The `isodate` package[*]

Harald Harders
h.harders@tu-bs.de

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Abstract

This package provides commands to switch between different date formats (standard, ISO, numeric, LaTeX package). They are used by the `\today` command, by the `\printdate` and `\printdateTeX` commands that print any date, and by the `\daterange` command that prints a date range. At the moment, this package supports German (old and new orthography, Austrian), British, US, Australian as well as New Zealand English,[1] French, Italian, Danish, Swedish, and Norwegian.

The idea for this package was taken from the akletter class.

Contents

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[*]This file has version v2.28 last revised 2005-04-15.

[1]In order to use Australian or New Zealand, you need a version of babel that supports the used language. It should be available, soon.

Acknowledgements

First of all I have to thank Axel Kielhorn who wrote the package `akletter` which inspired me to write `isodate`. The help of Heiko Oberdiek was necessary to handle characters in substrings which resulted in the package `substr`. David Sanderson found the bug which disabled `isodate` to work without `babel`. He also helped me to improve the documentation and sent me a link to the ISO 8601 norm [1]. Svend Tollak Munkejord has added the Norwegian language, Christian Schlauer has added Swedish, Philip Ratcliffe has added Italian.

Requirements

The package `isodate` needs the package `substr.sty` which can be obtained from `CTAN:macros/latex/contrib/substr/`.

1 Commands

1.1 Switching the date output format

\isodate
\numdate
\shortdate
\TeXdate
\origdate
\shortorigdate
\Romandate
\romandate
\shortRomandate
\shortromandate

This package provides five commands to switch the output format of all commands that print dates (described later):

\isodate	date format described in ISO 8601 and DIN 5008 [1] (yyyy-mm-dd)
\numdate	numeric date format with four digits of the year
\shortdate	short numeric date format with two digits of the year
\TeXdate	date format used for version description of packages (yyyy/mm/dd)
\origdate	original LaTeX format
\shortorigdate	original LaTeX format with two instead of four digits of

2

	the year
\Romandate	As \numdate but with uppercase Roman numerals for the month
\romandate	As \numdate but with lowercase Roman numerals for the month
\shortRomandate	As \shortdate but with uppercase Roman numerals for the month
\shortromandate	As \shortdate but with lowercase Roman numerals for the month

These commands *do not* print any dates and they don't take an argument. They just switch the format for later usage of the date-printing commands \today, \printdate, \printdateTeX, and \daterange.

The numeric and short numeric as well as the Roman numbered formats change their behaviour depending on the current language:

German, nGerman	dd.\,mm.~yyyy	resp.	dd.\,mm.\,yy
US English	mm/dd/yyyy	resp.	mm/dd/yy
other languages	dd/mm/yyyy	resp.	dd/mm/yy

This package supports German (old and new rules, Austrian), US English, French, Danish, Italian, Swedish, and Norwegian. Switching the language by using \selectlanguage does *not* switch back to the original date format. So the current date format stays active when changing the language.

The change of the date format works locally. So it is possible to change it locally inside a group; e.g.,

```
\today, {\origdate\today}, \today
```

leads to "2005-04-15, 15th April 2005, 2005-04-15".

\printyearoff
\printyearon
By default, all formats print the day, month, and year. Sometimes, you may want to print the date without the year. This can be reached by using the command \printyearoff. You can switch back with \printyearon or by using \printyearoff inside a group (e.g., an environment). To switch globally, preceed the command by \global. An example:

```
\today, {\printyearoff\today}, \today
```

leads to "15th April 2005, 15th April, 15th April 2005".

1.2 Printing today's date

\today   As usual, the command \today prints the date of today. Its appearance is influenced by the current date format

1.3 Printing any date

\printdate   The command \printdate{#1} prints any date in the current format. The argument may be a date in German, British English, or ISO format, e.g.,

```
\printdate{24.12.2000}
\printdate{24/12/2000}
\printdate{2000-12-24}
```

\printdateTeX The command `\printdateTeX{#1}` prints any date in the actual format. The argument must be in the LaTeX format `yyyy/mm/dd`, e.g.,

```
\printdateTeX{2000/12/24}
```

This command is useful for printing version information stored in a macro. For example the version of this package is stored in the macro `\filedate` ("2005/04/15"). To print it with the actual date format you can use the command `\printdateTeX{\filedate}` which leads to e.g., "2005-04-15" or "15th April 2005". Another possibility is to switch the input format to `tex` using `\dateinputformat`, described below.

1.4   Printing date ranges

\daterange The command `\daterange{#1}{#2}` prints a date range in the current format. The arguments may be a date in German, British English, or ISO format (see above). But there is a limitation: Both arguments must have the same input format.

Depending on the language and date format, this commands leaves out some of the data. The simplest way to understand it is to watch some examples:

```
{\isodate
\daterange{1999-05-03}{1999-05-31} ⟶ 1999-05-03 to 31
\daterange{1999-05-03}{1999-11-03} ⟶ 1999-05-03 to 11-03
\daterange{1999-05-03}{2000-04-07} ⟶ 1999-05-03 to 2000-04-07
}
{\origdate
\daterange{1999-05-03}{1999-05-31} ⟶ 3rd to 31st May 1999
\daterange{1999-05-03}{1999-11-03} ⟶ 3rd May to 3rd November 1999
\daterange{1999-05-03}{2000-04-07} ⟶ 3rd May 1999 to 7th April 2000
}
```

1.5   Changing the ISO format

\isodash The ISO norm says that the date format is "yyyy-mm-dd" or "yyyymmdd" [1]. By default I use the hyphen "-" as separator. You can change this using the `\isodash`[2] command, e.g.,

```
\printdate{24/12/2000},
\isodash{--}%
\printdate{24/12/2000},
\isodash{}%
\printdate{24/12/2000}
```

---

[2]The name "isodash" is a little bit confusing and was chosen due to my limited knowledge in English. It should be named "isoseparator" or "isosep". But for compatiblity reasons I will not change it.

leads to "2000-12-24, 2000–12–24, 20001224". Or for example

```
\isodash{$\cdot$}
\printdate{24/12/2000}
```

leads to "2000·12·24".

1.6 Changing the short original format

\shortyearsign

The short original format normally prints the year with two digits, e.g., "19th May 01". Some people want to add an additional sign before the year, e.g., "19th May '01". This can be achieved by using the command \shortyearsign, e.g.,

```
\printdate{24/12/2000},
\shortyearsign{'}%
\printdate{24/12/2000}
```

leads to "24 december 00, 24 december '00" in English.

This only effects the shortorig format. The short numerical format stays unchanged.

1.7 Changing the German format

The spacings for the numerical formats in the German language (24. 12. 2000 resp. 24. 12. 00) were taken from the Duden [2] and are the defaults when using one of the German derivatives. Some people want to use different spacings. Thus from version 2.03 on it is possible to change them. You can change the spacing between the day and the month using the command \daymonthsepgerman. Using the command \monthyearsepgerman you can change the spacing between the month and the year for the long and the short format, e.g.,

\daymonthsepgerman
\monthyearsepgerman

```
\daymonthsepgerman{\quad}%
\monthyearsepgerman{\qquad}{\quad}%
{\numdate\printdate{24.12.2000}}, {\shortdate\printdate{24.12.2000}}
```

leads to "24. 12.   2000, 24. 12. 00".

