

# English Module for datetime2 Package

Nicola L. C. Talbot

2016-01-18 (v1.02)

## 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>`.

## Contents

<b>1</b>	<b>Introduction</b>	<b>3</b>
<b>2</b>	<b>Base module</b>	<b>4</b>
<b>3</b>	<b>English (no region)</b>	<b>4</b>
<b>4</b>	<b>English (GB)</b>	<b>4</b>
<b>5</b>	<b>English (US)</b>	<b>6</b>
<b>6</b>	<b>English (CA)</b>	<b>7</b>
<b>7</b>	<b>English (AU)</b>	<b>7</b>
<b>8</b>	<b>English (NZ)</b>	<b>8</b>
<b>9</b>	<b>English (GG)</b>	<b>8</b>
<b>10</b>	<b>English (JE)</b>	<b>8</b>
<b>11</b>	<b>English (IM)</b>	<b>8</b>
<b>12</b>	<b>English (MT)</b>	<b>8</b>
<b>13</b>	<b>English (IE)</b>	<b>9</b>

<b>14 The Code</b>	<b>9</b>
14.1 Base Code ( <code>datetime2-english-base.ldf</code> ) . . . . .	9
14.2 Default English Code ( <code>datetime2-english.ldf</code> ) . . . . .	14
14.3 English (GB) Code ( <code>datetime2-en-GB.ldf</code> ) . . . . .	16
14.4 English (US) Code ( <code>datetime2-en-US.ldf</code> ) . . . . .	21
14.5 English (Canada) Code ( <code>datetime2-en-CA.ldf</code> ) . . . . .	26
14.6 English (Australia) Code ( <code>datetime2-en-AU.ldf</code> ) . . . . .	31
14.7 English (New Zealand) Code ( <code>datetime2-en-NZ.ldf</code> ) . . . . .	36
14.8 English (GG) Code ( <code>datetime2-en-GG.ldf</code> ) . . . . .	41
14.9 English (JE) Code ( <code>datetime2-en-JE.ldf</code> ) . . . . .	46
14.10 English (IM) Code ( <code>datetime2-en-IM.ldf</code> ) . . . . .	51
14.11 English (MT) Code ( <code>datetime2-en-MT.ldf</code> ) . . . . .	55
14.12 English (IE) Code ( <code>datetime2-en-IE.ldf</code> ) . . . . .	60
<b>Change History</b>	<b>66</b>
<b>Index</b>	<b>66</b>

# 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 example usage for British English with `polyglossia`:

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

```
\documentclass[british]{article}

\usepackage{fontspec}
\usepackage{polyglossia}
\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 and use `polyglossia`'s language interface:

```
\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}
```

## 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<sup>A</sup>T<sub>E</sub>X’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 style. These are:

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

`monthlyearsep` 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+00:00`) and `BST` (`UTC+01:00`). 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 superscript<sup>1</sup>), `omit` (omit the ordinal suffix) and `sc` (small caps ordinal suffix). If you want a different style you can redefine `\DTMenumGBfmtordsuffix` which takes one argument (the suffix). Take care if `\DTMenumGBfmtordsuffix` contains fragile commands, as they will need to be protected against expansion.

---

<sup>1</sup>Just 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.

**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.

**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**.

**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–03:00), AST (UTC–04:00), EST (UTC–05:00), CST (UTC–06:00), MST (UTC–07:00) and PST (UTC–08:00). If you want to use different mappings, you can redefine **\DTMusezonemapordefault**. 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** 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.

The **en-US** time style uses the **englishampm**. 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 **\DTMusezonemap**, which can be redefined as required. This has the additional time zones NDT and NST. Note that other than NDT, daylight saving isn't taken into account.

## 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

`\DTMenzonemaps`, which can be redefined as required. Note that daylight saving isn't taken into account.

## 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 `\DTMenzzonemaps`, which can be redefined as required.

## 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 (+01:00) and CEST (+02:00) 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 `+01:00` 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}[2015/01/18 v1.02 (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
184              \DTMtexorpdfstring
185                  {\DTMenglishampf{\DTMenglisham}}%
186                  {\DTMenglishpm}}%
187          \else
188              \DTMtexorpdfstring
189                  {\DTMenglishampf{\DTMenglisham}}%
190                  {\DTMenglisham}}%
191          \fi
192      \else
193          \number\numexpr##1-12\relax
194          \DTMenglishtimesep\DTMtwodigits{##2}%
195          \ifnum##1=24
196              \DTMtexorpdfstring
197                  {\DTMenglishampf{\DTMenglishpm}}%
198                  {\DTMenglisham}}%
199          \else
200              \DTMtexorpdfstring
201                  {\DTMenglishampf{\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}[2015/01/18 v1.02 (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     \DTMsetimestyle{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.1df)

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

```
266 \ProvidesDateTimeModule{en-GB}[2015/01/18 v1.02 (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.

- \DTM{en-GB}{daymonthsep} The separator between the day and month for the text format.  
268 \newcommand\*{\DTM{en-GB}{daymonthsep}}{\space}
  - \DTM{en-GB}{monthyearsep} The separator between the month and year for the text format.  
269 \newcommand\*{\DTM{en-GB}{monthyearsep}}{\space}
  - \DTM{en-GB}{datetimesep} The separator between the date and time blocks in the full format (either text or numeric).  
270 \newcommand\*{\DTM{en-GB}{datetimesep}}{\space}
  - \DTM{en-GB}{timezonesep} The separator between the time and zone blocks in the full format (either text or numeric).  
271 \newcommand\*{\DTM{en-GB}{timezonesep}}{\space}
  - \DTM{en-GB}{datesep} The separator for the numeric date format.  
272 \newcommand\*{\DTM{en-GB}{datesep}}{/}
  - \DTM{en-GB}{timesep} The separator for the numeric time format.  
273 \newcommand\*{\DTM{en-GB}{timesep}}{:}
- Provide keys that can be used in \DTMlangsetup to set these separators.
- ```

274 \DTMdefkey{en-GB}{daymonthsep}{\renewcommand*{\DTM{en-GB}{daymonthsep}}{\#1}}
275 \DTMdefkey{en-GB}{monthyearsep}{\renewcommand*{\DTM{en-GB}{monthyearsep}}{\#1}}
276 \DTMdefkey{en-GB}{datetimesep}{\renewcommand*{\DTM{en-GB}{datetimesep}}{\#1}}
277 \DTMdefkey{en-GB}{timezonesep}{\renewcommand*{\DTM{en-GB}{timezonesep}}{\#1}}
278 \DTMdefkey{en-GB}{datesep}{\renewcommand*{\DTM{en-GB}{datesep}}{\#1}}
279 \DTMdefkey{en-GB}{timesep}{\renewcommand*{\DTM{en-GB}{timesep}}{\#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.

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

The default is the full name.

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

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

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

The default is to use mappings.

```
283 \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.)

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

The default is to show the day of the month.

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

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

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

The default is to show the year.

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

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

```
288 \newcommand*{\DTMenGBfmtordsuffix}[1]{#1}
```

Define a setting to change the ordinal suffix style.

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

Define the `en-GB` style.

```
302 \DTMnewstyle
303 {en-GB}%
304 {%
305   \renewcommand*{\DTMenglishfmtordsuffix}{\DTMenGBfmtordsuffix}%
306   \renewcommand*\DTMdisplaydate[4]{%
```

```

307      \ifDTMshowdow
308          \ifnum##4>-1
309              \DTMifbool{en-GB}{abbr}%
310                  {\DTMenglishshortweekdayname{##4}}%
311                  {\DTMenglishweekdayname{##4}}%
312              \space
313          \fi
314      \fi
315      \DTMifbool{en-GB}{showdayofmonth}%
316      {%
317          \DTMenglishordinal{##3}%
318          \DTMEnGBdaymonthsep
319      }%
320      {}%
321      \DTMifbool{en-GB}{abbr}%
322      {\DTMenglishshortmonthname{##2}}%
323      {\DTMenglishmonthname{##2}}%
324      \DTMifbool{en-GB}{showyear}%
325      {%
326          \DTMEnGBmonthyearsep\number##1 % space intended
327      }%
328      {}%
329  }%
330  \renewcommand*\{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
331 }%
332 {%
333     \renewcommand*\DTMenglishtimesep{\DTMEnGBTimesep}%
334     \DTMsettimestyle{englishampm}%
335 }%
336 {%
337     \DTMresetzones
338     \DTMEnGBzonemaps
339     \renewcommand*\{\DTMdisplayzone}[2]{%
340         \DTMifbool{en-GB}{mapzone}%
341         {\DTMusezonemapordefault{##1}{##2}}%
342     }%
343     \ifnum##1<0\else+\fi\DTMtowodigits{##1}%
344     \ifDTMshowzoneminutes\DTMEnGBTimesep\DTMtowodigits{##2}\fi
345 }%
346 }%
347 }%
348 {%
349     \renewcommand*\{\DTMdisplay}[9]{%
350         \ifDTMshowdate
351             \DTMdisplaydate{##1}{##2}{##3}{##4}%
352             \DTMEnGBdatetimesep
353         \fi
354         \DTMdisplaytime{##5}{##6}{##7}%
355         \ifDTMshowzone
356             \DTMEnGBTimezonesep

```

```

357      \DTMdisplayzone{##8}{##9}%
358      \fi
359  }%
360  \renewcommand*{\DTMDisplay}{\DTMdisplay}%
361 }%
Define numeric style.
362 \DTMnewstyle
363 {en-GB-numeric}%
364 {%
365   \renewcommand*{\DTMdisplaydate}[4]{%
366     \DTMifbool{en-GB}{showdayofmonth}%
367   }%
368   \number##3 % space intended
369   \DTMendatesep
370 }%
371 }%
372 \number##2 % space intended
373 \DTMifbool{en-GB}{showyear}%
374 }%
375 \DTMendatesep
376 \number##1 % space intended
377 }%
378 }%
379 }%
380 \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
381 }%
382 {%
383   \renewcommand*{\DTMdisplaytime}[3]{%
384     \number##1
385     \DTMendatesep\DTMtwodigits{##2}%
386     \ifDTMshowseconds\DTMendatesep\DTMtwodigits{##3}\fi
387   }%
388 }%
389 {%
390   \DTMresetzones
391   \DTMendzonemaps
392   \renewcommand*{\DTMdisplayzone}[2]{%
393     \DTMifbool{en-GB}{mapzone}%
394     {\DTMusezonemapordefault{##1}{##2}}%
395   }%
396   \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
397   \ifDTMshowzoneminutes\DTMenddatesep\DTMtwodigits{##2}\fi
398 }%
399 }%
400 }%
401 {%
402   \renewcommand*{\DTMdisplay}[9]{%
403     \ifDTMshowdate
404       \DTMdisplaydate{##1}{##2}{##3}{##4}%

```

```

405      \DTMenGBdatetimesep
406      \fi
407      \DTMdisplaytime{##5}{##6}{##7}%
408      \ifDTMshowzone
409          \DTMenGBtimezonesep
410          \DTMdisplayzone{##8}{##9}%
411      \fi
412  }%
413  \renewcommand*\{\DTMDisplay}{\DTMdisplay}%
414 }

```

**\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.

```

415 \newcommand*\{\DTMenGBzonemaps}{%
416     \DTMdefzonemap{00}{00}{GMT}%
417     \DTMdefzonemap{01}{00}{BST}%
418 }

```

Switch style according to the `useregional` setting.

```

419 \DTMifcaseregional
420 {}% do nothing
421 {\DTMsetstyle{en-GB}}%
422 {\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.)

