommand*{\DTMnJEfmtordsuffix}[1]{%
1762   \or
1763     \renewcommand*{\DTMnJEfmtordsuffix}[1]{%
1764       \DTMtexorpdfstring{\protect\textsc{##1}}{##1}}%
1765   \fi
1766 }
```

Define the en-JE style.

```
1767 \DTMnewstyle
1768   {en-JE}%
1769   {%
1770     \renewcommand*{\DTMenglishfmtordsuffix}{\DTMnJEfmtordsuffix}%
1771     \renewcommand*\DTMdisplaydate[4]{%
1772       \ifDTMshowdow
1773         \ifnum##4>-1 % space intended
1774           \DTMifbool{en-JE}{abbr}{%
1775             {\DTMenglishshortweekdayname{##4}}%
1776             {\DTMenglishweekdayname{##4}}%
1777             \DTMnJEdaysep
1778           \fi
1779         \fi
1780         \DTMifbool{en-JE}{showdayofmonth}{%
1781           %
1782             \DTMenglishordinal{##3}%
1783             \DTMnJEdaymonthsep
1784           }%
1785           {}%
1786           \DTMifbool{en-JE}{abbr}{%
1787             {\DTMenglishshortmonthname{##2}}%
1788             {\DTMenglishmonthname{##2}}%
1789             \DTMifbool{en-JE}{showyear}{%
1790               %
1791                 \DTMnJEmonthyearsep\number##1 % space intended
1792               }%
1793               {}%
1794             }%
```

```

1795     \renewcommand*\{\DTMDisplaydate\}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1796   }%
1797   {%
1798     \renewcommand*\DTMenglishtimesep{\DTMenJEtimesep}%
1799     \DTMsettimestyle{englishampm}%
1800   }%
1801   {%
1802     \DTMresetzones
1803     \DTMenJEzonemaps
1804     \renewcommand*\{\DTMdisplayzone\}[2]{%
1805       \DTMifbool{en-JE}{mapzone}%
1806       {\DTMusezonemapordefault{##1}{##2}}%
1807       \%
1808       \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
1809       \ifDTMshowzoneminutes\DTMenJEtimesep\DTMtwodigits{##2}\fi
1810     }%
1811   }%
1812 }%
1813 {%
1814   \renewcommand*\{\DTMdisplay\}[9]{%
1815     \ifDTMshowdate
1816       \DTMdisplaydate{##1}{##2}{##3}{##4}%
1817       \DTMenEDatetimesep
1818       \fi
1819       \DTMdisplaytime{##5}{##6}{##7}%
1820       \ifDTMshowzone
1821         \DTMenJETimezonesep
1822         \DTMdisplayzone{##8}{##9}%
1823       \fi
1824     }%
1825   \renewcommand*\{\DTMDisplay\}{\DTMdisplay}%
1826 }%

```

Define numeric style.

```

1827 \DTMnewstyle
1828   {en-JE-numeric}%
1829   {%
1830     \renewcommand*\DTMdisplaydate[4]{%
1831       \DTMifbool{en-JE}{showdayofmonth}%
1832     }%
1833       \number##3 % space intended
1834       \DTMenEDatesep
1835     }%
1836   {}%
1837   \number##2 % space intended
1838   \DTMifbool{en-JE}{showyear}%
1839   {}%
1840   \DTMenEDatesep
1841   \number##1 % space intended
1842 }%

```

```

1843      {}%
1844      }%
1845      \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1846  }%
1847  {%
1848      \renewcommand*\DTMdisplaytime[3]{%
1849          \number##1
1850          \DTMEnJEtimesep\DTMtwodigits{##2}%
1851          \ifDTMshowseconds\DTMEnJEtimesep\DTMtwodigits{##3}\fi
1852      }%
1853  }%
1854  {%
1855      \DTMresetzones
1856      \DTMEnJEzonemaps
1857      \renewcommand*{\DTMdisplayzone}[2]{%
1858          \DTMifbool{en-JE}{mapzone}%
1859          {\DTMusezonemapordefault{##1}{##2}}%
1860          {%
1861              \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
1862              \ifDTMshowzoneminutes\DTMEnJEtimesep\DTMtwodigits{##2}\fi
1863          }%
1864      }%
1865  }%
1866  {%
1867      \renewcommand*{\DTMdisplay}[9]{%
1868          \ifDTMshowdate
1869              \DTMdisplaydate{##1}{##2}{##3}{##4}%
1870              \DTMEnJEdatetimesep
1871          \fi
1872          \DTMdisplaytime{##5}{##6}{##7}%
1873          \ifDTMshowzone
1874              \DTMEnJEtimezonesep
1875              \DTMdisplayzone{##8}{##9}%
1876          \fi
1877      }%
1878      \renewcommand*{\DTMDisplay}{\DTMdisplay}%
1879  }

```

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

```

1880 \newcommand*{\DTMEnJEzonemaps}{%
1881     \DTMdefzonemap{00}{00}{GMT}%
1882     \DTMdefzonemap{01}{00}{BST}%
1883 }

```

Switch style according to the `useregional` setting.