The default values are "\," for the separator between day and month resp. "\," between month and year in the short format and "~" in the long format.

1.8 Changing the English format

By default, the English date format looks like "24th December 2000". During the last years, a change has occured in many documents towards "24 December 2000". This new format is called "clean look". Isodate's behaviour can be changed towards it using \cleanlookdateon and \cleanlookdateoff. This can also be done globally using the cleanlook package option.

\cleanlookdateon
\cleanlookdateoff

At the moment, the "clean look" functionality only affects British English. If this trend also counts for different languages, please tell it me that I can add support for them.

1.9 User defined month formatting

Internally, the formats using Roman numerals for the month are just links to the `\numdate` and `\shortdate` formats with a changed format for printing the month. Therefore, the command `\Romandate` calls `\numdate` by following sequence:

```
\numdate[Roman]%
\isotwodigitdayfalse
```

This tells `\numdate` to format the month using the `\Roman` command and to typeset the day without a leading zero if it is less than ten.

You may do similar things, e.g.,

```
\numdate[Alph]
```

prints the months with the command `\Alph`, "A", "B", ... The day is printed with two digits since every call of `\numdate` or `\shortdate` calls `\isotwodigitdaytrue` which switches printing the day with two digits on. This does not make any sence but may serve as example. If you want to enable days with one digit, append `\isotwodigitdaytrue`:

```
\numdate[Alph]%
\isotwodigitdaytrue
```

You may declare any command that typesets a counter that is given as its mandatory argument (e.g., `\alph`, `\Alph`, `\arabic`, ...) in the optional argument of the `\numdate`, `\shortdate`, `\isodate`, and `\TeXdate` commands, without the leading backslash. You can, of course, define own commands that do it. For instance,

```
{\def\boldnum#1{\textbf{\twodigitarabic{#1}}}%
\numdate[boldnum]%
\printdate{24.3.2000}}
```

`\twodigitarabic`   leas to "24/**03**/2000". Here, the `\twodigitarabic` command has been used that prints a positive number with at least two digits.[3]

If you, for example want a numerical date format with the day and month printed with the "natural" number of digits rather than with two digits, you may do it as follows:

```
{\numdate[arabic]\isotwodigitdayfalse
\printdate{1.2.2000}}
```

which leads to "1/2/2000".

Using one of the other date formats reset the numerical format to its standard settings with arabic numerals (with two digits), e.g.,

```
{\numdate[Alph]\printdate{6.12.2000};
\isodate\printdate{6.12.2000};
\numdate\printdate{6.12.2000}}
```

leads to "6/L/2000; 2000-12-06; 06/12/2000".

---

[3]This command is also used for the numerical date formats.

1.10 Switching the date input format

\dateinputformat As described above, the date can be given in different formats. For the German format `dd.mm.yyyy` and the ISO format `yyyy-mm-dd`, the input format is definite. But when using slashes to seperate the day, month, and year, different formats exist. British people use `dd/mm/yyyy`, American people use `mm/dd/yyyy`, while TeX uses `yyyy/mm/dd` which in fact is an ISO format with slashes instead of dashes.

By default, the British format is used. If the user wants to give the American or TeX format as argument of the `\printdate` or `\daterange` commands, the macro `\dateinputformat` can be used to change the behaviour. This macro takes the name of the input format as single parameter, e.g., `\dateinputformat{american}`, for switching to American behaviour, e.i., `mm/dd/yyyy`. For example,

```
\numdate
\selectlanguage{UKenglish}%
\dateinputformat{american}%
\printdate{12/31/2004}
```

gives 31/12/2004. In this example, *input* format is American while the *output* format is English.

Valid arguments for the `\dateinputformat` command are `english`, `UKenglish`, `british`, `american`, `USenglish`, `tex`, `latex`, `TeX`, `LaTeX`. The meaning of most possibilities should be clear; `english` means British English.

Beware that the input format may only be changed for the date format using slashes. Thus, you don't have to and are not allowed to specify input formats other than these described above. For example, `\dateinputformat{german}` is not allowed (and not necessary).

2 Calling the package

The package is called using the `\usepackage` command:
`\usepackage[option]{isodate}`.

The possible package options can be seen in table 2.

Be aware that at least one language option must be set when calling isodate. The last language in the option list is the default language.

The package isodate works well together with `babel.sty`, `german.sty`, or `ngerman.sty`. It does not matter if `isodate` is loaded before or after the used language package.

It is also possible to use isodate without one of the language packages. Then it is not possible to switch between languages using the `\selectlanguage` command.[4] Then the default language is the last one in the option list. If an error oc-

---

[4]Yes, there is a way to change the date language, but it is a little bit tricky:
```
\makeatletter
\def\iso@languagename{german}%
\dategerman%
```

Table 2: Package options

option	function
iso	start with ISO date format
num	start with numeric date format with 4 digits of the year
short	start with numeric date format with 2 digits of the year
TeX	start with LaTeX numeric date format (yyyy/mm/dd)
orig	start with normal LaTeX date format (default[a])
shortorig	start with short normal LaTeX date format (2 digits)
Roman	start with numeric date format (month in uppercase Roman numerals)
roman	start with numeric date format (month in lowercase Roman numerals)
shortRoman	start with short Roman format
shortroman	start with short roman format
american	support American English date format
austrian	support Austrian date format
british	support British English date format
danish	support Danish date format
english	support British English date format
french	support French date format
german	support German date format
naustrian	support new Austrian date format
ngerman	support new German date format
italian	support Italian date format
norsk	support Norwegian date format
norwegian	support Norwegian date format
swedish	support Swedish date format
UKenglish	support British English date format
USenglish	support American English date format
inputenglish	English date input format (default)
inputbritish	English date input format (default)
inputUKenglish	English date input format (default)
inputamerican	American date input format
inputUSenglish	American date input format
inputtex	TeX date input format
inputTeX	TeX date input format
inputlatex	TeX date input format
inputLaTeX	TeX date input format
cleanlook	use "clean look" for English dates
nocleanlook	don't use "clean look" for English dates

[a]The original format is used as default in order to avoid a different document output by just including the package.

curs when using isodate without one of the packages `babel.sty`, `german.sty`, and `ngerman.sty` please run `tstlang.tex` through latex and send the file `tstlang.log` to the address `h.harders@tu-bs.de`.

If using isodate together with babel it can be useful to put the language options as global options into the optional parameters of the `\documentclass` command. Then automatically the available languages are the same for the text and the dates, and the default language is also the same. For example:

```
\documentclass[english,german]{article}
\usepackage{babel}
\usepackage[num]{isodate}
```

The input format options specify the input format that is used at the begin of the document. You don't have to define multiple options if you want to change the input format in the document using `\dateinputformat`. For example,

```
\documentclass[american,german,british]{article}
\usepackage{babel}
\usepackage[iso,inputamerican]{isodate}
\begin{document}
D \printdate{28.2.2000}\par
ISO \printdate{2000-2-28}\par
US \printdate{2/28/2000}\par
\dateinputformat{british}UK \printdate{28/2/2000}\par
\dateinputformat{tex}\TeX\ \printdate{2000/2/28}
\end{document}
```

works as expected.