```

423 \ifcsundef{date\CurrentTrackedDialect}
424 {}% do nothing
425     \ifundef\dateenglish
426         {%
427         }%
428         {%
429             \def\dateenglish{%
430                 \DTMifcaseregional
431                     {}% do nothing
432                     {\DTMsetstyle{en-GB}}%
433                     {\DTMsetstyle{en-GB-numeric}}%
434             }%
435         }%
436     }%
437     {%
438         \csdef{date\CurrentTrackedDialect}{%
439             \DTMifcaseregional
440                 {}% do nothing
441                 {\DTMsetstyle{en-GB}}%
442                 {\DTMsetstyle{en-GB-numeric}}%
443             }%
444     }%

```

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

This file contains the US English style.

Identify this module.

445 `\ProvidesDateTimeModule{en-US}[2015/01/18 v1.02 (NLCT)]`

Load base English module.

446 `\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.

- `\DTMnUSmonthdaysep` The separator between the month and day for the text format.  
447 `\newcommand*{\DTMnUSmonthdaysep}{\space}`
  - `\DTMnUSdownmonthsep` The separator between the day of week name and the month for the text format.  
(New to version 1.02.)  
448 `\newcommand*{\DTMnUSdownmonthsep}{\space}`
  - `\DTMnUSdayyearsep` The separator between the day and year for the text format.  
449 `\newcommand*{\DTMnUSdayyearsep}{\space}`
  - `\DTMnUSdatetimesep` The separator between the date and time blocks in the full format (either text or numeric).  
450 `\newcommand*{\DTMnUSdatetimesep}{\space}`
  - `\DTMnUSTimezonesep` The separator between the time and zone blocks in the full format (either text or numeric).  
451 `\newcommand*{\DTMnUSTimezonesep}{\space}`
  - `\DTMnUSdatesep` The separator for the numeric date format.  
452 `\newcommand*{\DTMnUSdatesep}{/}`
  - `\DTMnUStimesep` The separator for the numeric time format.  
453 `\newcommand*{\DTMnUStimesep}{:}`
- Provide keys that can be used in `\DTMlangsetup` to set these separators.
- 454 `\DTMdefkey{en-US}{monthdaysep}{\renewcommand*{\DTMnUSmonthdaysep}{#1}}`
  - 455 `\DTMdefkey{en-US}{downmonthsep}{\renewcommand*{\DTMnUSdownmonthsep}{#1}}`
  - 456 `\DTMdefkey{en-US}{dayyearsep}{\renewcommand*{\DTMnUSdayyearsep}{#1}}`
  - 457 `\DTMdefkey{en-US}{datetimesep}{\renewcommand*{\DTMnUSdatetimesep}{#1}}`
  - 458 `\DTMdefkey{en-US}{timezonesep}{\renewcommand*{\DTMnUSTimezonesep}{#1}}`
  - 459 `\DTMdefkey{en-US}{datesep}{\renewcommand*{\DTMnUSdatesep}{#1}}`
  - 460 `\DTMdefkey{en-US}{timesep}{\renewcommand*{\DTMnUStimesep}{#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.
- 461 `\DTMdefboolkey{en-US}{abbr}[true]{}`

The default is the full name.

```
462 \DTMsetbool{en-US}{abbr}{false}
```

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

```
463 \DTMdefboolkey{en-US}{mapzone}[true]{}
```

The default is no mappings.

```
464 \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.)

```
465 \DTMdefboolkey{en-US}{showdayofmonth}[true]{}
```

The default is to show the day of the month.

```
466 \DTMsetbool{en-US}{showdayofmonth}{true}
```

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

```
467 \DTMdefboolkey{en-US}{showyear}[true]{}
```

The default is to show the year.

```
468 \DTMsetbool{en-US}{showyear}{true}
```

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

```
469 \newcommand*{\DTMenUSfmtordsuffix}[1]{}
```

Define a setting to change the ordinal suffix style.

```
470 \DTMdefchoicekey{en-US}{ord}{\val\nr}{level,raise,omit,sc}{%
471   \ifcase\nr\relax
472     \renewcommand*{\DTMenUSfmtordsuffix}[1]{##1}%
473   \or
474     \renewcommand*{\DTMenUSfmtordsuffix}[1]{%
475       \DTMtexorpdfstring{\protect\textsuperscript{##1}}{##1}}%
476   \or
477     \renewcommand*{\DTMenUSfmtordsuffix}[1]{%}
478   \or
479     \renewcommand*{\DTMenUSfmtordsuffix}[1]{%
480       \DTMtexorpdfstring{\protect\textsc{##1}}{##1}}%
481   \fi
482 }
```

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.

```
483 \DTMnewstyle
484 {en-US}%
485 {%
486   \renewcommand*{\DTMenglishfmtordsuffix}{\DTMenUSfmtordsuffix}%
487   \renewcommand*\DTMdisplaydate[4]{%
```

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

```
488      \ifDTMshowdow
489          \ifnum##4>-1 % space intended
490              \DTMifbool{en-US}{abbr}%
491                  {\DTMenglishshortweekdayname{##4}}%
492                  {\DTMenglishweekdayname{##4}}%
493                  \DTMendowmonthsep
494          \fi
495      \fi
496      \DTMifbool{en-US}{abbr}%
497          {\DTMenglishshortmonthname{##2}}%
498          {\DTMenglishmonthname{##2}}%
499          \DTMifbool{en-US}{showdayofmonth}%
500          {%
501              \DTMendowmonthdaysep
502              \DTMenglishordinal{##3}%
503              \DTMifbool{en-US}{showyear}%
504              {%
505                  \DTMendowdayyearsep
506                  \number##1 % space intended
507              }%
508          }%
509      }%
510      {%
511          \DTMifbool{en-US}{showyear}%
512          {%
513              \DTMendowmonthdaysep
514              \number##1 % space intended
515          }%
516          {%
517      }%
518  }%
519  \renewcommand*\{\DTMDisplaydate\}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
520 }%
521 {%
522     \renewcommand*\DTMenglishtimesep{\DTMendustimesep}%
523     \DTMsettimestyle{englishampm}%
524 }%
525 {%
526     \DTMresetzones
527     \DTMenduszonemaps
528     \renewcommand*\{\DTMdisplayzone\}[2]{%
529         \DTMifbool{en-US}{mapzone}%
530             {\DTMusezonemapordefault{##1}{##2}}%
531         }%
532         \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
533         \ifDTMshowzoneminutes\DTMendustimesep\DTMtwodigits{##2}\fi
534     }%
535 }
```

```

536  }%
537 {%
538   \renewcommand*\{\DTMdisplay}[9]{%
539     \ifDTMshowdate
540       \DTMdisplaydate{##1}{##2}{##3}{##4}%
541     \DTMenUSdatetimesep
542     \fi
543     \DTMdisplaytime{##5}{##6}{##7}%
544   \ifDTMshowzone
545     \DTMenUStimezonesep
546     \DTMdisplayzone{##8}{##9}%
547     \fi
548   }%
549   \renewcommand*\{\DTMDisplay}{\DTMdisplay}%
550 }%

```

Define numeric style.

```

551 \DTMnewstyle
552 {en-US-numeric}%
553 {%
554   \renewcommand*\DTMdisplaydate[4]{%
555     \number##2 % space intended
556     \DTMifbool{en-US}{showdayofmonth}%
557     \%
558     \DTMenUSdatesep
559     \number##3 % space intended
560   }%
561   \%
562   \DTMifbool{en-US}{showyear}%
563   \%
564     \DTMenUSdatesep
565     \number##1 % space intended
566   }%
567   \%
568 }%
569   \renewcommand*\{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
570 }%
571 {%
572   \renewcommand*\DTMdisplaytime[3]{%
573     \number##1
574     \DTMenUStimesep\DTMtwodigits{##2}%
575     \ifDTMshowseconds\DTMenUStimesep\DTMtwodigits{##3}\fi
576   }%
577 }%
578 {%
579   \DTMresetzones
580   \DTMenUSzonemaps
581   \renewcommand*\{\DTMdisplayzone}[2]{%
582     \DTMifbool{en-US}{mapzone}%
583     {\DTMusezonemapdefault{##1}{##2}}%

```

```

584      {%
585      \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
586      \ifDTMshowzoneminutes\DTMenUStimesep\DTMtwodigits{##2}\fi
587      }%
588  }%
589 }%
590 {%
591     \renewcommand*\{\DTMdisplay}[9]{%
592     \ifDTMshowdate
593         \DTMdisplaydate{##1}{##2}{##3}{##4}%
594         \DTMenUSdatetimesep
595     \fi
596         \DTMdisplaytime{##5}{##6}{##7}%
597     \ifDTMshowzone
598         \DTMenUStimezonesep
599         \DTMdisplayzone{##8}{##9}%
600     \fi
601 }%
602     \renewcommand*\{\DTMDisplay}{\DTMdisplay}%
603 }

```

\DTMenUSzonemaps 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.)

```

604 \newcommand*\{\DTMenUSzonemaps}{%
605     \DTMdefzonemap{-3}{00}{ADT}%
606     \DTMdefzonemap{-4}{00}{AST}%
607     \DTMdefzonemap{-5}{00}{EST}%
608     \DTMdefzonemap{-6}{00}{CST}%
609     \DTMdefzonemap{-7}{00}{MST}%
610     \DTMdefzonemap{-8}{00}{PST}%
611 }

```

Switch style according to the `useregional` setting.

```

612 \DTMifcaseregional
613 {}% do nothing
614 {\DTMsetstyle{en-US}}%
615 {\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.)

```

616 \ifcsundef{date\CurrentTrackedDialect}
617 {}% do nothing
618     \ifundef\dateenglish
619     {}%
620 }%
621 {}%
622     \def\dateenglish{%
623     \DTMifcaseregional
624     {}% do nothing

```

```

625      {\DTMsetstyle{en-US}}%
626      {\DTMsetstyle{en-US-numeric}}%
627  }%
628 }%
629 }%
630 }%
631 \csdef{date\CurrentTrackedDialect}{%
632   \DTMifcaseregional
633   {}% do nothing
634   {\DTMsetstyle{en-US}}%
635   {\DTMsetstyle{en-US-numeric}}%
636 }%
637 }%

```

## 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.

```
638 \ProvidesDateTimeModule{en-CA}[2015/01/18 v1.02 (NLCT)]
```

Load base English module.

```
639 \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.

- \DTMenCmonthdaysep The separator between the month and day for the text format.  
640 \newcommand\*{\DTMenCmonthdaysep}{\space}
- \DTMenCdownmonthsep The separator between the day of week name and the month for the text format.  
(New to version 1.02.)  
641 \newcommand\*{\DTMenCdownmonthsep}{\space}
- \DTMenCdayyearsep The separator between the day and year for the text format.  
642 \newcommand\*{\DTMenCdayyearsep}{\space}
- \DTMenCdatetimesep The separator between the date and time blocks in the full format (either text or numeric).  
643 \newcommand\*{\DTMenCdatetimesep}{\space}
- \DTMenCtimezonesep The separator between the time and zone blocks in the full format (either text or numeric).  
644 \newcommand\*{\DTMenCtimezonesep}{\space}
- \DTMenCdatesep The separator for the numeric date format.  
645 \newcommand\*{\DTMenCdatesep}{/}

\DTMnCAtimesep The separator for the numeric time format.

```
646 \newcommand*{\DTMnCAtimesep}{:}

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

647 \DTMdefkey{en-CA}{monthdaysep}{\renewcommand\*{\DTMnCAmonthdaysep}{#1}}

648 \DTMdefkey{en-CA}{dowmonthsep}{\renewcommand\*{\DTMnCADowmonthsep}{#1}}

649 \DTMdefkey{en-CA}{dayyearsep}{\renewcommand\*{\DTMnCAdayyearsep}{#1}}

650 \DTMdefkey{en-CA}{datetimesep}{\renewcommand\*{\DTMnCADatetimesep}{#1}}

651 \DTMdefkey{en-CA}{timezonesep}{\renewcommand\*{\DTMnCAtimezonesep}{#1}}

652 \DTMdefkey{en-CA}{datesep}{\renewcommand\*{\DTMnCAdatesep}{#1}}

653 \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.

```
654 \DTMdefboolkey{en-CA}{abbr}[true]{}

The default is the full name.
```

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

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

```
656 \DTMdefboolkey{en-CA}{mapzone}[true]{}

The default is no mappings.
```

657 \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.)