```

1884 \DTMifcaseregional
1885 {}% do nothing
1886 {\DTMsetstyle{en-JE}}%
1887 {\DTMsetstyle{en-JE-numeric}}%

```

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

```

1888 \ifcsundef{date\CurrentTrackedDialect}
1889 {%
1890   \ifundef{\dateenglish}
1891   {%
1892   }%
1893   {%
1894     \def\dateenglish{%
1895       \DTMifcaseregional
1896       {}% do nothing
1897       {\DTMsetstyle{en-JE}}%
1898       {\DTMsetstyle{en-JE-numeric}}%
1899     }%
1900   }%
1901 }%
1902 {%
1903   \csdef{date\CurrentTrackedDialect}{%
1904     \DTMifcaseregional
1905     {}% do nothing
1906     {\DTMsetstyle{en-JE}}%
1907     {\DTMsetstyle{en-JE-numeric}}%
1908   }%
1909 }%

```

14.10 English (IM) Code (`datetime2-en-IM.1df`)

This file contains the `en-IM` style.

Identify this module.

```
1910 \ProvidesDateTimeModule{en-IM}[2019/10/21 v1.05 (NLCT)]
```

Load base English module.

```
1911 \RequireDateTimeModule{english-base}
```

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

`\DTM{en-IM}{dowdaysep}` The separator between the day of week name and the day of month number for the text format.

```
1912 \newcommand*{\DTM{en-IM}{dowdaysep}}{\space}
```

`\DTM{en-IM}{daymonthsep}` The separator between the day and month for the text format.

```
1913 \newcommand*{\DTM{en-IM}{daymonthsep}}{\space}
```

`\DTM{en-IM}{monthyearsep}` The separator between the month and year for the text format.

```
1914 \newcommand*{\DTM{en-IM}{monthyearsep}}{\space}
```

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

```
1915 \newcommand*{\DTMMenIMdatetimesep}{\space}
```

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

```
1916 \newcommand*{\DTMMenIMtimezonesep}{\space}
```

\DTMMenIMdatesep The separator for the numeric date format.

```
1917 \newcommand*{\DTMMenIMdatesep}{/}
```

\DTMMenIMtimesep The separator for the numeric time format.

```
1918 \newcommand*{\DTMMenIMtimesep}{:}
```

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

```
1919 \DTMdefkey{en-IM}{dowdaysep}{\renewcommand*{\DTMMenIMdowdaysep}{#1}}
1920 \DTMdefkey{en-IM}{daymonthsep}{\renewcommand*{\DTMMenIMdaymonthsep}{#1}}
1921 \DTMdefkey{en-IM}{monthyearsep}{\renewcommand*{\DTMMenIMmonthyearsep}{#1}}
1922 \DTMdefkey{en-IM}{datetimesep}{\renewcommand*{\DTMMenIMdatetimesep}{#1}}
1923 \DTMdefkey{en-IM}{timezonesep}{\renewcommand*{\DTMMenIMtimezonesep}{#1}}
1924 \DTMdefkey{en-IM}{datesep}{\renewcommand*{\DTMMenIMdatesep}{#1}}
1925 \DTMdefkey{en-IM}{timesep}{\renewcommand*{\DTMMenIMtimesep}{#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.

```
1926 \DTMdefboolkey{en-IM}{abbr}[true]{}
```

The default is the full name.

```
1927 \DTMsetbool{en-IM}{abbr}{false}
```

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

```
1928 \DTMdefboolkey{en-IM}{mapzone}[true]{}
```

The default is to use mappings.

```
1929 \DTMsetbool{en-IM}{mapzone}{true}
```

Define a boolean key that determines whether to show or hide the day of the month. (Called `showdayofmonth` instead of `showday` to avoid confusion with the day of the week.)

```
1930 \DTMdefboolkey{en-IM}{showdayofmonth}[true]{}
```

The default is to show the day of the month.

```
1931 \DTMsetbool{en-IM}{showdayofmonth}{true}
```

Define a boolean key that determines whether to show or hide the year.

```
1932 \DTMdefboolkey{en-IM}{showyear}[true]{}
```

The default is to show the year.

```
1933 \DTMsetbool{en-IM}{showyear}{true}
```

```
\DTMendIMfmtordsuffix Define the ordinal suffix to be used by this style.
```

```
1934 \newcommand*{\DTMendIMfmtordsuffix}[1]{#1}
```