Beware that only the mentioned input formats are defined. For example, `inputgerman` does not exist because it is not necessary.

3   Add new languages to the package

The easiest way to add new languages to the package is to copy one of the simple language files `danish.idf` or `french.idf` to the new language name, e.g., `plattdeutsch.idf`, and change it as necessary.

This new file can be used without changing `isodate.sty` if you use its name explicitly in the optional parameter of the `\usepackage` command. If you have added support for a new language please mail me.

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```
\makeatother
```

B Known errors

- The \printdate and \printdateTeX commands are not very good in checking the argument for correct syntax.

- The language definition files french.idf and german.idf are not yet commented.

- Isodate and draftcopy do not work together.

C Planned features and changes

- Of course eliminate the errors.

- Add other languages. Please help me with this topic. I don't know the date formats in other languages.

- Add a command that prints only the month and the year of a date.

- Format short given years to four digits and calculate reasonable first and second digits.

References

[1] International Standard: ISO 8601. http://www.iso.ch/markete/8601.pdf, 1988-06-15.

[2] DUDEN Band 1. Die deutsche Rechtschreibung. 21. Auflage, Dudenverlag, Mannheim, Germany, 1996.

D The implementation

D.1 Package file isodate.sty

Heading of the files:

```
 1 ⟨isodate⟩\NeedsTeXFormat{LaTeX2e}
 2 ⟨isodate⟩\ProvidesPackage{isodate}
 3 ⟨danish⟩\ProvidesFile{danish.idf}
 4 ⟨english⟩\ProvidesFile{english.idf}
 5 ⟨french⟩\ProvidesFile{french.idf}
 6 ⟨german⟩\ProvidesFile{german.idf}
 7 ⟨italian⟩\ProvidesFile{italian.idf}
 8 ⟨norsk⟩\ProvidesFile{norsk.idf}
 9 ⟨swedish⟩\ProvidesFile{swedish.idf}
10 ⟨isodate⟩   [2005/04/15   v2.28   Print dates with different formats (HH)]
11 ⟨language⟩  [2005/04/15   v2.28   Language definitions for isodate package (HH)]
```

The package:

```
12 ⟨∗isodate⟩
13 \RequirePackage{ifthen}
14 \IfFileExists{substr.sty}{\RequirePackage{substr}%
15 }{\PackageError{isodate.sty}{Package file substr.sty not found}
16    {This version of isodate.sty needs the package substr.sty.^^J%
17       You can download it from
18       CTAN:/macros/latex/contrib/substr/^^J%
19       e.g., one CTAN node is ftp.dante.de.
20       Install substr.sty into your TeX tree.}}
```

Declare the options for the default date format.

```
21 \DeclareOption{iso}{\AtEndOfPackage{\isodate}}
22 \DeclareOption{num}{\AtEndOfPackage{\numdate}}
23 \DeclareOption{short}{\AtEndOfPackage{\shortdate}}
24 \DeclareOption{TeX}{\AtEndOfPackage{\TeXdate}}
25 \DeclareOption{orig}{\AtEndOfPackage{\origdate}}
26 \DeclareOption{shortorig}{\AtEndOfPackage{\shortorigdate}}
27 \DeclareOption{Roman}{\AtEndOfPackage{\Romandate}}
28 \DeclareOption{roman}{\AtEndOfPackage{\romandate}}
29 \DeclareOption{shortRoman}{\AtEndOfPackage{\shortRomandate}}
30 \DeclareOption{shortroman}{\AtEndOfPackage{\shortromandate}}
31 \DeclareOption{cleanlook}{\AtEndOfPackage{\cleanlookdateon}}
32 \DeclareOption{nocleanlook}{\AtEndOfPackage{\cleanlookdateoff}}
```

Declare the options for the default date input format.

```
33 \DeclareOption{inputenglish}{\AtEndOfPackage{\dateinputformat{english}}}
34 \DeclareOption{inputbritish}{\AtEndOfPackage{\dateinputformat{english}}}
35 \DeclareOption{inputUKenglish}{\AtEndOfPackage{\dateinputformat{english}}}
36 \DeclareOption{inputamerican}{\AtEndOfPackage{\dateinputformat{american}}}
37 \DeclareOption{inputUSenglish}{\AtEndOfPackage{\dateinputformat{american}}}
38 \DeclareOption{inputtex}{\AtEndOfPackage{\dateinputformat{tex}}}
39 \DeclareOption{inputTeX}{\AtEndOfPackage{\dateinputformat{tex}}}
40 \DeclareOption{inputlatex}{\AtEndOfPackage{\dateinputformat{tex}}}
41 \DeclareOption{inputLaTeX}{\AtEndOfPackage{\dateinputformat{tex}}}
```

Declare the options for language support.

```
42 \DeclareOption{american}{\input{english.idf}}
43 \DeclareOption{australian}{\input{english.idf}}
44 \DeclareOption{austrian}{\input{german.idf}}
45 \DeclareOption{danish}{\input{danish.idf}}
46 \DeclareOption{english}{\input{english.idf}}
47 \DeclareOption{british}{\input{english.idf}}
48 \DeclareOption{french}{\input{french.idf}}
49 \DeclareOption{frenchb}{\input{french.idf}}
50 \DeclareOption{german}{\input{german.idf}}
51 \DeclareOption{italian}{\input{italian.idf}}
52 \DeclareOption{naustrian}{\input{german.idf}}
53 \DeclareOption{newzealand}{\input{english.idf}}
54 \DeclareOption{ngerman}{\input{german.idf}}
55 \DeclareOption{norsk}{\input{norsk.idf}}
```

```
56 \DeclareOption{norwegian}{\input{norsk.idf}}
57 \DeclareOption{swedish}{\input{swedish.idf}}
58 \DeclareOption{UKenglish}{\input{english.idf}}
59 \DeclareOption{USenglish}{\input{english.idf}}
```

Make it possible to load language definition files that are not known by this package.

```
60 \DeclareOption*{%
61   \InputIfFileExists{\CurrentOption.idf}{}{%
62     \PackageError{isodate}{%
63       Isodate definition file \CurrentOption.idf not found}{%
64       Maybe you misspelled the language option?}}%
65   }
```

Set default option to `orig`.

```
66 \ExecuteOptions{orig,nocleanlook}
```

Process the options.

```
67 \ProcessOptions*
```

Handle the case that no language was given. Throw an error message. Each language definition file `*.idf` must contain a line

```
\let\iso@languageloaded\active
```

that defines the command `\iso@languageloaded`.

```
68 \ifx\iso@languageloaded\@undefined
69   \PackageError{isodate}{%
70     You haven't specified a language option}{%
71     You need to specify a language, either as a global
72     option\MessageBreak
73     or as an optional argument to the \string\usepackage\space
74     command.\MessageBreak
75     If you have used the old isodate package (version <=1.06) you can
76     change the\MessageBreak
77     usepackage command to \protect\usepackage{isodate}.\MessageBreak
78     You shouldn't try to proceed from here, type x to quit.}
79 \fi
```

\iso@printday Prints a day.

```
80 \newcommand*\iso@printday[1]{%
81   \ifisotwodigitday
82     \ifthenelse{\number#1<10}{0}{}%
83   \fi
84   \number#1%
85 }%
```

\twodigitarabic Typesets the given counter with at least two digits. This command is very simple and does only work for positive numbers below 100.