```
658 \DTMdefboolkey{en-CA}{showdayofmonth}[true]{}

The default is to show the day of the month.
```

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

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

```
660 \DTMdefboolkey{en-CA}{showyear}[true]{}

The default is to show the year.
```

661 \DTMsetbool{en-CA}{showyear}{true}

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

```
662 \newcommand*{\DTMnCAFmtordsuffix}[1]{}

Define a setting to change the ordinal suffix style.
```

663 \DTMdefchoicekey{en-CA}{ord}{\val\nr}{level,raise,omit,sc}{%
 664 \ifcase\nr\relax
 665 \renewcommand\*{\DTMnCAFmtordsuffix}[1]{##1}%
 666 \or
 667 \renewcommand\*{\DTMnCAFmtordsuffix}[1]{%
 668 \DTMtexorpdfstring{\protect\textrightsupscript{##1}}{##1}}%
 669 \or
 670 \renewcommand\*{\DTMnCAFmtordsuffix}[1]{}%

```

671   \or
672     \renewcommand*{\DTMEnCAfmtordsuffix}[1]{%
673       \DTMtexorpdfstring{\protect\textsc{##1}}{##1}%
674     \fi
675   }

Define the en-CA style (similar to en-US).
676 \DTMnewstyle
677 {en-CA}%
678 {%
679   \renewcommand*{\DTMenglishfmtordsuffix}{\DTMEnCAfmtordsuffix}%
680   \renewcommand*\DTMdisplaydate[4]{%
Support for showdow added in v1.02 (thanks to Alan Munn).
681   \ifDTMshowdow
682     \ifnum##4>-1 % space intended
683       \DTMifbool{en-CA}{abbr}{%
684         {\DTMenglishshortweekdayname{##4}}%
685         {\DTMenglishweekdayname{##4}}%
686         \DTMEnCAdownmonthsep
687       \fi
688     \fi
689     \DTMifbool{en-CA}{abbr}{%
690       {\DTMenglishshortmonthname{##2}}%
691       {\DTMenglishmonthname{##2}}%
692       \DTMifbool{en-CA}{showdayofmonth}{%
693         {%
694           \DTMEnCAmonthdaysep
695           \DTMenglishordinal{##3}%
696           \DTMifbool{en-CA}{showyear}{%
697             {%
698               \DTMEnCAdayyearsep
699               \number##1 % intended
700             }%
701           }%
702         }%
703       }%
704       \DTMifbool{en-CA}{showyear}{%
705         {%
706           \DTMEnCAmonthdaysep
707           \number##1 % intended
708         }%
709         {}%
710       }%
711     }%
712     \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
713   }%
714   {%
715     \renewcommand*\DTMenglishtimesep{\DTMEnCATimesep}%
716     \DTMsettimestyle{englishampm}%
717   }%

```

```

718  {%
719    \DTMresetzones
720    \DTMenzonemaps
721    \renewcommand*{\DTMdisplayzone}[2]{%
722      \DTMifbool{en-CA}{\mapzone}{%
723        {\DTMusezonemapordefault{\##1}{\##2}}{%
724          {%
725            \ifnum##1<0\else+\fi\DTMtwodigits{\##1}{%
726              \ifDTMshowzoneminutes\DTMenzatimesep\DTMtwodigits{\##2}\fi
727            }%
728          }%
729        }%
730      {%
731        \renewcommand*{\DTMdisplay}[9]{%
732          \ifDTMshowdate
733            \DTMdisplaydate{\##1}{\##2}{\##3}{\##4}{%
734              \DTMenzatimesep
735              \fi
736            \DTMdisplaytime{\##5}{\##6}{\##7}{%
737              \ifDTMshowzone
738                \DTMenzatimezonesep
739                \DTMdisplayzone{\##8}{\##9}{%
740                  \fi
741                }%
742              \renewcommand*{\DTMDisplay}{\DTMdisplay}%
743            }%

```

Define numeric style.

```

744 \DTMnewstyle
745  {en-CA-numeric}{label}
746  {%
747    \renewcommand*{\DTMdisplaydate}[4]{%
748      \number##2 % space intended
749      \DTMifbool{en-CA}{\showdayofmonth}{%
750        {%
751          \DTMenzatimesep
752          \number##3 % space intended
753        }%
754      }%
755      \DTMifbool{en-CA}{\showyear}{%
756        {%
757          \DTMenzatimesep
758          \number##1 % space intended
759        }%
760      }%
761    }%
762    \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{\##1}{\##2}{\##3}{\##4}}%
763  }%
764  {%
765    \renewcommand*{\DTMdisplaytime}[3]{%

```

```

766     \number##1
767     \DTMendatetimesep\DTMtwodigits{##2}%
768     \ifDTMshowseconds\DTMendatetimesep\DTMtwodigits{##3}\fi
769   }%
770 }%
771 {%
772   \DTMresetzones
773   \DTMendatetimesep
774   \renewcommand*\{\DTMdisplayzone}[2]{%
775     \DTMifbool{en-CA}{mapzone}%
776     {\DTMusezonemapordefault{##1}{##2}}%
777     \fi%
778     \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
779     \ifDTMshowzoneminutes\DTMendatetimesep\DTMtwodigits{##2}\fi
780   }%
781 }%
782 }%
783 {%
784   \renewcommand*\{\DTMdisplay}[9]{%
785     \ifDTMshowdate
786       \DTMdisplaydate{##1}{##2}{##3}{##4}%
787       \DTMendatetimesep
788     \fi
789     \DTMdisplaytime{##5}{##6}{##7}%
790     \ifDTMshowzone
791       \DTMendatetimesep
792       \DTMdisplayzone{##8}{##9}%
793     \fi
794   }%
795   \renewcommand*\{\DTMDisplay}{\DTMdisplay}%
796 }

```

`\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, except for NDT.)

```

797 \newcommand*\{\DTMendatetimesep}{%
798   \DTMdefzonemap{-2}{30}{NDT}%
799   \DTMdefzonemap{-3}{30}{NST}%
800   \DTMdefzonemap{-4}{00}{AST}%
801   \DTMdefzonemap{-5}{00}{EST}%
802   \DTMdefzonemap{-6}{00}{CST}%
803   \DTMdefzonemap{-7}{00}{MST}%
804   \DTMdefzonemap{-8}{00}{PST}%
805 }

```

Switch style according to the `useregional` setting.

```

806 \DTMifcaseregional
807 {}% do nothing
808 {\DTMsetstyle{en-CA}}%
809 {\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.)

```

810 \ifcsundef{date\CurrentTrackedDialect}
811 {%
812   \ifundef{\dateenglish}
813   {%
814     {%
815       {%
816         \def\dateenglish{%
817           \DTMifcaseregional
818           {}% do nothing
819           {\DTMsetstyle{en-CA}}%
820           {\DTMsetstyle{en-CA-numeric}}%
821         }%
822       }%
823     }%
824   {%
825     \csdef{date\CurrentTrackedDialect}{%
826       \DTMifcaseregional
827       {}% do nothing
828       {\DTMsetstyle{en-CA}}%
829       {\DTMsetstyle{en-CA-numeric}}%
830     }%
831   }%

```

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

This file contains the Australian English style.

Identify this module.

```
832 \ProvidesDateTimeModule{en-AU}[2015/01/18 v1.02 (NLCT)]
```

Load base English module.

```
833 \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.

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

```
834 \newcommand*{\DTM{en-AU}{daymonthsep}}{\space}
```

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

```
835 \newcommand*{\DTM{en-AU}{monthyearsep}}{\space}
```

`\DTM{en-AU}{datetimesep}` The separator between the date and time blocks in the full format (either text or numeric).

```
836 \newcommand*{\DTM{en-AU}{datetimesep}}{\space}
```

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

```
837 \newcommand*{\DTMnAUtimezonesep}{\space}
```

\DTMnAUdatesep The separator for the numeric date format.

```
838 \newcommand*{\DTMnAUdatesep}{/}
```

\DTMnAUtimesep The separator for the numeric time format.

```
839 \newcommand*{\DTMnAUtimesep}{:}
```

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

```
840 \DTMdefkey{en-AU}{daymonthsep}{\renewcommand*{\DTMnAUdaymonthsep}{#1}}
841 \DTMdefkey{en-AU}{monthyearsep}{\renewcommand*{\DTMnAUmonthyearsep}{#1}}
842 \DTMdefkey{en-AU}{datetimesep}{\renewcommand*{\DTMnAUdatetimesep}{#1}}
843 \DTMdefkey{en-AU}{timezonesep}{\renewcommand*{\DTMnAUtimezonesep}{#1}}
844 \DTMdefkey{en-AU}{datesep}{\renewcommand*{\DTMnAUdatesep}{#1}}
845 \DTMdefkey{en-AU}{timesep}{\renewcommand*{\DTMnAUtimesep}{#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.

```
846 \DTMdefboolkey{en-AU}{abbr}[true]{}
```

The default is the full name.

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

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

```
848 \DTMdefboolkey{en-AU}{mapzone}[true]{}
```

The default is no mappings.

```
849 \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.)

```
850 \DTMdefboolkey{en-AU}{showdayofmonth}[true]{}
```

The default is to show the day of the month.

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

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

```
852 \DTMdefboolkey{en-AU}{showyear}[true]{}
```

The default is to show the year.

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

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

```
854 \newcommand*{\DTMnAUfmtordsuffix}[1]{}
```

Define a setting to change the ordinal suffix style.

```
855 \DTMdefchoicekey{en-AU}{ord}{\val\nr}{level,raise,omit,sc}{%
856   \ifcase\nr\relax
857     \renewcommand*\{\DTMnAUfmtordsuffix}[1]{##1}%
858   \or
859     \renewcommand*\{\DTMnAUfmtordsuffix}[1]{%
860       \DTMtexorpdfstring{\protect\textsuperscript{##1}}{##1}}%
861   \or
862     \renewcommand*\{\DTMnAUfmtordsuffix}[1]{%
863       \DTMtexorpdfstring{\protect\textsc{##1}}{##1}}%
864   \or
865     \renewcommand*\{\DTMnAUfmtordsuffix}[1]{%
866       \DTMtexorpdfstring{\protect\textit{##1}}{##1}}%
867 }
```

Define the en-AU style.

```
868 \DTMnewstyle
869 {en-AU}%
870 {%
871   date style
872   \renewcommand*\{\DTMenglishfmtordsuffix}{\DTMnAUfmtordsuffix}%
873   \renewcommand*\DTMdisplaydate[4]{%
874     \ifDTMshowdow
875       \ifnum##4>-1%
876         \DTMifbool{en-AU}{abbr}%
877         {\DTMenglishshortweekdayname{##4}}%
878         {\DTMenglishweekdayname{##4}}%
879       \space
880     \fi
881   \DTMifbool{en-AU}{showdayofmonth}%
882   {%
883     \DTMenglishordinal{##3}%
884     \DTMnAUdaymonthsep
885   }%
886   {%
887     \DTMifbool{en-AU}{abbr}%
888     {\DTMenglishshortmonthname{##2}}%
889     {\DTMenglishmonthname{##2}}%
890     \DTMifbool{en-AU}{showyear}%
891   {%
892     \DTMnAUmonthyearsep\number##1 % space intended
893   }%
894   {%
895   }%
896   \renewcommand*\{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
897 }%
898 {%
899   time style
900   \renewcommand*\DTMenglishtimesep{\DTMnAUtimesep}%
901 }
```

```

902  {%
903    \DTMresetzones
904    \DTMenzonemaps
905    \renewcommand*{\DTMdisplayzone}[2]{%
906      \DTMifbool{en-AU}{\mapzone}{%
907        {\DTMusezonemapordefault{\##1}{\##2}}{%
908          {%
909            \ifnum##1<0\else+\fi\DTMtwodigits{\##1}{%
910              \ifDTMshowzoneminutes\DTMenzutimesep\DTMtwodigits{\##2}\fi
911            }%
912          }%
913        }%
914      {%
915        \renewcommand*{\DTMdisplay}[9]{%
916          \ifDTMshowdate
917            \DTMdisplaydate{\##1}{\##2}{\##3}{\##4}{%
918              \DTMenzutimesep
919            \fi
920            \DTMdisplaytime{\##5}{\##6}{\##7}{%
921              \ifDTMshowzone
922                \DTMenzutimezonesep
923                \DTMdisplayzone{\##8}{\##9}{%
924                  \fi
925                }%
926              \renewcommand*{\DTMDisplay}{\DTMdisplay}%
927            }%

```

Define numeric style.

```

928 \DTMnewstyle
929 {en-AU-numeric}%
930 {%
931   date style
932   \renewcommand*{\DTMdisplaydate}[4]{%
933     \DTMifbool{en-AU}{\showdayofmonth}{%
934       \number##3 % space intended
935       \DTMenzutimesep
936     }%
937   }%
938   \number##2 % space intended
939   \DTMifbool{en-AU}{\showyear}{%
940     {%
941       \DTMenzutimesep
942       \number##1 % space intended
943     }%
944   }%
945 }%
946 \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{\##1}{\##2}{\##3}{\##4}}%
947 }%
948 {%
949   time style
950   \renewcommand*{\DTMdisplaytime}[3]{%

```

```

950     \number##1
951     \DTMend{AUtimesep}\DTMtwo{digits}{##2}%
952     \ifDTMshowseconds\DTMend{AUtimesep}\DTMtwo{digits}{##3}\fi
953   }%
954 }%
955 {%
956   \DTMresetzones
957   \DTMend{AUzonemaps}
958   \renewcommand*\{\DTMdisplayzone}[2]{%
959     \DTMifbool{en-AU}{mapzone}%
960     {\DTMusezonemapordefault{##1}{##2}}%
961     {}%
962     \ifnum##1<0\else+\fi\DTMtwo{digits}{##1}%
963     \ifDTMshowzoneminutes\DTMend{AUtimesep}\DTMtwo{digits}{##2}\fi
964   }%
965 }%
966 }%
967 {%
968   \renewcommand*\{\DTMdisplay}[9]{%
969     \ifDTMshowdate
970       \DTMdisplaydate{##1}{##2}{##3}{##4}%
971       \DTMend{AUdate}%
972     \fi
973     \DTMdisplaytime{##5}{##6}{##7}%
974     \ifDTMshowzone
975       \DTMend{AUtime}%
976       \DTMdisplayzone{##8}{##9}%
977     \fi
978   }%
979   \renewcommand*\{\DTMDisplay}{\DTMdisplay}%
980 }

```

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

```

981 \newcommand*\{\DTMend{AUzonemaps}}{%
982   \DTMdefzonemap{10}{30}{ACDT}%
983   \DTMdefzonemap{11}{00}{AEDT}%
984   \DTMdefzonemap{9}{00}{AWDT}%
985   \DTMdefzonemap{9}{30}{ACST}%
986   \DTMdefzonemap{8}{45}{ACWST}%
987   \DTMdefzonemap{10}{00}{AEST}%
988   \DTMdefzonemap{8}{00}{AWST}%
989   \DTMdefzonemap{7}{00}{CXT}%
990   \DTMdefzonemap{11}{30}{NFT}%
991 }

```

Switch style according to the `userregional` setting.