Define a setting to change the ordinal suffix style.

```
1935 \DTMdefchoicekey{en-IM}{ord}[@dtm@val@dtm@nr]{level,raise,omit,sc}{%
1936   \ifcase@dtm@nr\relax
1937     \renewcommand*{\DTMendIMfmtordsuffix}[1]{##1}%
1938   \or
1939     \renewcommand*{\DTMendIMfmtordsuffix}[1]{%
1940       \DTMtexorpdfstring{\protect\textrightsquigarrow}{##1}{}{##1}}%
1941   \or
1942     \renewcommand*{\DTMendIMfmtordsuffix}[1]{}%
1943   \or
1944     \renewcommand*{\DTMendIMfmtordsuffix}[1]{%
1945       \DTMtexorpdfstring{\protect\textrightsquigarrow}{##1}{}{##1}}%
1946   \fi
1947 }
```

Define the en-IM style.

```
1948 \DTMnewstyle
1949 {en-IM}%
1950 {%
1951   \renewcommand*{\DTMenglishfmtordsuffix}{\DTMendIMfmtordsuffix}%
1952   \renewcommand*\DTMdisplaydate[4]{%
1953     \ifDTMshowdow
1954       \ifnum##4>-1 % space intended
1955         \DTMifbool{en-IM}{abbr}{%
1956           {\DTMenglishshortweekdayname{##4}}%
1957           {\DTMenglishweekdayname{##4}}%
1958           \DTMendIMdowdaysep
1959         \fi
1960       \fi
1961       \DTMifbool{en-IM}{showdayofmonth}{%
1962         \%
1963         \DTMenglishordinal{##3}%
1964         \DTMendIMdaymonthsep
1965       }%
1966     \%
1967     \DTMifbool{en-IM}{abbr}{%
1968       {\DTMenglishshortmonthname{##2}}%
1969       {\DTMenglishmonthname{##2}}%
1970       \DTMifbool{en-IM}{showyear}{%
1971         \%
1972           \DTMendIMmonthyearsep\number##1 % space intended
1973         \%
1974         \%
1975       }%
1976       \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1977     }%
1978   \% time style
```

```

1979     \renewcommand*\DTMenglishtimesep{\DTMenglishampm}%
1980     \DTMsettimestyle{englishampm}%
1981 }%
1982 {%
1983   \DTMresetzones
1984   \DTMenglishzonemaps
1985   \renewcommand*{\DTMdisplayzone}[2]{%
1986     \DTMifbool{en-IM}{mapzone}%
1987     {\DTMusezonemapordefault{##1}{##2}}%
1988     {}%
1989     \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
1990     \ifDTMshowzoneminutes\DTMenglishtimesep\DTMtwodigits{##2}\fi
1991   }%
1992 }%
1993 }%
1994 {%
1995   \renewcommand*{\DTMdisplay}[9]{%
1996     \ifDTMshowdate
1997       \DTMdisplaydate{##1}{##2}{##3}{##4}%
1998       \DTMenglishdatetimesep
1999       \fi
2000       \DTMdisplaytime{##5}{##6}{##7}%
2001       \ifDTMshowzone
2002         \DTMenglishtimezonesep
2003         \DTMdisplayzone{##8}{##9}%
2004       \fi
2005     }%
2006   \renewcommand*{\DTMDisplay}{\DTMdisplay}%
2007 }%

```

Define numeric style.

```

2008 \DTMnewstyle
2009 {en-IM-numeric}%
2010 label
2011 {%
2012   \renewcommand*{\DTMdisplaydate}[4]{%
2013     \DTMifbool{en-IM}{showdayofmonth}%
2014     {}%
2015     \number##3 % space intended
2016     \DTMenglishdatesep
2017   }%
2018   {}%
2019   \number##2 % space intended
2020   \DTMifbool{en-IM}{showyear}%
2021   {}%
2022   \DTMenglishdatesep
2023   \number##1 % space intended
2024 }%
2025 }%
2026 \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%