```
86 \newcommand*\twodigitarabic[1]{%
87   \ifthenelse{\number\arabic{#1}<10}{0}{}%
```

```
88    \arabic{#1}%
89 }
```

\iso@printmonth Prints a month using \theiso@tmpmonth as output fourmat.

```
90 \newcommand*\iso@printmonth[1]{%
91    \setcounter{iso@tmpmonth}{#1}%
92    \theiso@tmpmonth%
93 }
```

Define the help counter that prints the month and initialize it to print arabic numbers.

```
94 \newcounter{iso@tmpmonth}
95 %\def\theiso@tmpmonth{\arabic{iso@tmpmonth}}
```

\iso@yeartwo Prints the argument of the command with two digits.
Example: \iso@yeartwo{1873} ⟶ 73.

```
96 \newcounter{iso@yeartwo}%
97 \newcommand*\iso@yeartwo[1]{%
98    \setcounter{iso@yeartwo}{\number#1}%
99    \whiledo{\theiso@yeartwo>99}{%
100      \addtocounter{iso@yeartwo}{-100}}{}%
101   \ifthenelse{\number\theiso@yeartwo<10}{0}{}\theiso@yeartwo
102 }
```

\iso@yearfour Prints the argument of the command with four digits.

```
103 \newcommand*\iso@yearfour[1]{%
104    \ifthenelse{\number#1<1000}{0}{}%
105    \ifthenelse{\number#1<100}{0}{}%
106    \ifthenelse{\number#1<10}{0}{}%
107    \number#1%
108 }%
```

\ifisotwodigitday Print day with two digits or natural number of digits?

```
109 \newif\ifisotwodigitday
```

\iso@dateformat In this command, the current active date format ist stored. Possible values are: numeric, short, iso, orig, shortorig, TeX.

```
110 \def\iso@dateformat{numeric}
```

\iso@inputformat This macro stores which input format is used for dates given with slashes. Valid formats are english (dd/mm/yyyy), american (mm/dd/yyyy), and tex (yyyy/mm/dd). By default, English is used.

```
111 \DeclareRobustCommand*\dateinputformat[1]{%
112    \ifthenelse{%
113      \equal{#1}{english}\or
114      \equal{#1}{british}\or
115      \equal{#1}{UKenglish}}{%
116      \def\iso@inputformat{english}%
```

```
117  }{%
118    \ifthenelse{%
119      \equal{#1}{american}\or
120      \equal{#1}{USenglish}}{%
121      \def\iso@inputformat{american}%
122    }{%
123      \ifthenelse{%
124        \equal{#1}{tex}\or
125        \equal{#1}{TeX}\or
126        \equal{#1}{latex}\or
127        \equal{#1}{LaTeX}}{%
128        \def\iso@inputformat{tex}%
129      }{%
130        \PackageError{isodate}{Invalid date input format}{%
131          Maybe you misspelled the language option (english, american,
132          tex)?}%
133      }%
134    }%
135  }%
136 }
```

\iso@inputformat This macro stores which input format is used for dates given with slashes. Valid formats are english (dd/mm/yyyy), american (mm/dd/yyyy), and tex (yyyy/mm/dd). By default, English is used.

```
137 \dateinputformat{english}
```

\numdate Switches to long numerical date format.

```
138 \DeclareRobustCommand*\numdate[1][twodigitarabic]{%
139   \def\iso@dateformat{numeric}%
140   \isotwodigitdaytrue
141   \def\theiso@tmpmonth{\csname #1\endcsname{iso@tmpmonth}}%
142 }
```

\shortdate Switches to short numerical date format.

```
143 \DeclareRobustCommand*\shortdate[1][twodigitarabic]{%
144   \def\iso@dateformat{short}%
145   \isotwodigitdaytrue
146   \def\theiso@tmpmonth{\csname #1\endcsname{iso@tmpmonth}}%
147 }
```

\isodate Switches to ISO date format.

```
148 \DeclareRobustCommand*\isodate[1][twodigitarabic]{%
149   \def\iso@dateformat{iso}%
150   \isotwodigitdaytrue
151   \def\theiso@tmpmonth{\csname #1\endcsname{iso@tmpmonth}}%
152 }
```

`\origdate`	Switches to the original date format.

```
153 \DeclareRobustCommand*\origdate{%
154   \def\iso@dateformat{orig}%
155   \isotwodigitdayfalse
156   \def\theiso@tmpmonth{\twodigitarabic{iso@tmpmonth}}}%
157 }
```

`\shortorigdate`	Switches to the short original date format.

```
158 \DeclareRobustCommand*\shortorigdate{%
159   \def\iso@dateformat{shortorig}%
160   \isotwodigitdayfalse
161   \def\theiso@tmpmonth{\twodigitarabic{iso@tmpmonth}}}%
162 }
```

q

`\TeXdate`	Switches to LaTeX date format.

```
163 \DeclareRobustCommand*\TeXdate[1][twodigitarabic]{%
164   \def\iso@dateformat{TeX}%
165   \isotwodigitdaytrue
166   \def\theiso@tmpmonth{\csname #1\endcsname{iso@tmpmonth}}}%
167 }
```

`\Romandate`	Switches to long numerical date format with month printed in uppercase Roman numerals.

```
168 \DeclareRobustCommand*\Romandate{%
169   \numdate[Roman]%
170   \isotwodigitdayfalse
171 }
```

`\romandate`	Switches to long numerical date format with month printed in lowercase Roman numerals.

```
172 \DeclareRobustCommand*\romandate{%
173   \numdate[roman]%
174   \isotwodigitdayfalse
175 }
```

`\shortRomandate`	Switches to short numerical date format with month printed in uppercase Roman numerals.

```
176 \DeclareRobustCommand*\shortRomandate{%
177   \shortdate[Roman]%
178   \isotwodigitdayfalse
179 }
```

`\shortromandate`	Switches to short numerical date format with month printed in lowercase Roman numerals.

```
180 \DeclareRobustCommand*\shortromandate{%
181   \shortdate[roman]%
182   \isotwodigitdayfalse
183 }
```

\isodash   Changes the dash in the ISO date format. The default is "-".

```
184 \def\iso@isodash{-}%
185 \DeclareRobustCommand*\isodash[1]{\def\iso@isodash{#1}}%
```

Define the sign that is printed before a two digit year in the short original format. Default is nothing.

\shortyearsign

```
186 \def\iso@twodigitsign{}
187 \DeclareRobustCommand*\shortyearsign[1]{\def\iso@twodigitsign{#1}}%
```

\isorangesign   Defines the sign or word that is printed between the two dates in a date range. e.g., in English the default is " to ".