```

992 \DTMifcaseregional
993 {}% do nothing
994 {\DTMsetstyle{en-AU}}%

```

```

995 {\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.)
996 \ifcsundef{date\CurrentTrackedDialect}%
997 {%
998   \ifundef{\dateenglish}%
999   {%
1000     {%
1001       {%
1002         \def\dateenglish{%
1003           \DTMifcaseregional
1004           {}% do nothing
1005           {\DTMsetstyle{en-AU}}%
1006           {\DTMsetstyle{en-AU-numeric}}%
1007         }%
1008       }%
1009     }%
1010   }%
1011   \csdef{date\CurrentTrackedDialect}{%
1012     \DTMifcaseregional
1013     {}% do nothing
1014     {\DTMsetstyle{en-AU}}%
1015     {\DTMsetstyle{en-AU-numeric}}%
1016   }%
1017 }%

```

## 14.7 English (New Zealand) Code (datetime2-en-NZ.ldf)

This file contains the New Zealand English style.

Identify this module.

```
1018 \ProvidesDateTimeModule{en-NZ}[2015/01/18 v1.02 (NLCT)]
```

Load base English module.

```
1019 \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.

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

```
1020 \newcommand*{\DTMenzdaymonthsep}{\space}
```

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

```
1021 \newcommand*{\DTMenzmonthyearsep}{\space}
```

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

```
1022 \newcommand*{\DTMenzdatetimesep}{\space}
```

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

```
1023 \newcommand*{\DTMenztimezonesep}{\space}
```

\DTMenzdatesep The separator for the numeric date format.

```
1024 \newcommand*{\DTMenzdatesep}{/}
```

\DTMenztimesep The separator for the numeric time format.

```
1025 \newcommand*{\DTMenztimesep}{:}
```

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

```
1026 \DTMdefkey{en-NZ}{daymonthsep}{\renewcommand*{\DTMenzdaymonthsep}{#1}}
1027 \DTMdefkey{en-NZ}{monthyearsep}{\renewcommand*{\DTMenzmonthyearsep}{#1}}
1028 \DTMdefkey{en-NZ}{datetimesep}{\renewcommand*{\DTMenzdatetimesep}{#1}}
1029 \DTMdefkey{en-NZ}{timezonesep}{\renewcommand*{\DTMenztimezonesep}{#1}}
1030 \DTMdefkey{en-NZ}{datesep}{\renewcommand*{\DTMenzdatesep}{#1}}
1031 \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.

```
1032 \DTMdefboolkey{en-NZ}{abbr}[true]{}
```

The default is the full name.

```
1033 \DTMsetbool{en-NZ}{abbr}{false}
```

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

```
1034 \DTMdefboolkey{en-NZ}{mapzone}[true]{}
```

The default is no mappings.

```
1035 \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.)

```
1036 \DTMdefboolkey{en-NZ}{showdayofmonth}[true]{}
```

The default is to show the day of the month.

```
1037 \DTMsetbool{en-NZ}{showdayofmonth}{true}
```

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

```
1038 \DTMdefboolkey{en-NZ}{showyear}[true]{}
```

The default is to show the year.

```
1039 \DTMsetbool{en-NZ}{showyear}{true}
```

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

```
1040 \newcommand*{\DTMenzfmtordsuffix}[1]{}
```

Define a setting to change the ordinal suffix style.

```
1041 \DTMdefchoicekey{en-NZ}{ord}{\val\nr}{level,raise,omit,sc}{%
1042   \ifcase\nr\relax
1043     \renewcommand*\{\DTMenzfmtordsuffix}[1]{##1}%
1044   \or
1045     \renewcommand*\{\DTMenzfmtordsuffix}[1]{%
1046       \DTMtexorpdfstring{\protect\textsuperscript{##1}}{##1}}%
1047   \or
1048     \renewcommand*\{\DTMenzfmtordsuffix}[1]{%
1049       \or
1050         \renewcommand*\{\DTMenzfmtordsuffix}[1]{%
1051           \DTMtexorpdfstring{\protect\textsc{##1}}{##1}}%
1052   \fi
1053 }
```

Define the en-NZ style.

```
1054 \DTMnewstyle
1055 {en-NZ}%
1056 {%
1057   \renewcommand*\{\DTMenglishfmtordsuffix}{\DTMenzfmtordsuffix}%
1058   \renewcommand*\DTMdisplaydate[4]{%
1059     \ifDTMshowdow
1060       \ifnum##4>-1%
1061         \DTMifbool{en-NZ}{abbr}%
1062         {\DTMenglishshortweekdayname{##4}}%
1063         {\DTMenglishweekdayname{##4}}%
1064       \space
1065     \fi
1066   \fi
1067   \DTMifbool{en-NZ}{showdayofmonth}%
1068   {%
1069     \DTMenglishordinal{##3}%
1070     \DTMenzdaymonthsep
1071   }%
1072   {%
1073     \DTMifbool{en-NZ}{abbr}%
1074     {\DTMenglishshortmonthname{##2}}%
1075     {\DTMenglishmonthname{##2}}%
1076     \DTMifbool{en-NZ}{showyear}%
1077   }%
1078   \DTMenzmonthyearsep\number##1 % space intended
1079   }%
1080   {%
1081   }%
1082   \renewcommand*\{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1083 }%
1084 {%
1085   \renewcommand*\DTMenglishtimesep{\DTMenztimesep}%
1086   \DTMsetimestyle{englishampm}%
1087 }%
```

```

1088  {%
1089    \DTMresetzones
1090    \DTMenzzonemaps
1091    \renewcommand*{\DTMdisplayzone}[2]{%
1092      \DTMifbool{en-NZ}{\mapzone}{%
1093        {\DTMusezonemapordefault{##1}{##2}}{%
1094          {%
1095            \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
1096            \ifDTMshowzoneminutes\DTMenztimesep\DTMtwodigits{##2}\fi
1097          }%
1098        }%
1099      }%
1100    {%
1101      \renewcommand*{\DTMdisplay}[9]{%
1102        \ifDTMshowdate
1103          \DTMdisplaydate{##1}{##2}{##3}{##4}%
1104          \DTMenzdatetimesep
1105          \fi
1106          \DTMdisplaytime{##5}{##6}{##7}%
1107          \ifDTMshowzone
1108            \DTMenztimezonesep
1109            \DTMdisplayzone{##8}{##9}%
1110            \fi
1111        }%
1112        \renewcommand*{\DTMDisplay}{\DTMdisplay}%
1113      }%

```

Define numeric style.

```

1114 \DTMnewstyle
1115  {en-NZ-numeric}%
1116  {%
1117    \renewcommand*{\DTMdisplaydate}[4]{%
1118      \DTMifbool{en-NZ}{\showdayofmonth}{%
1119        {%
1120          \number##3 % space intended
1121          \DTMenzdatesep
1122        }%
1123        {}%
1124        \number##2 % space intended
1125        \DTMifbool{en-NZ}{\showyear}{%
1126          {%
1127            \DTMenzdatesep
1128            \number##1 % space intended
1129          }%
1130          {}%
1131        }%
1132        \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1133      }%
1134    {%
1135      \renewcommand*{\DTMdisplaytime}[3]{%

```

```

1136      \number##1
1137      \DTMenztimesep\DTMtwodigits{##2}%
1138      \ifDTMshowseconds\DTMenztimesep\DTMtwodigits{##3}\fi
1139    }%
1140  }%
1141  {%
1142    \DTMresetzones
1143    \DTMenzzonemaps
1144    \renewcommand*\{\DTMdisplayzone}[2]{%
1145      \DTMifbool{en-NZ}{mapzone}%
1146      {\DTMusezonemapordefault{##1}{##2}}%
1147      {%
1148        \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
1149        \ifDTMshowzoneminutes\DTMenztimesep\DTMtwodigits{##2}\fi
1150      }%
1151    }%
1152  }%
1153  {%
1154    \renewcommand*\{\DTMdisplay}[9]{%
1155      \ifDTMshowdate
1156        \DTMdisplaydate{##1}{##2}{##3}{##4}%
1157        \DTMenzdatetimesep
1158        \fi
1159        \DTMdisplaytime{##5}{##6}{##7}%
1160      \ifDTMshowzone
1161        \DTMenztimezonesep
1162        \DTMdisplayzone{##8}{##9}%
1163      \fi
1164    }%
1165    \renewcommand*\{\DTMDisplay}{\DTMdisplay}%
1166  }

```

\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.

```

1167 \newcommand*\{\DTMenzzonemaps}{%
1168   \DTMdefzonemap{12}{00}{NZST}%
1169   \DTMdefzonemap{12}{45}{CHAST}%
1170   \DTMdefzonemap{13}{00}{NZDT}%
1171   \DTMdefzonemap{13}{45}{CHADT}%
1172 }

```

Switch style according to the `useregional` setting.

```

1173 \DTMifcaseregional
1174 {}% do nothing
1175 {\DTMsetstyle{en-NZ}}%
1176 {\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.)

```

1177 \ifcsundef{date\CurrentTrackedDialect}

```

```

1178 {%
1179   \ifundef\dateenglish
1180   {%
1181   }%
1182   {%
1183     \def\dateenglish{%
1184       \DTMifcaseregional
1185       {}% do nothing
1186       {\DTMsetstyle{en-NZ}}%
1187       {\DTMsetstyle{en-NZ-numeric}}%
1188     }%
1189   }%
1190 }%
1191 {%
1192   \csdef{date\CurrentTrackedDialect}{%
1193     \DTMifcaseregional
1194     {}% do nothing
1195     {\DTMsetstyle{en-NZ}}%
1196     {\DTMsetstyle{en-NZ-numeric}}%
1197   }%
1198 }%

```

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

This file contains the en-GG style.

Identify this module.

```
1199 \ProvidesDateTimeModule{en-GG}[2015/01/18 v1.02 (NLCT)]
```

Load base English module.

```
1200 \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.

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

```
1201 \newcommand*{\DTMEnGGdaymonthsep}{\space}
```

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

```
1202 \newcommand*{\DTMEnGGmonthyearsep}{\space}
```

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

```
1203 \newcommand*{\DTMEnGGdatetimesep}{\space}
```

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

```
1204 \newcommand*{\DTMEnGGtimezonesep}{\space}
```

```

\DTMenGGdatesep The separator for the numeric date format.
1205 \newcommand*\{\DTMenGGdatesep\}{/}

\DTMenGGtimesep The separator for the numeric time format.
1206 \newcommand*\{\DTMenGGtimesep\}{:}

Provide keys that can be used in \DTMlangsetup to set these separators.
1207 \DTMdefkey{en-GG}{daymonthsep}{\renewcommand*\{\DTMenGGdaymonthsep\}{#1}}
1208 \DTMdefkey{en-GG}{monthyearsep}{\renewcommand*\{\DTMenGGmonthyearsep\}{#1}}
1209 \DTMdefkey{en-GG}{datetimesep}{\renewcommand*\{\DTMenGGdatetimesep\}{#1}}
1210 \DTMdefkey{en-GG}{timezonesep}{\renewcommand*\{\DTMenGGtimezonesep\}{#1}}
1211 \DTMdefkey{en-GG}{datesep}{\renewcommand*\{\DTMenGGdatesep\}{#1}}
1212 \DTMdefkey{en-GG}{timesep}{\renewcommand*\{\DTMenGGtimesep\}{#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.
1213 \DTMdefboolkey{en-GG}{abbr}{true} {}

The default is the full name.
1214 \DTMsetbool{en-GG}{abbr}{false}

Define a boolean key that determines if the time zone mappings should be
used.
1215 \DTMdefboolkey{en-GG}{mapzone}{true} {}

The default is to use mappings.
1216 \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.)
1217 \DTMdefboolkey{en-GG}{showdayofmonth}{true} {}

The default is to show the day of the month.
1218 \DTMsetbool{en-GG}{showdayofmonth}{true}

Define a boolean key that determines whether to show or hide the year.
1219 \DTMdefboolkey{en-GG}{showyear}{true} {}

The default is to show the year.
1220 \DTMsetbool{en-GG}{showyear}{true}

\DTMenGGfmtordsuffix Define the ordinal suffix to be used by this style.
1221 \newcommand*\{\DTMenGGfmtordsuffix\}[1]{#1}

Define a setting to change the ordinal suffix style.
1222 \DTMdefchoicekey{en-GG}{ord}{\val\nr}{level,raise,omit,sc}{%
1223 \ifcase\nr\relax
1224   \renewcommand*\{\DTMenGGfmtordsuffix\}[1]{##1}%
1225 \or
1226   \renewcommand*\{\DTMenGGfmtordsuffix\}[1]{%
1227     \DTMtexorpdfstring{\protect\textsuperscript{##1}}{##1}}%