```

```

2027 }%
2028 {%
2029   \renewcommand*\DTMdisplaytime[3]{%
2030     \number##1
2031     \DTMendtimesep\DTMtwodigits{##2}%
2032     \ifDTMshowseconds\DTMendtimesep\DTMtwodigits{##3}\fi
2033   }%
2034 }%
2035 {%
2036   \DTMresetzones
2037   \DTMendIMzonemaps
2038   \renewcommand*\{\DTMdisplayzone}[2]{%
2039     \DTMifbool{en-IM}{mapzone}%
2040     {\DTMusezonemapordefault{##1}{##2}}%
2041   }%
2042     \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
2043     \ifDTMshowzoneminutes\DTMendIMtimesep\DTMtwodigits{##2}\fi
2044   }%
2045 }%
2046 }%
2047 {%
2048   \renewcommand*\{\DTMdisplay}[9]{%
2049     \ifDTMshowdate
2050       \DTMdisplaydate{##1}{##2}{##3}{##4}%
2051       \DTMendIMdatetimesep
2052     \fi
2053     \DTMdisplaytime{##5}{##6}{##7}%
2054     \ifDTMshowzone
2055       \DTMendIMtimezonesep
2056       \DTMdisplayzone{##8}{##9}%
2057     \fi
2058   }%
2059   \renewcommand*\{\DTMDisplay}{\DTMdisplay}%
2060 }

```

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

```

2061 \newcommand*\{\DTMendIMzonemaps}{%
2062   \DTMdefzonemap{00}{00}{GMT}%
2063   \DTMdefzonemap{01}{00}{BST}%
2064 }

```

Switch style according to the `userregional` setting.

```

2065 \DTMifcaseregional
2066 {}% do nothing
2067 {\DTMsetstyle{en-IM}}%
2068 {\DTMsetstyle{en-IM-numeric}}%

```

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

```

2069 \ifcsundef{date\CurrentTrackedDialect}
2070 {%
2071   do nothing
2072   \ifundefined\dateenglish
2073   {%
2074   }%
2075   \def\dateenglish{%
2076     \DTMifcaseregional
2077     {}% do nothing
2078     {\DTMsetstyle{en-IM}}%
2079     {\DTMsetstyle{en-IM-numeric}}%
2080   }%
2081 }%
2082 }%
2083 {%
2084   \csdef{date\CurrentTrackedDialect}{%
2085     \DTMifcaseregional
2086     {}% do nothing
2087     {\DTMsetstyle{en-IM}}%
2088     {\DTMsetstyle{en-IM-numeric}}%
2089   }%
2090 }%

```

14.11 English (MT) Code (datetime2-en-MT.ldf)

This file contains the en-MT style.

Identify this module.

```
2091 \ProvidesDateTimeModule{en-MT}[2019/10/21 v1.05 (NLCT)]
```

Load base English module.

```
2092 \RequireDateTimeModule{english-base}
```

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

\DTMendowdaysep The separator between the day of week name and the day of month number for the text format.

```
2093 \newcommand*{\DTMendowdaysep}{\space}
```

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

```
2094 \newcommand*{\DTMendaymonthsep}{\space}
```

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

```
2095 \newcommand*{\DTMendonthyearsep}{\space}
```

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

```
2096 \newcommand*{\DTMendatetimesep}{\space}
```

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

2097 \newcommand*{\DTMMenMTtimezonesep}{\space}

\DTMMenMTdatesep The separator for the numeric date format.

2098 \newcommand*{\DTMMenMTdatesep}{/}

\DTMMenMTtimesep The separator for the numeric time format.

2099 \newcommand*{\DTMMenMTtimesep}{:}

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

2100 \DTMdefkey{en-MT}{dowdaysep}{\renewcommand*{\DTMMenMTdowdaysep}{#1}}
2101 \DTMdefkey{en-MT}{daymonthsep}{\renewcommand*{\DTMMenMTdaymonthsep}{#1}}
2102 \DTMdefkey{en-MT}{monthyearsep}{\renewcommand*{\DTMMenMTmonthyearsep}{#1}}
2103 \DTMdefkey{en-MT}{datetimesep}{\renewcommand*{\DTMMenMTdatetimesep}{#1}}
2104 \DTMdefkey{en-MT}{timezonesep}{\renewcommand*{\DTMMenMTtimezonesep}{#1}}
2105 \DTMdefkey{en-MT}{datesep}{\renewcommand*{\DTMMenMTdatesep}{#1}}
2106 \DTMdefkey{en-MT}{timesep}{\renewcommand*{\DTMMenMTtimesep}{#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.

2107 \DTMdefboolkey{en-MT}{abbr}[true]{}

The default is the full name.

2108 \DTMsetbool{en-MT}{abbr}{false}

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

2109 \DTMdefboolkey{en-MT}{mapzone}[true]{}

The default is to use mappings.

2110 \DTMsetbool{en-MT}{mapzone}{true}

Define a boolean key that determines whether to show or hide the day of the month. (Called `showdayofmonth` instead of `showday` to avoid confusion with the day of the week.)

2111 \DTMdefboolkey{en-MT}{showdayofmonth}[true]{}

The default is to show the day of the month.

2112 \DTMsetbool{en-MT}{showdayofmonth}{true}

Define a boolean key that determines whether to show or hide the year.