```
188 \def\iso@rangesign{\csname iso@rangesign@\iso@languagename\endcsname}%
189 \DeclareRobustCommand*\isorangesign[1]{\def\iso@rangesign{#1}}%
```

\printyearoff   Switches printing of the year on or off. Default is to print the year.
\printyearon

```
190 \newif\ifiso@printyear
191 \DeclareRobustCommand*\printyearon{\iso@printyeartrue}
192 \DeclareRobustCommand*\printyearoff{\iso@printyearfalse}
193 \printyearon
```

\cleanlookdateoff   Switch on or off "clean look" for English dates. Default is not to use "clean look".
\cleanlookdateon

```
194 \newif\ifiso@cleanlook
195 \DeclareRobustCommand*\cleanlookdateon{\iso@cleanlooktrue}
196 \DeclareRobustCommand*\cleanlookdateoff{\iso@cleanlookfalse}
197 \cleanlookdateoff
```

\iso@printdate   Defines the command `iso@printdate` which takes three arguments (year, month, day) and prints the date by using the \today command.

```
198 \newcommand*\iso@printdate[3]{%
199   \begingroup%
```

Generate a warning if the active language is not known by `isodate`.

```
200     \@ifundefined{iso@printdate@\iso@languagename}{%
201       \PackageWarning{isodate}{Language \iso@languagename\space unknown
202        to isodate.\MessageBreak
203        Using default format}%
204     }{}%
```

The counters \year, \month, and \day are preserved as counters instead of changed to macros (as it has been done until version 2.25) to avoid problems with languages that are not defined in `isodate.sty`.

```
205     \year=#1 %
206     \month=#2 %
207     \day=#3 %
208     \today%
209   \endgroup%
210 }
```

16

\printdate	Prints a date that is given as one argument in one of these formats: yyyy-mm-dd, dd/mm/yyyy, dd.mm.yyyy.

```
211 \DeclareRobustCommand*\printdate[1]{%
```

Define \iso@date command to expand the argument #1.

```
212   \edef\iso@date{#1}%
```

Count appearances of "/", "-", and "." in the argument.

```
213   \SubStringsToCounter{iso@slash}{/}{\iso@date}%
214   \SubStringsToCounter{iso@minus}{-}{\iso@date}%
215   \SubStringsToCounter{iso@dot}{.}{\iso@date}%
```

If number of "." in the argument is equal to 2 then the German format dd.mm.yyyy is used.

```
216   \ifthenelse{\equal{\theiso@dot}{2}}{%
217     \expandafter\iso@input@german\iso@date\@empty}{%
```

If number of "-" in the argument is equal to 2 then the ISO format yyyy-mm-dd is used.

```
218     \ifthenelse{\equal{\theiso@minus}{2}}{%
219       \expandafter\iso@input@iso\iso@date\@empty}{%
```

If number of "/" in the argument is equal to 2 then the British English format dd/mm/yyyy is used.

```
220       \ifthenelse{\equal{\theiso@slash}{2}}{%
221         \expandafter\iso@input@english\iso@date\@empty}{%
```

Else no of the formats above is used an thus an error message is thrown.

```
222         ????\iso@isodash ??\iso@isodash ??%
223         \PackageError{isodate}{unrecognized date format}{Use one of
224           the following formats as macro argument:^^J%
225           \space\space dd.mm.yyyy^^J%
226           \space\space dd/mm/yyyy^^J%
227           \space\space yyyy-mm-dd^^J%
228           Don't use any spaces or commands like \protect\, or
229           \protect~ inside the argument.}%
230       }}}%
231 }
```

\iso@input@iso	Converts a string with the format yyyy-mm-dd to three arguments {#1}{#2}{#3} and calls \iso@printdate.

```
232 \def\iso@input@iso#1-#2-#3\@empty{\iso@printdate{#1}{#2}{#3}}
```

\iso@input@german	Converts a string with the format dd.mm.yyyy to three arguments {#3}{#2}{#1} and calls \iso@printdate.

```
233 \def\iso@input@german#1.#2.#3\@empty{\iso@printdate{#3}{#2}{#1}}
```

\iso@input@english	Converts a string with the format dd/mm/yyyy to three arguments {#3}{#2}{#1} and calls \iso@printdate.

```
234 \def\iso@input@english#1/#2/#3\@empty{%
235   \ifthenelse{\equal{\iso@inputformat}{tex}}{%
```

```
236        \iso@printdate{#1}{#2}{#3}%
237      }{%
238        \ifthenelse{\equal{\iso@inputformat}{american}}{%
239          \iso@printdate{#3}{#1}{#2}%
240        }{%
241          \iso@printdate{#3}{#2}{#1}%
242        }%
243      }%
244 }
```

\printdateTeX   Prints a date that is given as one argument in the format yyyy/mm/dd.

```
245 \DeclareRobustCommand*\printdateTeX[1]{%
```

Define \iso@date command to expand the argument #1.

```
246    \edef\iso@date{#1}%
```

Count appearances of "/" in the argument.

```
247    \SubStringsToCounter{iso@slash}{/}{\iso@date}%
```

If number of "/" in the argument is equal to 2 then the LaTeX format yyyy/mm/dd is used.

```
248    \ifthenelse{\equal{\theiso@slash}{2}}{%
249      \expandafter\iso@input@TeX\iso@date\@empty}{%
```

Else no of the formats above is used an thus an error message is thrown.

```
250      ????\iso@isodash ??\iso@isodash ??%
251      \PackageError{isodate}{unrecognized date format}{Use one of
252        the following formats as macro argument:^^J%
253        \space\space dd.mm.yyyy^^J%
254        \space\space dd/mm/yyyy^^J%
255        \space\space yyyy-mm-dd^^J%
256        Don't use any spaces or commands like \protect\, or
257        \protect~ inside the argument.}%
258      }}
```

\iso@input@TeX   Converts a string with the format yyyy/mm/dd to three arguments {#1}{#2}{#3} and calls \iso@printdate.

```
259 \def\iso@input@TeX#1/#2/#3\@empty{\iso@printdate{#1}{#2}{#3}}
```

\daterange   Prints a date range.

```
260 \DeclareRobustCommand*\daterange[2]{%
```

Define \iso@date and \iso@@date commands to expand the argument #1 and #2. Define \iso@@@date which contains both arguments devided by a komma.

```
261    \edef\iso@date{#1}%
262    \edef\iso@@date{#2}%
263    \edef\iso@@@date{\iso@date,\iso@@date}%
```

Count appearances of "/", "-", and "." in the arguments.

```
264    \SubStringsToCounter{iso@slash}{/}{\iso@date}%
265    \SubStringsToCounter{iso@minus}{-}{\iso@date}%
```

```
266    \SubStringsToCounter{iso@dot}{.}{\iso@date}%
267    \SubStringsToCounter{iso@@slash}{/}{\iso@@date}%
268    \SubStringsToCounter{iso@@minus}{-}{\iso@@date}%
269    \SubStringsToCounter{iso@@dot}{.}{\iso@@date}%
```

If number of "." in both arguments is equal to 2 then the German format dd.mm.yyyy is used.

```
270    \ifthenelse{\equal{\theiso@dot}{2}\and\equal{\theiso@@dot}{2}}{%
271      \expandafter\iso@range@input@german\iso@@@date\@empty}{%
```

If number of "-" in both arguments is equal to 2 then the ISO format yyyy-mm-dd is used.

```
272      \ifthenelse{\equal{\theiso@minus}{2}\and\equal{\theiso@@minus}{2}}{%
273        \expandafter\iso@range@input@iso\iso@@@date\@empty}{%
```

If number of "/" in both arguments is equal to 2 then the British English format dd/mm/yyyy is used.