```

```

1228   \or
1229     \renewcommand*{\DTMengfmtordsuffix}[1]{}
1230   \or
1231     \renewcommand*{\DTMengfmtordsuffix}[1]{%
1232       \DTMtexorpdfstring{\protect\textsc{##1}}{##1}%
1233   \fi
1234 }

Define the en-GG style.

1235 \DTMnewstyle
1236 {en-GG}%
1237 {%
1238   \renewcommand*{\DTMenglishfmtordsuffix}{\DTMengfmtordsuffix}%
1239   \renewcommand*\DTMdisplaydate[4]{%
1240     \ifDTMshowdow
1241       \ifnum##4>-1%
1242         \DTMifbool{en-GG}{abbr}%
1243         {\DTMenglishshortweekdayname{##4}}%
1244         {\DTMenglishweekdayname{##4}}%
1245         \space
1246       \fi
1247     \fi
1248     \DTMifbool{en-GG}{showdayofmonth}%
1249     {%
1250       \DTMenglishordinal{##3}%
1251       \DTMengGGdaymonthsep
1252     }%
1253     {%
1254       \DTMifbool{en-GG}{abbr}%
1255       {\DTMenglishshortmonthname{##2}}%
1256       {\DTMenglishmonthname{##2}}%
1257       \DTMifbool{en-GG}{showyear}%
1258       {%
1259         \DTMengGGmonthyearsep\number##1 % space intended
1260       }%
1261     }%
1262   }%
1263   \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1264 }%
1265 {%
1266   \renewcommand*\DTMenglishtimesep{\DTMengGGtimesep}%
1267   \DTMsetimestyle{englishampm}%
1268 }%
1269 {%
1270   \DTMresetzones
1271   \DTMengGGzonemaps
1272   \renewcommand*{\DTMdisplayzone}[2]{%
1273     \DTMifbool{en-GG}{mapzone}%
1274     {\DTMusezonemapdefault{##1}{##2}}%
1275   }%

```

```

1276      \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
1277      \ifDTMshowzoneminutes\DTMenGGtimesep\DTMtwodigits{##2}\fi
1278      }%
1279  }%
1280 }%
1281 {%
1282     \renewcommand*\DTMdisplay}[9]{%
1283     \ifDTMshowdate
1284         \DTMdisplaydate{##1}{##2}{##3}{##4}%
1285         \DTMenGGdatetimesep
1286     \fi
1287     \DTMdisplaytime{##5}{##6}{##7}%
1288     \ifDTMshowzone
1289         \DTMenGGtimezonesep
1290         \DTMdisplayzone{##8}{##9}%
1291     \fi
1292 }%
1293     \renewcommand*\DTMDisplay{\DTMdisplay}%
1294 }%

```

Define numeric style.

```

1295 \DTMnewstyle
1296 {en-GG-numeric}%
1297 {%
1298     \renewcommand*\DTMdisplaydate[4]{%
1299         \DTMifbool{en-GG}{showdayofmonth}%
1300         {%
1301             \number##3 % space intended
1302             \DTMenGGdatesep
1303         }%
1304         {}%
1305         \number##2 % space intended
1306         \DTMifbool{en-GG}{showyear}%
1307         {%
1308             \DTMenGGdatesep
1309             \number##1 % space intended
1310         }%
1311         {}%
1312     }%
1313     \renewcommand*\DTMDisplaydate[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1314 }%
1315 {%
1316     \renewcommand*\DTMdisplaytime[3]{%
1317         \number##1
1318         \DTMenGGtimesep\DTMtwodigits{##2}%
1319         \ifDTMshowseconds\DTMenGGtimesep\DTMtwodigits{##3}\fi
1320     }%
1321 }%
1322 {%
1323     \DTMresetzones

```

```

1324 \DTMendGGzonemaps
1325 \renewcommand*{\DTMdisplayzone}[2]{%
1326   \DTMifbool{en-GG}{mapzone}{%
1327     {\DTMusezonemapordefault{##1}{##2}}{%
1328       {%
1329         \ifnum##1<0\else+\fi\DTMtwodigits{##1}{%
1330           \ifDTMshowzoneminutes\DTMendGGtimesep\DTMtwodigits{##2}\fi
1331         }{%
1332       }{%
1333     }{%
1334     }{%
1335     \renewcommand*{\DTMdisplay}[9]{%
1336       \ifDTMshowdate
1337         \DTMdisplaydate{##1}{##2}{##3}{##4}{%
1338           \DTMendGGdatetimesep
1339         \fi
1340         \DTMdisplaytime{##5}{##6}{##7}{%
1341           \ifDTMshowzone
1342             \DTMendGGtimezonesep
1343             \DTMdisplayzone{##8}{##9}{%
1344               \fi
1345             }{%
1346             \renewcommand*{\DTMDisplay}{\DTMdisplay}{%
1347           }

```

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

```

1348 \newcommand*{\DTMendGGzonemaps}{%
1349   \DTMdefzonemap{00}{00}{GMT}{%
1350   \DTMdefzonemap{01}{00}{BST}{%
1351 }

```

Switch style according to the `useregional` setting.

```

1352 \DTMifcaseregional
1353 {}% do nothing
1354 {\DTMsetstyle{en-GG}}%
1355 {\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.)

```

1356 \ifcsundef{date\CurrentTrackedDialect}
1357 {}% do nothing
1358   \ifundef{\dateenglish}
1359   {}%
1360   {}%
1361   {}%
1362   \def{\dateenglish}{%
1363     \DTMifcaseregional
1364     {}% do nothing
1365     {\DTMsetstyle{en-GG}}%

```

```

1366      {\DTMsetstyle{en-GG-numeric}}%
1367      }%
1368  }%
1369 }%
1370 {%
1371   \csdef{date\CurrentTrackedDialect}{%
1372     \DTMifcaseregional
1373     {}% do nothing
1374     {\DTMsetstyle{en-GG}}%
1375     {\DTMsetstyle{en-GG-numeric}}%
1376   }%
1377 }%

```

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

This file contains the en-JE style.

Identify this module.

```
1378 \ProvidesDateTimeModule{en-JE}[2015/01/18 v1.02 (NLCT)]
```

Load base English module.

```
1379 \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.

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

```
1380 \newcommand*{\DTMenJEdaymonthsep}{\space}
```

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

```
1381 \newcommand*{\DTMenJEmonthyearsep}{\space}
```

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

```
1382 \newcommand*{\DTMenJEdatetimesep}{\space}
```

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

```
1383 \newcommand*{\DTMenJEtmezonesep}{\space}
```

\DTMenJEdatesep The separator for the numeric date format.

```
1384 \newcommand*{\DTMenJEdatesep}{/}
```

\DTMenJEtimesep The separator for the numeric time format.

```
1385 \newcommand*{\DTMenJEtimesep}{:}
```

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

```
1386 \DTMdefkey{en-JE}{daymonthsep}{\renewcommand*{\DTMenJEdaymonthsep}{#1}}
```

```
1387 \DTMdefkey{en-JE}{monthyearsep}{\renewcommand*{\DTMenJEmonthyearsep}{#1}}
```

```

1388 \DTMdefkey{en-JE}{datetimesep}{\renewcommand*{\DTMenJE datetimesep}{#1}}
1389 \DTMdefkey{en-JE}{timezonesep}{\renewcommand*{\DTMenJE timezonesep}{#1}}
1390 \DTMdefkey{en-JE}{datesep}{\renewcommand*{\DTMenJE datesep}{#1}}
1391 \DTMdefkey{en-JE}{timesep}{\renewcommand*{\DTMenJE timesep}{#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.

```

1392 \DTMdefboolkey{en-JE}{abbr}[true]{}

```

The default is the full name.

```

1393 \DTMsetbool{en-JE}{abbr}{false}

```

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

```

1394 \DTMdefboolkey{en-JE}{mapzone}[true]{}

```

The default is to use mappings.

```

1395 \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.)

```

1396 \DTMdefboolkey{en-JE}{showdayofmonth}[true]{}

```

The default is to show the day of the month.

```

1397 \DTMsetbool{en-JE}{showdayofmonth}{true}

```

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

```

1398 \DTMdefboolkey{en-JE}{showyear}[true]{}

```

The default is to show the year.

```

1399 \DTMsetbool{en-JE}{showyear}{true}

```

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

```

1400 \newcommand*{\DTMenJEfmtordsuffix}[1]{#1}

```

Define a setting to change the ordinal suffix style.

```

1401 \DTMdefchoicekey{en-JE}{ord}{\val\nr}{level,raise,omit,sc}{%
1402   \ifcase\nr\relax
1403     \renewcommand*{\DTMenJEfmtordsuffix}[1]{##1}%
1404   \or
1405     \renewcommand*{\DTMenJEfmtordsuffix}[1]{%
1406       \DTMtexorpdfstring{\protect\textsuperscript{##1}}{##1}}%
1407   \or
1408     \renewcommand*{\DTMenJEfmtordsuffix}[1]{%
1409   \or
1410     \renewcommand*{\DTMenJEfmtordsuffix}[1]{%
1411       \DTMtexorpdfstring{\protect\textsc{##1}}{##1}}%
1412   \fi
1413 }

```

Define the en-JE style.

```
1414 \DTMnewstyle
1415 {en-JE}%
1416 {%
1417   \renewcommand*\{\DTMenglishfmtordsuffix\}{\DTMenJEfmtordsuffix}%
1418   \renewcommand*\DTMdisplaydate[4]{%
1419     \ifDTMshowdow
1420       \ifnum##4>-1%
1421         \DTMifbool{en-JE}{abbr}%
1422         {\DTMenglishshortweekdayname{##4}}%
1423         {\DTMenglishweekdayname{##4}}%
1424         \space
1425       \fi
1426     \fi
1427     \DTMifbool{en-JE}{showdayofmonth}%
1428     {%
1429       \DTMenglishordinal{##3}%
1430       \DTMENJEdaymonthsep
1431     }%
1432   }%
1433   \DTMifbool{en-JE}{abbr}%
1434   {\DTMenglishshortmonthname{##2}}%
1435   {\DTMenglishmonthname{##2}}%
1436   \DTMifbool{en-JE}{showyear}%
1437   {%
1438     \DTMENJEmonthyearsep\number##1 % space intended
1439   }%
1440   {}%
1441 }%
1442 \renewcommand*\{\DTMDisplaydate\}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1443 }%
1444 {%
1445   \renewcommand*\DTMenglishtimesep{\DTMenJEtimesep}%
1446   \DTMsettimestyle{englishampm}%
1447 }%
1448 {%
1449   \DTMresetzones
1450   \DTMENJEzonemaps
1451   \renewcommand*\{\DTMdisplayzone\}[2]{%
1452     \DTMifbool{en-JE}{mapzone}%
1453     {\DTMusezonemapordefault{##1}{##2}}%
1454     {%
1455       \ifnum##1<0\else+\fi\DTMtowodigits{##1}%
1456       \ifDTMshowzoneminutes\DTMenJEtimesep\DTMtowodigits{##2}\fi
1457     }%
1458   }%
1459 }%
1460 {%
1461   \renewcommand*\{\DTMdisplay\}[9]{%
```

```

1462     \ifDTMshowdate
1463         \DTMdisplaydate{##1}{##2}{##3}{##4}%
1464         \DTMenJEdatetimesep
1465     \fi
1466     \DTMdisplaytime{##5}{##6}{##7}%
1467     \ifDTMshowzone
1468         \DTMenJEtmezonesep
1469         \DTMdisplayzone{##8}{##9}%
1470     \fi
1471 }
1472 \renewcommand*\{\DTMDisplay\}{\DTMdisplay}%
1473 }%

```

Define numeric style.

```

1474 \DTMnewstyle
1475 {en-JE-numeric}%
1476 {%
1477     \renewcommand*\DTMddisplaydate[4]{%
1478         \DTMifbool{en-JE}{showdayofmonth}%
1479     }%
1480         \number##3 % space intended
1481         \DTMenJEdatesep
1482     }%
1483     \number##2 % space intended
1484     \DTMifbool{en-JE}{showyear}%
1485     \number##1 % space intended
1486     \DTMenJEdatesep
1487     \number##1 % space intended
1488 }%
1489 \renewcommand*\{\DTMDisplaydate\}[4]{\DTMddisplaydate{##1}{##2}{##3}{##4}}%
1490 }%
1491 \renewcommand*\{\% time style
1492 \renewcommand*\DTMddisplaytime[3]{%
1493     \number##1
1494     \DTMenJEtmesep\DTMtwdigits{##2}%
1495     \ifDTMshowseconds\DTMenJEtmesep\DTMtwdigits{##3}\fi
1496 }%
1497 }%
1498 \renewcommand*\{\% zone style
1499 \DTMresetzones
1500 \DTMenJEzonemaps
1501 \renewcommand*\{\DTMddisplayzone\}[2]{%
1502     \DTMifbool{en-JE}{mapzone}%
1503     {\DTMusezonemapdefault{##1}{##2}}%
1504     \ifnum##1<0\else+\fi\DTMtwdigits{##1}%
1505     \ifDTMshowzoneminutes\DTMenJEtmesep\DTMtwdigits{##2}\fi
1506 }%
1507 }%
1508 }%
1509 }%

```

```

1510      }%
1511      }%
1512  }%
1513  {%
1514    \renewcommand*\{\DTMdisplay}[9]{%
1515      \ifDTMshowdate
1516        \DTMdisplaydate{##1}{##2}{##3}{##4}%
1517        \DTMEnJEdatetimesep
1518      \fi
1519      \DTMdisplaytime{##5}{##6}{##7}%
1520      \ifDTMshowzone
1521        \DTMEnJEtimezonesep
1522        \DTMdisplayzone{##8}{##9}%
1523      \fi
1524    }%
1525    \renewcommand*\{\DTMDisplay}{\DTMdisplay}%
1526  }

```

**\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.

```

1527 \newcommand*\{\DTMEnJEzonemaps}{%
1528   \DTMdefzonemap{00}{00}{GMT}%
1529   \DTMdefzonemap{01}{00}{BST}%
1530 }

```

Switch style according to the `useregional` setting.

```

1531 \DTMifcaseregional
1532 {}% do nothing
1533 {\DTMsetstyle{en-JE}}%
1534 {\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.)