2113 \DTMdefboolkey{en-MT}{showyear}[true]{}

The default is to show the year.

2114 \DTMsetbool{en-MT}{showyear}{true}

\DTMMenMTfmtordsuffix Define the ordinal suffix to be used by this style.

2115 \newcommand*{\DTMMenMTfmtordsuffix}[1]{}

Define a setting to change the ordinal suffix style.

```
2116 \DTMdefchoicekey{en-MT}{ord}{[@dtm@val[@dtm@nr]{level,raise,omit,sc}}}{%
2117   \ifcase@dtm@nr\relax
2118     \renewcommand*\{\DTMenglishfmtordsuffix}[1]{##1}%
2119   \or
2120     \renewcommand*\{\DTMenglishfmtordsuffix}[1]{%
2121       \DTMtexorpdfstring{\protect\textsuperscript{##1}}{##1}}%
2122   \or
2123     \renewcommand*\{\DTMenglishfmtordsuffix}[1]{%
2124   \or
2125     \renewcommand*\{\DTMenglishfmtordsuffix}[1]{%
2126       \DTMtexorpdfstring{\protect\textsc{##1}}{##1}}%
2127   \fi
2128 }
```

Define the en-MT style.

```
2129 \DTMnewstyle
2130 {en-MT}%
2131 {%
2132   \renewcommand*\{\DTMenglishfmtordsuffix}{\DTMenglishfmtordsuffix}%
2133   \renewcommand*\DTMdisplaydate[4]{%
2134     \ifDTMshowdow
2135       \ifnum##4>-1 % space intended
2136         \DTMifbool{en-MT}{abbr}{%
2137           {\DTMenglishshortweekdayname{##4}}%
2138           {\DTMenglishweekdayname{##4}}%
2139         \DTMenglishdowdaysep
2140       \fi
2141     \fi
2142     \DTMifbool{en-MT}{showdayofmonth}{%
2143       \%
2144       \DTMenglishordinal{##3}%
2145       \DTMenglishmonthsep
2146     }%
2147     \%
2148     \DTMifbool{en-MT}{abbr}{%
2149       {\DTMenglishshortmonthname{##2}}%
2150       {\DTMenglishmonthname{##2}}%
2151     \DTMifbool{en-MT}{showyear}{%
2152       \%
2153       \DTMenglishyearsep\number##1 % space intended
2154     }%
2155     \%
2156   }%
2157   \renewcommand*\{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
2158 }%
2159 {%
2160   \renewcommand*\DTMenglishtimesep{\DTMenglishtimesep}%
2161   \DTMsetimestyle{englishampm}%
2162 }%
```

```

2163  {%
2164    \DTMresetzones
2165    \DTMenzonemaps
2166    \renewcommand*{\DTMdisplayzone}[2]{%
2167      \DTMifbool{en-MT}{\mapzone}{%
2168        {\DTMusezonemapordefault{##1}{##2}}{%
2169          {%
2170            \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
2171            \ifDTMshowzoneminutes\DTMenzontimesep\DTMtwodigits{##2}\fi
2172          }%
2173        }%
2174      }%
2175    {%
2176      \renewcommand*{\DTMdisplay}[9]{%
2177        \ifDTMshowdate
2178          \DTMdisplaydate{##1}{##2}{##3}{##4}%
2179          \DTMenzontimetimestep
2180        \fi
2181        \DTMdisplaytime{##5}{##6}{##7}%
2182        \ifDTMshowzone
2183          \DTMenzontimezonesep
2184          \DTMdisplayzone{##8}{##9}%
2185        \fi
2186      }%
2187      \renewcommand*{\DTMDisplay}{\DTMdisplay}%
2188    }%

```

Define numeric style.

```

2189 \DTMnewstyle
2190  {en-MT-numeric}%
2191  {%
2192    \renewcommand*{\DTMdisplaydate}[4]{%
2193      \DTMifbool{en-MT}{\showdayofmonth}{%
2194        {%
2195          \number##3 % space intended
2196          \DTMenzontimesep
2197        }%
2198      }%
2199      \number##2 % space intended
2200      \DTMifbool{en-MT}{\showyear}{%
2201        {%
2202          \DTMenzontimesep
2203          \number##1 % space intended
2204        }%
2205      }%
2206    }%
2207    \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
2208  }%
2209  {%
2210    \renewcommand*{\DTMdisplaytime}[3]{%