```
274        \ifthenelse{\equal{\theiso@slash}{2}\and%
275                   \equal{\theiso@@slash}{2}}{%
276          \expandafter\iso@range@input@english\iso@@@date\@empty}{%
```

Else no of the formats above is used an thus an error message is thrown.

```
277          ????\iso@isodash ??\iso@isodash ??%
278          \PackageError{isodate}{unrecognized date format}{Use one of
279            the following formats as macro argument:^^J%
280            \space\space dd.mm.yyyy^^J%
281            \space\space dd/mm/yyyy^^J%
282            \space\space yyyy-mm-dd^^J%
283            Don't use any spaces or commands like \protect\, or
284            \protect~ inside the argument.^^J
285            Use the same format for both arguments.}%
286        }}}%
287 }
```

\iso@range@input@iso   Converts a string with the format yyyy-mm-dd,yyyy-mm-dd to six arguments {#1}{#2}{#3}{#4}{#5}{#6} and calls \iso@daterange@language.

```
288 \def\iso@range@input@iso#1-#2-#3,#4-#5-#6\@empty{%
289    \begingroup
```

Generate a warning if the active language is not known by isodate.

```
290      \@ifundefined{iso@daterange@\iso@languagename}{%
291        \PackageWarning{isodate}{Language \iso@languagename\space unknown
292          to isodate.\MessageBreak
293          Using default date range\MessageBreak
294          with range sign --}%
295        \expandafter\def\csname iso@printdate@\iso@languagename\endcsname{}%
```

Print date range in fall-back format.

```
296        \iso@printdate{#1}{#2}{#3}--\iso@printdate{#4}{#5}{#6}%
297      }{%
```

Print date range in the chosen `isodate` format.

```
298        \ifthenelse{\equal{\number#1}{\number#4}}{}{\printyearon}%
299        \csname iso@daterange@\iso@languagename\endcsname{%
300            #1}{#2}{#3}{#4}{#5}{#6}%
301      }%
302    \endgroup
303 }
```

`\iso@range@input@german`   Converts a string with the format dd.mm.yyyy,dd.mm.yyyy to six arguments {#3}{#2}{#1}{#6}{#5}{#4} and calls \iso@daterange@language.

```
304 \def\iso@range@input@german#1.#2.#3,#4.#5.#6\@empty{%
305    \begingroup
```

Generate a warning if the active language is not known by `isodate`.

```
306      \@ifundefined{iso@daterange@\iso@languagename}{%
307        \PackageWarning{isodate}{Language \iso@languagename\space unknown
308          to isodate.\MessageBreak
309          Using default date range\MessageBreak
310          with range sign --}%
311        \expandafter\def\csname iso@printdate@\iso@languagename\endcsname{}%
```

Print date range in fall-back format.

```
312        \iso@printdate{#3}{#2}{#1}--\iso@printdate{#6}{#5}{#4}%
313      }{%
```

Print date range in the chosen `isodate` format.

```
314        \ifthenelse{\equal{\number#3}{\number#6}}{}{\printyearon}%
315        \csname iso@daterange@\iso@languagename\endcsname{%
316            #3}{#2}{#1}{#6}{#5}{#4}%
317      }%
318    \endgroup
319 }
```

`\iso@range@input@english`   Converts a string with the format dd/mm/yyyy,dd/mm/yyyy to six arguments {#3}{#2}{#1}{#6}{#5}{#4} and calls \iso@daterange@language.

```
320 \def\iso@range@input@english#1/#2/#3,#4/#5/#6\@empty{%
321    \begingroup
```

Generate a warning if the active language is not known by `isodate`.

```
322      \@ifundefined{iso@daterange@\iso@languagename}{%
323        \PackageWarning{isodate}{Language \iso@languagename\space unknown
324          to isodate.\MessageBreak
325          Using default date range\MessageBreak
326          with range sign --}%
327        \expandafter\def\csname iso@printdate@\iso@languagename\endcsname{}%
```

Print date range in fall-back format.

```
328        \ifthenelse{\equal{\iso@inputformat}{tex}}{%
329          \iso@printdate{#1}{#2}{#3}--\iso@printdate{#4}{#5}{#6}%
330        }{%
331          \ifthenelse{\equal{\iso@inputformat}{american}}{%
```

20

```
332        \iso@printdate{#3}{#1}{#2}--\iso@printdate{#6}{#4}{#5}%
333          }{%
334        \iso@printdate{#3}{#2}{#1}--\iso@printdate{#6}{#5}{#4}%
335          }%
336        }%
337     }{%
```

Print date range in the chosen `isodate` format.

```
338      \ifthenelse{\equal{\number#3}{\number#6}}{}{\printyearon}%
339      \ifthenelse{\equal{\iso@inputformat}{tex}}{%
340        \csname iso@daterange@\iso@languagename\endcsname{%
341          #1}{#2}{#3}{#4}{#5}{#6}%
342      }{%
343        \ifthenelse{\equal{\iso@inputformat}{american}}{%
344          \csname iso@daterange@\iso@languagename\endcsname{%
345            #3}{#1}{#2}{#6}{#4}{#5}%
346        }{%
347          \csname iso@daterange@\iso@languagename\endcsname{%
348            #3}{#2}{#1}{#6}{#5}{#4}%
349        }%
350      }%
351     }%
352   \endgroup
353 }
```

Define the counters for conting the appearances of ".", "-", and "/" in the arguments.

```
354 \newcounter{iso@slash}
355 \newcounter{iso@minus}
356 \newcounter{iso@dot}
357 \newcounter{iso@@slash}
358 \newcounter{iso@@minus}
359 \newcounter{iso@@dot}
```

The command `\iso@languagename` is defined to be able to use this package without loading one of the language packages babel.sty, german.sty, or ngerman.sty.

If neither babel.sty nor german.sty nor ngerman.sty is loaded my computer returns "nohyphenation" when using `\languagename`. So this is the indication that none of the above packages is loaded.

```
360 \AtBeginDocument{%
361   \@tempswafalse
362   \@ifpackageloaded{babel}{%
363     \@tempswatrue
364     \typeout{isodate: babel.sty has been loaded}%
365   }{}%
366   \@ifpackageloaded{german}{%
367     \@tempswatrue
368     \typeout{isodate: german.sty has been loaded}%
369   }{}%
370   \@ifpackageloaded{ngerman}{%
```

```
371    \@tempswatrue
372    \typeout{isodate: ngerman.sty has been loaded}%
373  }{}%
```

The language is not equal "nohyphenation". So one of the language packages is loaded. Replace the internal language name \iso@languagename by the global language name \languagename.

```
374  \if@tempswa
375    \gdef\iso@languagename{\languagename}%
```

Reload language to surely switch to new date format. The languagename gets first expanded because of errors that would occur otherwise.

```
376    \edef\iso@tmplang{\languagename}%
377    \expandafter\selectlanguage\expandafter{\iso@tmplang}%
378  \else
```

At the end of the preamble still none of the language packages are loaded. So no language switching is possible. Set the date language manually to the last language that was loaded for isodate.

```
379    \typeout{isodate: babel.sty, (n)german.sty have not been loaded}%
380    \csname date\iso@languagename\endcsname%
381  \fi
382 }
383 ⟨/isodate⟩
```

D.2   Language definition file danish.idf

\iso@languageloaded   Define the command \iso@languageloaded in order to enable isodate.sty to determine if at least one language is loaded.