```

1535 \ifcsundef{date\CurrentTrackedDialect}%
1536 {}% do nothing
1537   \ifundef\dateenglish
1538     {%
1539     }%
1540     {%
1541       \def\dateenglish{%
1542         \DTMifcaseregional
1543         {}% do nothing
1544         {\DTMsetstyle{en-JE}}%
1545         {\DTMsetstyle{en-JE-numeric}}%
1546       }%
1547     }%
1548   }%
1549   {%
1550     \csdef{date\CurrentTrackedDialect}{%
1551       \DTMifcaseregional

```

```

1552     {}% do nothing
1553     {\DTMsetstyle{en-JE}}%
1554     {\DTMsetstyle{en-JE-numeric}}%
1555   }%
1556 }%

```

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

This file contains the en-IM style.

Identify this module.

```
1557 \ProvidesDateTimeModule{en-IM}[2015/01/18 v1.02 (NLCT)]
```

Load base English module.

```
1558 \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}{daymonthsep} The separator between the day and month for the text format.

```
1559 \newcommand*{\DTM{en}{daymonthsep}}{\space}
```

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

```
1560 \newcommand*{\DTM{en}{monthyearsep}}{\space}
```

\DTM{en}{datetimesep} The separator between the date and time blocks in the full format (either text or numeric).

```
1561 \newcommand*{\DTM{en}{datetimesep}}{\space}
```

\DTM{en}{timezonesep} The separator between the time and zone blocks in the full format (either text or numeric).

```
1562 \newcommand*{\DTM{en}{timezonesep}}{\space}
```

\DTM{en}{datesep} The separator for the numeric date format.

```
1563 \newcommand*{\DTM{en}{datesep}}{/}
```

\DTM{en}{timesep} The separator for the numeric time format.

```
1564 \newcommand*{\DTM{en}{timesep}}{:}
```

Provide keys that can be used in \DTM{lang}{setup} to set these separators.

```
1565 \DTM{defkey}{en-IM}{daymonthsep}{\renewcommand*{\DTM{en}{daymonthsep}}{\#1}}
```

```
1566 \DTM{defkey}{en-IM}{monthyearsep}{\renewcommand*{\DTM{en}{monthyearsep}}{\#1}}
```

```
1567 \DTM{defkey}{en-IM}{datetimesep}{\renewcommand*{\DTM{en}{datetimesep}}{\#1}}
```

```
1568 \DTM{defkey}{en-IM}{timezonesep}{\renewcommand*{\DTM{en}{timezonesep}}{\#1}}
```

```
1569 \DTM{defkey}{en-IM}{datesep}{\renewcommand*{\DTM{en}{datesep}}{\#1}}
```

```
1570 \DTM{defkey}{en-IM}{timesep}{\renewcommand*{\DTM{en}{timesep}}{\#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.

```
1571 \DTM{defboolkey}{en-IM}{abbr}{true}{}
```

The default is the full name.

```
1572 \DTMsetbool{en-IM}{abbr}{false}
```

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

```
1573 \DTMdefboolkey{en-IM}{mapzone}[true]{}
```

The default is to use mappings.

```
1574 \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.)

```
1575 \DTMdefboolkey{en-IM}{showdayofmonth}[true]{}
```

The default is to show the day of the month.

```
1576 \DTMsetbool{en-IM}{showdayofmonth}{true}
```

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

```
1577 \DTMdefboolkey{en-IM}{showyear}[true]{}
```

The default is to show the year.

```
1578 \DTMsetbool{en-IM}{showyear}{true}
```

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

```
1579 \newcommand*{\DTMenIMfmtordsuffix}[1]{#1}
```

Define a setting to change the ordinal suffix style.

```
1580 \DTMdefchoicekey{en-IM}{ord}{\val\nr}{level,raise,omit,sc}{%
1581   \ifcase\nr\relax
1582     \renewcommand*{\DTMenIMfmtordsuffix}[1]{##1}%
1583   \or
1584     \renewcommand*{\DTMenIMfmtordsuffix}[1]{%
1585       \DTMtexorpdfstring{\protect\textrightsupscript{##1}}{##1}}%
1586   \or
1587     \renewcommand*{\DTMenIMfmtordsuffix}[1]{%
1588   \or
1589     \renewcommand*{\DTMenIMfmtordsuffix}[1]{%
1590       \DTMtexorpdfstring{\protect\textsc{##1}}{##1}}%
1591   \fi
1592 }
```

Define the en-IM style.

```
1593 \DTMnewstyle
1594 {en-IM}%
1595 {%
1596   \renewcommand*{\DTMenglishfmtordsuffix}{\DTMenIMfmtordsuffix}%
1597   \renewcommand*\DTMdisplaydate[4]{%
1598     \ifDTMshowdow
1599       \ifnum##4>-1%
1600         \DTMifbool{en-IM}{abbr}{%
1601           \DTMenglishshortweekdayname{##4}}%
```

```

1602      {\DTMenglishweekdayname{##4}}%
1603      \space
1604      \fi
1605      \fi
1606      \DTMifbool{en-IM}{showdayofmonth}%
1607      {%
1608          \DTMenglishordinal{##3}%
1609          \DTMenglishmonthsep
1610      }%
1611      {}%
1612      \DTMifbool{en-IM}{abbr}%
1613      {\DTMenglishshortmonthname{##2}}%
1614      {\DTMenglishmonthname{##2}}%
1615      \DTMifbool{en-IM}{showyear}%
1616      {%
1617          \DTMenglishyearsep\number##1 % space intended
1618      }%
1619      {}%
1620  }%
1621  \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1622 }%
1623 {%
1624     \renewcommand*{\DTMenglishtimesep}{\DTMenglishtimesep}%
1625     \DTMsetimestyle{englishampm}%
1626 }%
1627 {%
1628     \DTMresetzones
1629     \DTMenglishzonemaps
1630     \renewcommand*{\DTMdisplayzone}[2]{%
1631         \DTMifbool{en-IM}{mapzone}%
1632         {\DTMusezonemapordefault{##1}{##2}}%
1633         {%
1634             \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
1635             \ifDTMshowzoneminutes\DTMenglishtimesep\DTMtwodigits{##2}\fi
1636         }%
1637     }%
1638 }%
1639 {%
1640     \renewcommand*{\DTMdisplay}[9]{%
1641         \ifDTMshowdate
1642             \DTMdisplaydate{##1}{##2}{##3}{##4}%
1643             \DTMenglishdatetimesep
1644         \fi
1645         \DTMdisplaytime{##5}{##6}{##7}%
1646         \ifDTMshowzone
1647             \DTMenglishtimezonesep
1648             \DTMdisplayzone{##8}{##9}%
1649         \fi
1650     }%
1651     \renewcommand*{\DTMDisplay}{\DTMdisplay}%

```

```

1652 }%
Define numeric style.
1653 \DTMnewstyle
1654 {en-IM-numeric}%
1655 {%
1656   \renewcommand*\DTMdisplaydate[4]{%
1657     \DTMifbool{en-IM}{showdayofmonth}%
1658     {%
1659       \number##3 % space intended
1660       \DTMendatesep
1661     }%
1662   }%
1663   \number##2 % space intended
1664   \DTMifbool{en-IM}{showyear}%
1665   {%
1666     \DTMendatesep
1667     \number##1 % space intended
1668   }%
1669   {%
1670 }%
1671   \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1672 }%
1673 {%
1674   \renewcommand*\DTMdisplaytime[3]{%
1675     \number##1
1676     \DTMendtimesep\DTMtwodigits{##2}%
1677     \ifDTMshowseconds\DTMendtimesep\DTMtwodigits{##3}\fi
1678   }%
1679 }%
1680 {%
1681   \DTMresetzones
1682   \DTMendzonemaps
1683   \renewcommand*{\DTMdisplayzone}[2]{%
1684     \DTMifbool{en-IM}{mapzone}%
1685     {\DTMusezonemapordefault{##1}{##2}}%
1686     {%
1687       \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
1688       \ifDTMshowzoneminutes\DTMendtimesep\DTMtwodigits{##2}\fi
1689     }%
1690   }%
1691 }%
1692 {%
1693   \renewcommand*{\DTMdisplay}[9]{%
1694     \ifDTMshowdate
1695     \DTMdisplaydate{##1}{##2}{##3}{##4}%
1696     \DTMenddatetimesep
1697     \fi
1698     \DTMdisplaytime{##5}{##6}{##7}%
1699     \ifDTMshowzone

```

```

1700      \DTMendIMtimezonesep
1701      \DTMdisplayzone{##8}{##9}%
1702      \fi
1703  }%
1704  \renewcommand*\{\DTMdisplay\}{\DTMdisplay}%
1705 }

```

**\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.

```

1706 \newcommand*\{\DTMendIMzonemaps\}{%
1707   \DTMdefzonemap{00}{00}{GMT}%
1708   \DTMdefzonemap{01}{00}{BST}%
1709 }

```

Switch style according to the `useregional` setting.

```

1710 \DTMifcaseregional
1711 {}% do nothing
1712 {\DTMsetstyle{en-IM}}%
1713 {\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.)

```

1714 \ifcsundef{date\CurrentTrackedDialect}
1715 {}% do nothing
1716   \ifundef\dateenglish
1717   {}%
1718   {}%
1719   {}%
1720   \def\dateenglish{%
1721     \DTMifcaseregional
1722     {}% do nothing
1723     {\DTMsetstyle{en-IM}}%
1724     {\DTMsetstyle{en-IM-numeric}}%
1725   }%
1726 }%
1727 }%
1728 {}%
1729 \csdef{date\CurrentTrackedDialect}{%
1730   \DTMifcaseregional
1731   {}% do nothing
1732   {\DTMsetstyle{en-IM}}%
1733   {\DTMsetstyle{en-IM-numeric}}%
1734 }%
1735 }%

```

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

This file contains the `en-MT` style.

Identify this module.

```
1736 \ProvidesDateTimeModule{en-MT}[2015/01/18 v1.02 (NLCT)]
```

Load base English module.

1737 \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.

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

1738 \newcommand\*{\DTM{en}{MT}{daymonthsep}}{\space}

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

1739 \newcommand\*{\DTM{en}{MT}{monthyearsep}}{\space}

`\DTM{en}{MT}{datetimesep}` The separator between the date and time blocks in the full format (either text or numeric).

1740 \newcommand\*{\DTM{en}{MT}{datetimesep}}{\space}

`\DTM{en}{MT}{timezonesep}` The separator between the time and zone blocks in the full format (either text or numeric).

1741 \newcommand\*{\DTM{en}{MT}{timezonesep}}{\space}

`\DTM{en}{MT}{datesep}` The separator for the numeric date format.

1742 \newcommand\*{\DTM{en}{MT}{datesep}}{/}

`\DTM{en}{MT}{timesep}` The separator for the numeric time format.

1743 \newcommand\*{\DTM{en}{MT}{timesep}}{:}

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

1744 \DTMdefkey{en-MT}{daymonthsep}{\renewcommand\*{\DTM{en}{MT}{daymonthsep}}{\#1}}

1745 \DTMdefkey{en-MT}{monthyearsep}{\renewcommand\*{\DTM{en}{MT}{monthyearsep}}{\#1}}

1746 \DTMdefkey{en-MT}{datetimesep}{\renewcommand\*{\DTM{en}{MT}{datetimesep}}{\#1}}

1747 \DTMdefkey{en-MT}{timezonesep}{\renewcommand\*{\DTM{en}{MT}{timezonesep}}{\#1}}

1748 \DTMdefkey{en-MT}{datesep}{\renewcommand\*{\DTM{en}{MT}{datesep}}{\#1}}

1749 \DTMdefkey{en-MT}{timesep}{\renewcommand\*{\DTM{en}{MT}{timesep}}{\#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.

1750 \DTMdefboolkey{en-MT}{abbr}[true]{}

The default is the full name.

1751 \DTMsetbool{en-MT}{abbr}{false}

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

1752 \DTMdefboolkey{en-MT}{mapzone}[true]{}

The default is to use mappings.

1753 \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.)