```

```

2211      \number##1
2212      \DTMendMTtimesep\DTMtwodigits{##2}%
2213      \ifDTMshowseconds\DTMendMTtimesep\DTMtwodigits{##3}\fi
2214  }%
2215 }%
2216 {%
2217   \DTMresetzones
2218   \DTMendMTzonemaps
2219   \renewcommand*\{\DTMdisplayzone}[2]{%
2220     \DTMifbool{en-MT}{mapzone}%
2221     {\DTMusezonemapordefault{##1}{##2}}%
2222     {%
2223       \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
2224       \ifDTMshowzoneminutes\DTMendMTtimesep\DTMtwodigits{##2}\fi
2225     }%
2226   }%
2227 }%
2228 {%
2229   \renewcommand*\{\DTMdisplay}[9]{%
2230     \ifDTMshowdate
2231       \DTMdisplaydate{##1}{##2}{##3}{##4}%
2232       \DTMendMTdatetimesep
2233       \fi
2234       \DTMdisplaytime{##5}{##6}{##7}%
2235     \ifDTMshowzone
2236       \DTMendMTtimezonesep
2237       \DTMdisplayzone{##8}{##9}%
2238     \fi
2239   }%
2240   \renewcommand*\{\DTMDisplay}{\DTMdisplay}%
2241 }

```

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

```

2242 \newcommand*\{\DTMendMTzonemaps}{%
2243   \DTMdefzonemap{02}{00}{CEST}%
2244   \DTMdefzonemap{01}{00}{CET}%
2245 }

```

Switch style according to the `useregional` setting.

```

2246 \DTMifcaseregional
2247 {}% do nothing
2248 {\DTMsetstyle{en-MT}}%
2249 {\DTMsetstyle{en-MT-numeric}}%

```

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

```

2250 \ifcsundef{date\CurrentTrackedDialect}
2251 {}% do nothing
2252 \ifundef{\dateenglish}

```

```

2253  {%
2254  }%
2255  {%
2256      \def\dateenglish{%
2257          \DTMifcaseregional
2258          {}% do nothing
2259          {\DTMsetstyle{en-MT}}%
2260          {\DTMsetstyle{en-MT-numeric}}%
2261      }%
2262  }%
2263 }%
2264 {%
2265     \csdef{date\CurrentTrackedDialect}{%
2266         \DTMifcaseregional
2267         {}% do nothing
2268         {\DTMsetstyle{en-MT}}%
2269         {\DTMsetstyle{en-MT-numeric}}%
2270     }%
2271 }%

```

14.12 English (IE) Code (datetime2-en-IE.ldf)

This file contains the `en-IE` style.

Identify this module.

```
2272 \ProvidesDateTimeModule{en-IE}[2019/10/21 v1.05 (NLCT)]
```

Load base English module.

```
2273 \RequireDateTimeModule{english-base}
```

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

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

```
2274 \newcommand*{\DTMEnIEDowdaysep}{\space}
```

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

```
2275 \newcommand*{\DTMEnIEDaymonthsep}{\space}
```

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

```
2276 \newcommand*{\DTMEnIEmonthyearsep}{\space}
```

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

```
2277 \newcommand*{\DTMEnIEDatetimesep}{\space}
```

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

```
2278 \newcommand*{\DTMEnIEtimezonesep}{\space}
```

```

\DTMenIEdatesep The separator for the numeric date format.
2279 \newcommand*\{\DTMenIEdatesep\}{/}

\DTMenIetimesep The separator for the numeric time format.
2280 \newcommand*\{\DTMenIetimesep\}{::}

Provide keys that can be used in \DTMlangsetup to set these separators.
2281 \DTMdefkey{en-IE}{dowdaysep}{\renewcommand*\{\DTMenIEDowdaysep\}{#1}}
2282 \DTMdefkey{en-IE}{daymonthsep}{\renewcommand*\{\DTMenIEDaymonthsep\}{#1}}
2283 \DTMdefkey{en-IE}{monthyearsep}{\renewcommand*\{\DTMenIEmonthyearsep\}{#1}}
2284 \DTMdefkey{en-IE}{datetimesep}{\renewcommand*\{\DTMenIEDatetimesep\}{#1}}
2285 \DTMdefkey{en-IE}{timezonesep}{\renewcommand*\{\DTMenIEtimezonesep\}{#1}}
2286 \DTMdefkey{en-IE}{datesep}{\renewcommand*\{\DTMenIEdatesep\}{#1}}
2287 \DTMdefkey{en-IE}{timesep}{\renewcommand*\{\DTMenIetimesep\}{#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.
2288 \DTMdefboolkey{en-IE}{abbr}[true]{}

The default is the full name.
2289 \DTMsetbool{en-IE}{abbr}{false}

Define a boolean key that determines if the time zone mappings should be
used.
2290 \DTMdefboolkey{en-IE}{mapzone}[true]{}

The default is to use mappings.
2291 \DTMsetbool{en-IE}{mapzone}{true}

Define a boolean key that determines whether to show or hide the day of the
month. (Called showdayofmonth instead of showday to avoid confusion with the
day of the week.)
2292 \DTMdefboolkey{en-IE}{showdayofmonth}[true]{}

The default is to show the day of the month.
2293 \DTMsetbool{en-IE}{showdayofmonth}{true}

Define a boolean key that determines whether to show or hide the year.
2294 \DTMdefboolkey{en-IE}{showyear}[true]{}

The default is to show the year.
2295 \DTMsetbool{en-IE}{showyear}{true}

\DTMenIEfmtordsuffix Define the ordinal suffix to be used by this style.
2296 \newcommand*\{\DTMenIEfmtordsuffix\}[1]{#1}

Define a setting to change the ordinal suffix style.
2297 \DTMdefchoicekey{en-IE}{ord}[@dtm@val@dtm@nr]{level,raise,omit,sc}{%
2298   \ifcase@dtm@nr\relax
2299     \renewcommand*\{\DTMenIEfmtordsuffix\}[1]{##1}%
2300   \or
2301     \renewcommand*\{\DTMenIEfmtordsuffix\}[1]{%