```
384 ⟨*danish⟩
385 \let\iso@languageloaded\active
386 \typeout{Define commands for Danish date format}
```

\month@danish   Prints the name of today's month in the long form for the original date format.

```
387 \def\month@danish{\ifcase\month\or
388     januar\or februar\or marts\or april\or maj\or juni\or
389     juli\or august\or september\or oktober\or november\or december\fi}
```

\iso@printmonthday@danish   Prints the month and the day given as two arguments ({mm}{dd}) in the current date format.

```
390    \def\iso@printmonthday@danish#1#2{%
```

Numeric and short date format: dd/mm/

```
391    \ifthenelse{\equal{\iso@dateformat}{numeric}\or%
392      \equal{\iso@dateformat}{short}}{%
393      \iso@printday{#2}/\iso@printmonth{#1}\ifiso@printyear/\fi}{%
```

ISO date format: -mm-dd

```
394      \ifthenelse{\equal{\iso@dateformat}{iso}}{%
395        \ifiso@printyear\iso@isodash\fi\iso@printmonth{#1}%
396        \iso@isodash\iso@printday{#2}}{%
```

LATEX date format: /mm/dd

```
397        \ifthenelse{\equal{\iso@dateformat}{TeX}}{%
398          \ifiso@printyear/\fi\iso@printmonth{#1}/\iso@printday{#2}}{%
```

Original date format: d. mmm

```
399        \ifthenelse{\equal{\iso@dateformat}{orig}\or
400              \equal{\iso@dateformat}{shortorig}}{%
401        \iso@printday{#2}.~\begingroup
402        \edef\lmonth{#1}\def\month{\lmonth}%
403        \month@danish%
404        \endgroup
405        }{}}}}%
406     }
```

\iso@printdate@danish Prints the date given as three arguments ({yyyy}{mm}{dd}) in the actual date format

```
407   \def\iso@printdate@danish#1#2#3{%
```

ISO or LATEXdate format: yyyy\iso@printmonthday@danish

```
408      \ifthenelse{\equal{\iso@dateformat}{iso}\or%
409        \equal{\iso@dateformat}{TeX}}{%
410        \ifiso@printyear
411          \number#1%
412        \fi}{}%
413      \iso@printmonthday@danish{\number#2}{\number#3}%
414      \ifiso@printyear
```

numeric date format: \iso@printmonthday@danish yyyy

```
415        \ifthenelse{\equal{\iso@dateformat}{numeric}}{\iso@yearfour{\number#1}}{%
```

original date format: \iso@printmonthday@danish~yyyy

```
416        \ifthenelse{\equal{\iso@dateformat}{orig}}{~\iso@yearfour{\number#1}}{%
```

short original date format: \iso@printmonthday@danish~yy

```
417          \ifthenelse{\equal{\iso@dateformat}{shortorig}}{%
418            ~\iso@twodigitsign\iso@yeartwo{\number#1}}{%
```

short date format: \iso@printmonthday@danish yy

```
419            \ifthenelse{\equal{\iso@dateformat}{short}}{%
420              \iso@yeartwo{\number#1}}{%
421              }}}}%
422      \fi
423    }
```

\iso@datedanish This command redefines the \today command to print in the actual date format.

```
424   \def\iso@datedanish{%
425     \def\today{\iso@printdate@danish{\year}{\month}{\day}}}%
```

\iso@daterange@... Define date-range commands for dialects.

```
426   \expandafter\def\csname iso@daterange@\CurrentOption\endcsname{%
427     \iso@daterange@danish}%
```

`\iso@daterange@danish` This command takes six arguments ({yyyy1}{mm1}{dd1}{yyyy2}{mm2}{dd2}) and prints the corrosponding date range in the actual date format.

```
428 \def\iso@daterange@danish#1#2#3#4#5#6{%
```

ISO or LaTeX date format.

```
429    \ifthenelse{\equal{\iso@dateformat}{iso}\or%
430               \equal{\iso@dateformat}{TeX}}{%
```

Print the start date.

```
431      \csname iso@printdate@\iso@languagename\endcsname{%
432        #1}{#2}{#3}\iso@rangesign%
```

If year and month are equal, only print the day of the end date. If only the year is equal, only print month and day of the end date. Otherwise print the whole end date.

```
433      \ifthenelse{\equal{\number#1}{\number#4}}{%
434        \ifthenelse{\equal{\number#2}{\number#5}}{\iso@printday{#6}%
435          }{\iso@printmonthday@danish{#5}{#6}}}{%
436        \csname iso@printdate@\iso@languagename\endcsname{#4}{#5}{#6}}%
437    }{%
```

Numeric, short, or original date format.

If year and month are equal, only print the day of the start date. If only the year is equal, only print month and day of the start date. Otherwise print the whole start date.

```
438      \ifthenelse{\equal{\number#1}{\number#4}}{%
439        \ifthenelse{\equal{\number#2}{\number#5}}{%
440          \ifthenelse{\equal{\iso@dateformat}{orig}\or
441                     \equal{\iso@dateformat}{shortorig}}{%
442            \iso@printday{#3}.}{\iso@printday{#3}}%
443          }{\iso@printmonthday@danish{#2}{#3}}}{%
444        \begingroup
445          \printyearon
446          \csname iso@printdate@\iso@languagename\endcsname{%
447            #1}{#2}{#3}%
448        \endgroup}%
```

Print the end date.

```
449      \iso@rangesign\csname iso@printdate@\iso@languagename\endcsname{%
450        #4}{#5}{#6}%
451    }{%
452    }%
453 }
```

`\iso@rangesign@danish` Sets the word between start and end date in a date range to " til ".

```
454 \expandafter\def\csname iso@rangesign@\CurrentOption\endcsname{~til~}
```

Define the language name that will the active language for isodate if none of the packages babel.sty, german.sty, and ngerman.sty is loaded and if this is the last language that is used for isodate. If one of the above packages is used this definition

will be overridden by the command `\languagename` that will always return the current used language.

```
455 \def\iso@languagename{danish}%
```

Redefine the command `\datedanish` that is used by babel to switch to the original Danish date format to enable the use of different date formats. This has to be done after the preamble in order to ensure to overwrite the babel command.

```
456 \AtBeginDocument{%
457   \ifx\undefined\iso@datedanish\else
458     \def\datedanish{\iso@datedanish}%
459   \fi
460 }
461 ⟨/danish⟩
```

D.3   Language definition file english.idf

`\iso@languageloaded` Define the command `\iso@languageloaded` in order to enable `isodate.sty` to determine if at least one language is loaded.

```
462 ⟨*english⟩
463 \let\iso@languageloaded\active
```

`\month@english` Prints the name of today's month in the long form for the original date format.

```
464 \def\month@english{\ifcase\month\or
465     January\or February\or March\or April\or May\or June\or
466     July\or August\or September\or October\or November\or December\fi}
```

British and American English dates are very different. So handle them seperately. It might have been easier to put them in different files but I wanted to organize my files analogous to babel.

First handle British English.