```
1754 \DTMdefboolkey{en-MT}{showdayofmonth}[true]{}
```

The default is to show the day of the month.

```
1755 \DTMsetbool{en-MT}{showdayofmonth}{true}
```

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

```
1756 \DTMdefboolkey{en-MT}{showyear}[true]{}
```

The default is to show the year.

```
1757 \DTMsetbool{en-MT}{showyear}{true}
```

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

```
1758 \newcommand*{\DTMenMTfmtordsuffix}[1]{}
```

Define a setting to change the ordinal suffix style.

```
1759 \DTMdefchoicekey{en-MT}{ord}{\val\nr}{level,raise,omit,sc}{%
1760   \ifcase\nr\relax
1761     \renewcommand*{\DTMenMTfmtordsuffix}[1]{##1}%
1762   \or
1763     \renewcommand*{\DTMenMTfmtordsuffix}[1]{%
1764       \DTMtexorpdfstring{\protect\textsuperscript{##1}}{##1}}%
1765   \or
1766     \renewcommand*{\DTMenMTfmtordsuffix}[1]{%
1767   \or
1768     \renewcommand*{\DTMenMTfmtordsuffix}[1]{%
1769       \DTMtexorpdfstring{\protect\textsc{##1}}{##1}}%
1770   \fi
1771 }
```

Define the `en-MT` style.

```
1772 \DTMnewstyle
1773 {en-MT}%
1774 {%
1775   \renewcommand*{\DTMenglishfmtordsuffix}{\DTMenMTfmtordsuffix}%
1776   \renewcommand*\DTMdisplaydate[4]{%
1777     \ifDTMshowdow
1778       \ifnum##4>-1%
1779         \DTMifbool{en-MT}{abbr}{%
1780           {\DTMenglishshortweekdayname{##4}}%
1781           {\DTMenglishweekdayname{##4}}%
1782         \space
1783       \fi
1784     \fi
1785     \DTMifbool{en-MT}{showdayofmonth}{%
1786       \%
1787       \DTMenglishordinal{##3}%
1788       \DTMenMTdaymonthsep
1789     }%
1790 }
```

```

1790     {}%
1791     \DTMifbool{en-MT}{abbr}%
1792     {\DTMenglishshortmonthname{\#2}}%
1793     {\DTMenglishmonthname{\#2}}%
1794     \DTMifbool{en-MT}{showyear}%
1795     {}%
1796     \DTMEnMTmonthyearsep\number##1 % space intended
1797   }%
1798   {}%
1799 }%
1800 \renewcommand*\DTMDisplaydate[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1801 }%
1802 {%
1803   \renewcommand*\DTMenglishtimesep{\DTMEnMTtimesep}%
1804   \DTMsettimestyle{englishampm}%
1805 }%
1806 {%
1807   \DTMresetzones
1808   \DTMEnMTzonemaps
1809   \renewcommand*\DTMdisplayzone[2]{%
1810     \DTMifbool{en-MT}{mapzone}%
1811     {\DTMusezonemapordefault{##1}{##2}}%
1812     {}%
1813     \ifnum##1<0\else+\fi\DTMtowodigits{##1}%
1814     \ifDTMshowzoneminutes\DTMEnMTtimesep\DTMtowodigits{##2}\fi
1815   }%
1816 }%
1817 }%
1818 {%
1819   \renewcommand*\DTMdisplay[9]{%
1820     \ifDTMshowdate
1821       \DTMdisplaydate{##1}{##2}{##3}{##4}%
1822       \DTMEnMTdatetimesep
1823     \fi
1824     \DTMdisplaytime{##5}{##6}{##7}%
1825     \ifDTMshowzone
1826       \DTMEnMTtimezonesep
1827       \DTMdisplayzone{##8}{##9}%
1828     \fi
1829   }%
1830   \renewcommand*\DTMDisplay{\DTMdisplay}%
1831 }%

```

Define numeric style.

```

1832 \DTMnewstyle
1833 {en-MT-numeric}%
1834 {%
1835   \renewcommand*\DTMdisplaydate[4]{%
1836     \DTMifbool{en-MT}{showdayofmonth}%
1837     {}%

```

```

1838      \number##3 % space intended
1839      \DTMenMTdatesep
1840      }%
1841      {}%
1842      \number##2 % space intended
1843      \DTMifbool{en-MT}{showyear}%
1844      {%
1845          \DTMenMTdatesep
1846          \number##1 % space intended
1847      }%
1848      {}%
1849      }%
1850      \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1851  }%
1852  {% time style
1853      \renewcommand*{\DTMdisplaytime}[3]{%
1854          \number##1
1855          \DTMenMTtimesep\DTMtwodigits{##2}%
1856          \ifDTMshowseconds\DTMenMTtimesep\DTMtwodigits{##3}\fi
1857      }%
1858  }%
1859  {% zone style
1860      \DTMresetzones
1861      \DTMenMTzonemaps
1862      \renewcommand*{\DTMdisplayzone}[2]{%
1863          \DTMifbool{en-MT}{mapzone}%
1864          {\DTMusezonemapordefault{##1}{##2}}%
1865      }%
1866          \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
1867          \ifDTMshowzoneminutes\DTMenMTtimesep\DTMtwodigits{##2}\fi
1868      }%
1869  }%
1870  }%
1871  {% full style
1872      \renewcommand*{\DTMdisplay}[9]{%
1873          \ifDTMshowdate
1874              \DTMdisplaydate{##1}{##2}{##3}{##4}%
1875              \DTMenMTdatetimesep
1876          \fi
1877          \DTMdisplaytime{##5}{##6}{##7}%
1878          \ifDTMshowzone
1879              \DTMenMTtimezonesep
1880              \DTMdisplayzone{##8}{##9}%
1881          \fi
1882      }%
1883      \renewcommand*{\DTMDisplay}{\DTMdisplay}%
1884  }

```

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

```

1885 \newcommand*{\DTMenzonemaps}{%
1886   \DTMdefzonemap{02}{00}{CEST}%
1887   \DTMdefzonemap{01}{00}{CET}%
1888 }

      Switch style according to the useregional setting.

1889 \DTMifcaseregional
1890 {}% do nothing
1891 {\DTMsetstyle{en-MT}}%
1892 {\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.)

1893 \ifcsundef{date\CurrentTrackedDialect}
1894 {}% do nothing
1895 \ifundef{\dateenglish}
1896 {}%
1897 {}%
1898 {}%
1899 \def{\dateenglish}{%
1900   \DTMifcaseregional
1901   {}% do nothing
1902   {\DTMsetstyle{en-MT}}%
1903   {\DTMsetstyle{en-MT-numeric}}%
1904 }%
1905 }%
1906 }%
1907 }%
1908 \csdef{date\CurrentTrackedDialect}{%
1909   \DTMifcaseregional
1910   {}% do nothing
1911   {\DTMsetstyle{en-MT}}%
1912   {\DTMsetstyle{en-MT-numeric}}%
1913 }%
1914 }%

```

## 14.12 English (IE) Code (`datetime2-en-IE.1df`)

This file contains the `en-IE` style.

Identify this module.

```
1915 \ProvidesDateTimeModule{en-IE}[2015/01/18 v1.02 (NLCT)]
```

Load base English module.

```
1916 \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.

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

```
1917 \newcommand*{\DTMenzonemaps}{\space}
```

\DTMnIEmonthyearsep The separator between the month and year for the text format.  
1918 \newcommand\*\{\DTMnIEmonthyearsep\}{\space}

\DTMnIEDatetimesep The separator between the date and time blocks in the full format (either text or numeric).  
1919 \newcommand\*\{\DTMnIEDatetimesep\}{\space}

\DTMnIEtimezonesep The separator between the time and zone blocks in the full format (either text or numeric).  
1920 \newcommand\*\{\DTMnIEtimezonesep\}{\space}

\DTMnIEDatesep The separator for the numeric date format.  
1921 \newcommand\*\{\DTMnIEDatesep\}{/}

\DTMnIEtimesep The separator for the numeric time format.  
1922 \newcommand\*\{\DTMnIEtimesep\}{:}

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

1923 \DTMdefkey{en-IE}{daymonthsep}{\renewcommand\*\{\DTMnIEDaymonthsep\}{#1}}  
1924 \DTMdefkey{en-IE}{monthyearsep}{\renewcommand\*\{\DTMnIEmonthyearsep\}{#1}}  
1925 \DTMdefkey{en-IE}{datetimesep}{\renewcommand\*\{\DTMnIEDatetimesep\}{#1}}  
1926 \DTMdefkey{en-IE}{timezonesep}{\renewcommand\*\{\DTMnIEtimezonesep\}{#1}}  
1927 \DTMdefkey{en-IE}{datesep}{\renewcommand\*\{\DTMnIEDatesep\}{#1}}  
1928 \DTMdefkey{en-IE}{timesep}{\renewcommand\*\{\DTMnIEtimesep\}{#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.

1929 \DTMdefboolkey{en-IE}{abbr}[true]{}

The default is the full name.

1930 \DTMsetbool{en-IE}{abbr}{false}

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

1931 \DTMdefboolkey{en-IE}{mapzone}[true]{}

The default is to use mappings.

1932 \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.)

1933 \DTMdefboolkey{en-IE}{showdayofmonth}[true]{}

The default is to show the day of the month.

1934 \DTMsetbool{en-IE}{showdayofmonth}{true}

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

1935 \DTMdefboolkey{en-IE}{showyear}[true]{}

The default is to show the year.

1936 \DTMsetbool{en-IE}{showyear}{true}

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

```
1937 \newcommand*{\DTMnIEfmtordsuffix}[1]{#1}
```

Define a setting to change the ordinal suffix style.

```
1938 \DTMdefchoicekey{en-IE}{ord}{\val\nr}{level,raise,omit,sc}{%
1939   \ifcase\nr\relax
1940     \renewcommand*{\DTMnIEfmtordsuffix}[1]{##1}%
1941   \or
1942     \renewcommand*{\DTMnIEfmtordsuffix}[1]{%
1943       \DTMtexorpdfstring{\protect\textrm{##1}}{##1}%
1944     \or
1945       \renewcommand*{\DTMnIEfmtordsuffix}[1]{%
1946         \renewcommand*{\DTMnIEfmtordsuffix}[1]{%
1947           \renewcommand*{\DTMnIEfmtordsuffix}[1]{%
1948             \DTMtexorpdfstring{\protect\textrm{##1}}{##1}%
1949           \fi
1950 }
```

Define the en-IE style.

```
1951 \DTMnewstyle
1952 {en-IE}%
1953 {%
1954   \renewcommand*{\DTMenglishfmtordsuffix}{\DTMnIEfmtordsuffix}%
1955   \renewcommand*\DTMdisplaydate[4]{%
1956     \ifDTMshowdow
1957       \ifnum##4>-1%
1958         \DTMifbool{en-IE}{abbr}{%
1959           {\DTMenglishshortweekdayname{##4}}%
1960           {\DTMenglishweekdayname{##4}}%
1961           \space
1962         \fi
1963       \fi
1964       \DTMifbool{en-IE}{showdayofmonth}{%
1965         \%
1966         \DTMenglishordinal{##3}%
1967         \DTMnIEDaymonthsep
1968       }%
1969     \%
1970     \DTMifbool{en-IE}{abbr}{%
1971       {\DTMenglishshortmonthname{##2}}%
1972       {\DTMenglishmonthname{##2}}%
1973       \DTMifbool{en-IE}{showyear}{%
1974         \%
1975           \DTMnIEmonthyearsep\number##1 % space intended
1976         \%
1977       \%
1978     }%
1979     \renewcommand*\DTMDisplaydate[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%
1980   }%
1981 {%
1982 }
```

```

1982     \renewcommand*\DTMenglishtimesep{\DTMnIEtimesep}%
1983     \DTMsettimestyle{englishampm}%
1984 }%
1985 {%
1986     \DTMresetzones
1987     \DTMnIEzonemaps
1988     \renewcommand*{\DTMdisplayzone}[2]{%
1989         \DTMifbool{en-IE}{mapzone}%
1990         {\DTMusezonemapordefault{##1}{##2}}%
1991         {}%
1992         \ifnum##1<0\else+\fi\DTMtowodigits{##1}%
1993         \ifDTMshowzoneminutes\DTMnIEtimesep\DTMtowodigits{##2}\fi
1994     }%
1995 }%
1996 }%
1997 {%
1998     \renewcommand*{\DTMdisplay}[9]{%
1999         \ifDTMshowdate
2000             \DTMdisplaydate{##1}{##2}{##3}{##4}%
2001             \DTMnIEDatetimesep
2002             \fi
2003             \DTMdisplaytime{##5}{##6}{##7}%
2004             \ifDTMshowzone
2005                 \DTMnIETimezonesep
2006                 \DTMdisplayzone{##8}{##9}%
2007                 \fi
2008             }%
2009     \renewcommand*{\DTMDisplay}{\DTMdisplay}%
2010 }%