```

```

2302     \DTMtexorpdfstring{\protect\textsuperscript{##1}}{##1}%
2303   \or
2304     \renewcommand*{\DTMnIEfmtordsuffix}[1]{}
2305   \or
2306     \renewcommand*{\DTMnIEfmtordsuffix}[1]{%
2307       \DTMtexorpdfstring{\protect\textsc{##1}}{##1}%
2308     }
2309 }

Define the en-IE style.

2310 \DTMnewstyle
2311 {en-IE}%
2312 {%
2313   \renewcommand*{\DTMenglishfmtordsuffix}{\DTMnIEfmtordsuffix}%
2314   \renewcommand*\DTMdisplaydate[4]{%
2315     \ifDTMshowdow
2316       \ifnum##4>-1 % space intended
2317         \DTMifbool{en-IE}{abbr}%
2318         {\DTMenglishshortweekdayname{##4}}%
2319         {\DTMenglishweekdayname{##4}}%
2320       \DTMnIEDowdaysep
2321     \fi
2322   \fi
2323   \DTMifbool{en-IE}{showdayofmonth}%
2324   {%
2325     \DTMenglishordinal{##3}%
2326     \DTMnIEDaymonthsep
2327   }%
2328   {%
2329     \DTMifbool{en-IE}{abbr}%
2330     {\DTMenglishshortmonthname{##2}}%
2331     {\DTMenglishmonthname{##2}}%
2332     \DTMifbool{en-IE}{showyear}%
2333   }%
2334   \DTMnIEmonthyearsep\number##1 % space intended
2335   }%
2336   {%
2337   }%
2338   \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
2339 }%
2340 {%
2341   \renewcommand*\DTMenglishtimesep{\DTMnIEtimesep}%
2342   \DTMsettimestyle{englishampm}%
2343 }%
2344 {%
2345   \DTMresetzones
2346   \DTMnIEzonemaps
2347   \renewcommand*{\DTMdisplayzone}[2]{%
2348     \DTMifbool{en-IE}{mapzone}%
2349     {\DTMusezonemapdefault{##1}{##2}}%

```

```

2350      {%
2351          \ifnum##1<0 \else+\fi\DTMtwodigits{##1}%
2352          \ifDTMshowzoneminutes\DTMenIEtimesep\DTMtwodigits{##2}\fi
2353      }%
2354  }%
2355 }%
2356 {%
2357     \renewcommand*\{\DTMdisplay}[9]{%
2358         \ifDTMshowdate
2359             \DTMdisplaydate{##1}{##2}{##3}{##4}%
2360             \DTMenIEdatetimesep
2361         \fi
2362         \DTMdisplaytime{##5}{##6}{##7}%
2363         \ifDTMshowzone
2364             \DTMenIftimezonesep
2365             \DTMdisplayzone{##8}{##9}%
2366         \fi
2367     }%
2368     \renewcommand*\{\DTMDisplay}{\DTMdisplay}%
2369 }%

```

Define numeric style.

```

2370 \DTMnewstyle
2371 {en-IE-numeric}%
2372 {%
2373     \renewcommand*\{\DTMdisplaydate}[4]{%
2374         \DTMifbool{en-IE}{showdayofmonth}%
2375     }%
2376         \number##3 % space intended
2377         \DTMenIEdatesep
2378     }%
2379     \{}%
2380         \number##2 % space intended
2381         \DTMifbool{en-IE}{showyear}%
2382     \{}%
2383         \DTMenIEdatesep
2384         \number##1 % space intended
2385     \{}%
2386     \{}%
2387 }%
2388     \renewcommand*\{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
2389 }%
2390 {%
2391     \renewcommand*\{\DTMdisplaytime}[3]{%
2392         \number##1
2393         \DTMenIEtimesep\DTMtwodigits{##2}%
2394         \ifDTMshowseconds\DTMenIEtimesep\DTMtwodigits{##3}\fi
2395     }%
2396 }%
2397 {%