```

Define numeric style.

```

2011 \DTMnewstyle
2012 {en-IE-numeric}%
2013 {%
2014     \renewcommand*{\DTMdisplaydate}[4]{%
2015         \DTMifbool{en-IE}{showdayofmonth}%
2016         {}%
2017         \number##3 % space intended
2018         \DTMnIEDatesep
2019     }%
2020     {}%
2021     \number##2 % space intended
2022     \DTMifbool{en-IE}{showyear}%
2023     {}%
2024     \DTMnIEDatesep
2025     \number##1 % space intended
2026     {}%
2027     {}%
2028 }%
2029 \renewcommand*{\DTMDisplaydate}[4]{\DTMdisplaydate{##1}{##2}{##3}{##4}}%

```

```

2030  }%
2031  {%
2032    \renewcommand*\DTMdisplaytime[3]{%
2033      \number##1
2034      \DTMnIetimesep\DTMtwodigits{##2}%
2035      \ifDTMshowseconds\DTMnIetimesep\DTMtwodigits{##3}\fi
2036    }%
2037  }%
2038  {%
2039    \DTMresetzones
2040    \DTMnIEzonemaps
2041    \renewcommand*\{\DTMdisplayzone}[2]{%
2042      \DTMifbool{en-IE}{mapzone}%
2043      {\DTMusezonemapordefault{##1}{##2}}%
2044      {%
2045        \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
2046        \ifDTMshowzoneminutes\DTMnIetimesep\DTMtwodigits{##2}\fi
2047      }%
2048    }%
2049  }%
2050  {%
2051    \renewcommand*\{\DTMdisplay}[9]{%
2052      \ifDTMshowdate
2053        \DTMdisplaydate{##1}{##2}{##3}{##4}%
2054        \DTMnIEDatetimesep
2055        \fi
2056        \DTMdisplaytime{##5}{##6}{##7}%
2057        \ifDTMshowzone
2058          \DTMnIEtimezonesep
2059          \DTMdisplayzone{##8}{##9}%
2060        \fi
2061    }%
2062    \renewcommand*\{\DTMDisplay}{\DTMdisplay}%
2063  }

```

`\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.

```

2064 \newcommand*\{\DTMnIEzonemaps}{%
2065   \DTMdefzonemap{00}{00}{GMT}%
2066   \DTMdefzonemap{01}{00}{IST}%
2067 }

```

Switch style according to the `userregional` setting.

```

2068 \DTMifcaseregional
2069 {}% do nothing
2070 {\DTMsetstyle{en-IE}}%
2071 {\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.)

```
2072 \ifcsundef{date\CurrentTrackedDialect}{%
2073   % do nothing
2074   \ifundefined{\dateenglish}
2075     {%
2076     }%
2077     {%
2078       \def\dateenglish{%
2079         \DTMifcaseregional
2080         {}% do nothing
2081         {\DTMsetstyle{en-IE}}%
2082         {\DTMsetstyle{en-IE-numeric}}%
2083       }%
2084     }%
2085   }%
2086 }%
2087 \csdef{date\CurrentTrackedDialect}{%
2088   \DTMifcaseregional
2089   {}% do nothing
2090   {\DTMsetstyle{en-IE}}%
2091   {\DTMsetstyle{en-IE-numeric}}%
2092 }%
2093 }
```

## Change History

|      |                                    |                                                  |                              |                                                          |    |
|------|------------------------------------|--------------------------------------------------|------------------------------|----------------------------------------------------------|----|
| 1.0  | General: Initial release . . . . . | 9, 14,<br>16, 21, 26, 31, 36, 41, 46, 51, 55, 60 | 1.02                         | General: added support for show-<br>dow option . . . . . | 22 |
| 1.01 | General: fixed mispelt style name  | 19                                               | \DTM <b>enC</b> dowmonthsep: | new . . . . .                                            | 26 |
|      |                                    |                                                  | \DTM <b>enU</b> dowmonthsep: | new . . . . .                                            | 21 |

## Index

|                               |      |                                              |    |
|-------------------------------|------|----------------------------------------------|----|
| <b>A</b>                      |      |                                              |    |
| abbr                          | 5, 6 | \DTM <b>enGG</b> daymonthsep . . . . .       | 41 |
| <b>D</b>                      |      |                                              |    |
| datesep                       | 5, 6 | \DTM <b>enGG</b> fmtordsuffix . . . . .      | 42 |
| datetimesep                   | 5, 6 | \DTM <b>enGG</b> monthyearsep . . . . .      | 41 |
| daymonthsep                   | 5    | \DTM <b>enGG</b> timesep . . . . .           | 42 |
| dayyearsep                    | 6    | \DTM <b>enGG</b> timezonesep . . . . .       | 41 |
| dowmonthsep                   | 6    | \DTM <b>enGG</b> zonemaps . . . . .          | 45 |
| \DTM <b>enAU</b> datesep      | 32   | \DTM <b>englis</b> ham . . . . .             | 12 |
| \DTM <b>enAU</b> datetimesep  | 31   | \DTM <b>englis</b> hampmfmt . . . . .        | 13 |
| \DTM <b>enAU</b> daymonthsep  | 31   | \DTM <b>englis</b> hfmtordsuffix . . . . .   | 10 |
| \DTM <b>enAU</b> fmtordsuffix | 32   | \DTM <b>englis</b> hmidnight . . . . .       | 13 |
| \DTM <b>enAU</b> monthyearsep | 31   | \DTM <b>englis</b> hmonthname . . . . .      | 10 |
| \DTM <b>enAU</b> timesep      | 32   | \DTM <b>englis</b> hnd . . . . .             | 10 |
| \DTM <b>enAU</b> timezonesep  | 32   | \DTM <b>englis</b> hnoon . . . . .           | 13 |
| \DTM <b>enAU</b> zonemaps     | 35   | \DTM <b>englis</b> hordinal . . . . .        | 9  |
| \DTM <b>enCA</b> datesep      | 26   | \DTM <b>englis</b> hpm . . . . .             | 12 |
| \DTM <b>enCA</b> datetimesep  | 26   | \DTM <b>englis</b> hrd . . . . .             | 10 |
| \DTM <b>enCA</b> dayyearsep   | 26   | \DTM <b>englis</b> hshortmonthname . . . . . | 11 |
| \DTM <b>enCA</b> dowmonthsep  | 26   | \DTM <b>englis</b> hst . . . . .             | 10 |
| \DTM <b>enCA</b> fmtordsuffix | 27   | \DTM <b>englis</b> hth . . . . .             | 10 |
| \DTM <b>enCA</b> monthdaysep  | 26   | \DTM <b>englis</b> htimesep . . . . .        | 13 |
| \DTM <b>enCA</b> timesep      | 27   | \DTM <b>englis</b> hweekdayname . . . . .    | 12 |
| \DTM <b>enCA</b> timezonesep  | 26   | \DTM <b>enI</b> datesep . . . . .            | 61 |
| \DTM <b>enCA</b> zonemaps     | 30   | \DTM <b>enI</b> datetimesep . . . . .        | 61 |
| \DTM <b>enGB</b> datesep      | 16   | \DTM <b>enI</b> Edatesep . . . . .           | 61 |
| \DTM <b>enGB</b> datetimesep  | 16   | \DTM <b>enI</b> Edatetimesep . . . . .       | 61 |
| \DTM <b>enGB</b> daymonthsep  | 16   | \DTM <b>enI</b> Edaymonthsep . . . . .       | 60 |
| \DTM <b>enGB</b> fmtordsuffix | 17   | \DTM <b>enI</b> Efmtordsuffix . . . . .      | 62 |
| \DTM <b>enGB</b> monthyearsep | 16   | \DTM <b>enI</b> Emonthyearsep . . . . .      | 61 |
| \DTM <b>enGB</b> timesep      | 16   | \DTM <b>enI</b> Etimesep . . . . .           | 61 |
| \DTM <b>enGB</b> timezonesep  | 16   | \DTM <b>enI</b> Etimezonesep . . . . .       | 61 |
| \DTM <b>enGB</b> zonemaps     | 20   | \DTM <b>enI</b> Imdatesep . . . . .          | 51 |
| \DTM <b>enGG</b> datesep      | 42   | \DTM <b>enI</b> Imdatetimesep . . . . .      | 51 |
| \DTM <b>enGG</b> datetimesep  | 41   | \DTM <b>enI</b> Imdaymonthsep . . . . .      | 51 |
|                               |      | \DTM <b>enI</b> Imfmtordsuffix . . . . .     | 52 |
|                               |      | \DTM <b>enI</b> Immonthyearsep . . . . .     | 51 |
|                               |      | \DTM <b>enI</b> Imtimesep . . . . .          | 51 |

|                                 |    |                              |                                        |
|---------------------------------|----|------------------------------|----------------------------------------|
| \DTMnIMtimezonesep . . . . .    | 51 | \DTMnUSTimesep . . . . .     | 21                                     |
| \DTMnIMzonemaps . . . . .       | 55 | \DTMnUStimezonesep . . . . . | 21                                     |
| \DTMnJEDatesep . . . . .        | 46 | \DTMnUSzonemaps . . . . .    | 25                                     |
| \DTMnJEdatetimesep . . . . .    | 46 |                              |                                        |
| \DTMnJEdaymonthsep . . . . .    | 46 |                              | <b>H</b>                               |
| \DTMnJEfmtordsuffix . . . . .   | 47 | hourminsep . . . . .         | 4                                      |
| \DTMnJEmonthyearchsep . . . . . | 46 |                              |                                        |
| \DTMnJEtimesep . . . . .        | 46 |                              | <b>M</b>                               |
| \DTMnJEtimezonesep . . . . .    | 46 | mapzone . . . . .            | 5–7                                    |
| \DTMnEZonemaps . . . . .        | 50 | monthdaysep . . . . .        | 6                                      |
| \DTMnMTdatesep . . . . .        | 56 | monthyearchsep . . . . .     | 5                                      |
| \DTMnMTdatetimesep . . . . .    | 56 |                              |                                        |
| \DTMnMTdaymonthsep . . . . .    | 56 |                              | <b>O</b>                               |
| \DTMnMTfmtordsuffix . . . . .   | 57 | ord . . . . .                | 5, 7, 8                                |
| \DTMnMTmonthyearchsep . . . . . | 56 |                              |                                        |
| \DTMnMTtimesep . . . . .        | 56 |                              | <b>S</b>                               |
| \DTMnMTtimezonesep . . . . .    | 56 | showdate . . . . .           | 4                                      |
| \DTMnMTzonemaps . . . . .       | 59 | showdayofmonth . . . . .     | 6, 7                                   |
| \DTMnNZdatesep . . . . .        | 37 | showdow . . . . .            | 4, 6, 14, 23, 28                       |
| \DTMnNZdatetimesep . . . . .    | 36 | showisoZ . . . . .           | 4, 6, 7                                |
| \DTMnNZdaymonthsep . . . . .    | 36 | showseconds . . . . .        | 4                                      |
| \DTMnNZfmtordsuffix . . . . .   | 37 | showyear . . . . .           | 6, 7                                   |
| \DTMnNZmonthyearchsep . . . . . | 36 | showzone . . . . .           | 4                                      |
| \DTMnNZtimesep . . . . .        | 37 | showzoneminutes . . . . .    | 4, 6, 7                                |
| \DTMnNZtimezonesep . . . . .    | 37 |                              |                                        |
| \DTMnNZzonemaps . . . . .       | 40 |                              | <b>T</b>                               |
| \DTMnUSdatesep . . . . .        | 21 | timesep . . . . .            | 5, 6                                   |
| \DTMnUSdatetimesep . . . . .    | 21 | timezonesep . . . . .        | 5, 6                                   |
| \DTMnUSdayyearchsep . . . . .   | 21 |                              |                                        |
| \DTMnUSdownmonthsep . . . . .   | 21 |                              | <b>U</b>                               |
| \DTMnUSfmtordsuffix . . . . .   | 22 | useregional . . . . .        | 1, 3–5, 15,                            |
| \DTMnUSmonthdaysep . . . . .    | 21 |                              | 20, 25, 30, 35, 40, 45, 50, 55, 60, 64 |