```

```

2398 \DTMresetzones
2399 \DTMnIEzonemaps
2400 \renewcommand*{\DTMdisplayzone}[2]{%
2401   \DTMifbool{en-IE}{\mapzone}{%
2402     {\DTMusezonemapordefault{\##1}{\##2}}{%
2403       {%
2404         \ifnum##1<0 \else+\fi\DTMtwodigits{\##1}{%
2405           \ifDTMshowzoneminutes\DTMnIETimesep\DTMtwodigits{\##2}\fi
2406         }{%
2407       }{%
2408     }{%
2409   }{%
2410     \renewcommand*{\DTMdisplay}[9]{%
2411       \ifDTMshowdate
2412         \DTMdisplaydate{\##1}{\##2}{\##3}{\##4}{%
2413           \DTMnIEDatetimesep
2414         \fi
2415         \DTMdisplaytime{\##5}{\##6}{\##7}{%
2416         \ifDTMshowzone
2417           \DTMnIETimezonesep
2418           \DTMdisplayzone{\##8}{\##9}{%
2419             \fi
2420           }{%
2421         \renewcommand*{\DTMDisplay}{\DTMdisplay}%
2422       }

```

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

```

2423 \newcommand*{\DTMnIEzonemaps}{%
2424   \DTMdefzonemap{00}{00}{GMT}%
2425   \DTMdefzonemap{01}{00}{IST}%
2426 }

```

Switch style according to the `useregional` setting.

```

2427 \DTMifcaseregional
2428 {}% do nothing
2429 {\DTMsetstyle{en-IE}}%
2430 {\DTMsetstyle{en-IE-numeric}}%

```

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

```

2431 \ifcsundef{date\CurrentTrackedDialect}
2432 {}% do nothing
2433   \ifundef{\dateenglish}
2434   {}%
2435   {}%
2436   {}%
2437   \def{\dateenglish}{%
2438     \DTMifcaseregional
2439     {}% do nothing

```

```
2440      {\DTMsetstyle{en-IE}}%
2441      {\DTMsetstyle{en-IE-numeric}}%
2442  }%
2443 }%
2444 }%
2445 {%
2446 \csdef{date\CurrentTrackedDialect}{%
2447   \DTMifcaseregional
2448   {}% do nothing
2449   {\DTMsetstyle{en-IE}}%
2450   {\DTMsetstyle{en-IE-numeric}}%
2451 }%
2452 }%
```

Change History

1.0	\DTMenUSalaskazonemaps: new	31
	General: Initial release	12, 17, 19, 24, 32, 40, 47, 52, 57, 62, 67, 72
1.01	General: fixed mispelt style name	22
1.02	\DTMenCAdowmonthsep: new	32
	\DTMenUSdownmonthsep: new	24
	General: added support for showdow option	27
1.03	\DTMenAUcentralwesternzonemaps: new	46
	\DTMenAUcentralzonemaps: new	46
	\DTMenAUchristmaszonemaps: new	46
	\DTMenAUcocoszonemaps: new	47
	\DTMenAUdstzonemaps: new	46
	\DTMenAUEasternzonemaps: new	46
	\DTMenAUlordhowezonemaps: new	46
	\DTMenAUnorfolkzonemaps: new	47
	\DTMenAUstdzonemaps: new	45
	\DTMenAUwesternzonemaps: new	46
	\DTMenCAatlanticzonemaps: new	38
	\DTMenCcentralzonemaps: new	39
	\DTMenCAdstzonemaps: new	38
	\DTMenCAeasternzonemaps: new	39
	\DTMenCAmountainzonemaps: new	39
	\DTMenCAnewfoundlandzonemaps: new	38
	\DTMenCApacificzonemaps: new	39
	\DTMenCAstdzonemaps: new	38
1.04	\DTMenAUDowdaysep: new	40
	\DTMenGBdowdaysep: new	19
	\DTMenGGdowdaysep: new	53
	\DTMenIEDowdaysep: new	72
	\DTMenIMDowdaysep: new	62
	\DTMenJEDowdaysep: new	57
	\DTMenMTdowdaysep: new	67
	\DTMenNZdowdaysep: new	48
1.05	General: renamed scratch variables	20, 25, 26, 34, 41, 49, 54, 59, 64, 69, 73

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