```
467 \ifthenelse{\equal{\CurrentOption}{english}\or
468            \equal{\CurrentOption}{british}\or
469            \equal{\CurrentOption}{UKenglish}}{%
470 \typeout{Define commands for English date format}
```

`\day@english` Prints today's day for the original date format.

```
471   \def\day@english{%
472     \ifiso@cleanlook
473       \day
474     \else
475       \ifcase\day\or
476         1st\or 2nd\or 3rd\or 4th\or 5th\or
477         6th\or 7th\or 8th\or 9th\or 10th\or
478         11th\or 12th\or 13th\or 14th\or 15th\or
479         16th\or 17th\or 18th\or 19th\or 20th\or
480         21st\or 22nd\or 23rd\or 24th\or 25th\or
481         26th\or 27th\or 28th\or 29th\or 30th\or
482         31st%
```

25

```
483        \fi
484      \fi
485    }
```

`\iso@printmonthday@english` Prints the month and the day given as two arguments (`{mm}{dd}`) in the current date format.

```
486    \def\iso@printmonthday@english#1#2{%
```

Numeric and short date format: `dd/mm/`

```
487      \ifthenelse{\equal{\iso@dateformat}{numeric}\or%
488        \equal{\iso@dateformat}{short}}{%
489        \iso@printday{#2}/\iso@printmonth{#1}\ifiso@printyear/\fi}{%
```

ISO date format: `mm-dd`

```
490        \ifthenelse{\equal{\iso@dateformat}{iso}}{%
491          \iso@printmonth{#1}\iso@isodash\iso@printday{#2}}{%
```

LᴬTᴇX date format: `mm/dd`

```
492          \ifthenelse{\equal{\iso@dateformat}{TeX}}{%
493            \iso@printmonth{#1}/\iso@printday{#2}}{%
```

Original date format: `ddd mmm`

```
494            \ifthenelse{\equal{\iso@dateformat}{orig}\or
495                       \equal{\iso@dateformat}{shortorig}}{%
496              \begingroup
497              \edef\lday{#2}\def\day{\lday}%
498              \edef\lmonth{#1}\def\month{\lmonth}%
499              \day@english~\month@english%
500              \endgroup
501              }{}}}}%
502    }
```

`\iso@printdate@english` Prints the date given as three arguments (`{yyyy}{mm}{dd}`) in the actual date format.

```
503    \def\iso@printdate@english#1#2#3{%
```

ISO date format: `yyyy-\iso@printmonthday@english`

```
504      \ifthenelse{\equal{\iso@dateformat}{iso}}{%
505        \ifiso@printyear\iso@yearfour{\number#1}\iso@isodash\fi}{%
```

LᴬTᴇX date format: `yyyy/\iso@printmonthday@english`

```
506      \ifthenelse{\equal{\iso@dateformat}{TeX}}{%
507        \ifiso@printyear\iso@yearfour{\number#1}/\fi}{}}%
508    \iso@printmonthday@english{\number#2}{\number#3}%
```

Numeric date format: `\iso@printmonthday@english yyyy`

```
509    \ifiso@printyear
510      \ifthenelse{\equal{\iso@dateformat}{numeric}}{\iso@yearfour{\number#1}}{%
```

Original date format: `\iso@printmonthday@english~yyyy`

```
511        \ifthenelse{\equal{\iso@dateformat}{orig}}{~\iso@yearfour{\number#1}}{%
```

Short original date format: \iso@printmonthday@english~yy

```
512          \ifthenelse{\equal{\iso@dateformat}{shortorig}}{%
513            ~\iso@twodigitsign\iso@yeartwo{\number#1}}{%
```

Short date format: \iso@printmonthday@english yy

```
514          \ifthenelse{\equal{\iso@dateformat}{short}}{%
515            \iso@yeartwo{\number#1}}{%
516            }}}%
517      }%
518    \fi
519  }
```

\iso@printdate@UKenglish   Just a second name for \iso@printdate@UKenglish.

```
520  \def\iso@printdate@UKenglish{\iso@printdate@english}
521  \def\iso@printdate@british{\iso@printdate@english}
```

\iso@dateenglish   This command redefines the \today command to print in the actual date format.

```
522  \def\iso@dateenglish{%
523    \def\today{\iso@printdate@english{\year}{\month}{\day}}}%
```

\iso@daterange@...   Define date-range commands for dialects of English.

```
524  \expandafter\def\csname iso@daterange@\CurrentOption\endcsname{%
525    \iso@daterange@english}%
```

\iso@daterange@english   This command takes six arguments ({yyyy1}{mm1}{dd1}{yyyy2}{mm2}{dd2}) and prints the corrosponding date range in the actual date format.

```
526  \def\iso@daterange@english#1#2#3#4#5#6{%
```

ISO or LATEX date format.

```
527      \ifthenelse{\equal{\iso@dateformat}{iso}\or%
528                  \equal{\iso@dateformat}{TeX}}{%
```

Print the start date.

```
529        \csname iso@printdate@\iso@languagename\endcsname{%
530          #1}{#2}{#3}\iso@rangesign%
```

If year and month are equal, only print the day of the end date. If only the year is equal, only print month and day of the end date. Otherwise print the whole end date.

```
531        \ifthenelse{\equal{\number#1}{\number#4}}{%
532          \ifthenelse{\equal{\number#2}{\number#5}}{\iso@printday{#6}%
533            }{\iso@printmonthday@english{#5}{#6}}}{%
534          \csname iso@printdate@\iso@languagename\endcsname{#4}{#5}{#6}}}{%
```

Numeric, short, or original date format.

If year and month are equal, only print the day of the start date. If only the year is equal, only print month and day of the start date. Otherwise print the whole start date.

```
535        \ifthenelse{\equal{\number#1}{\number#4}}{%
536          \ifthenelse{\equal{\number#2}{\number#5}}{%
```

27

```
537            \ifthenelse{\equal{\iso@dateformat}{orig}\or
538                    \equal{\iso@dateformat}{shortorig}}{%
539              \begingroup
540                \edef\lday{#3}\def\day{\lday}%
541                \day@english\endgroup}{\iso@printday{#3}}%
542          }{\iso@printmonthday@english{#2}{#3}}}{%
543        \csname iso@printdate@\iso@languagename\endcsname{#1}{#2}{#3}}%
```

Print the end date.

```
544        \iso@rangesign\csname iso@printdate@\iso@languagename\endcsname{%
545          #4}{#5}{#6}%
546    }{%
547    }%
548  }
```

Define the language name that will the active language for isodate if none of the packages babel.sty, german.sty, and ngerman.sty is loaded and if this is the last language that is used for isodate. If one of the above packages is used this definition will be overridden by the command `\languagename` that will always return the current used language.

```
549    \def\iso@languagename{english}%
```

The end of the British section.

Second handle Australian and New Zealand.

```
550 }{%
551  \ifthenelse{\equal{\CurrentOption}{australian}\or%
552                \equal{\CurrentOption}{newzealand}}{%
553  \typeout{Define commands for Australian date format}
```

\iso@printmonthday@australian Prints the month and the day given as two arguments ({mm}{dd}) in the current date format.

```
554      \def\iso@printmonthday@australian#1#2{%
```

Numeric and short date format: dd/mm/

```
555        \ifthenelse{\equal{\iso@dateformat}{numeric}\or%
556          \equal{\iso@dateformat}{short}}{%
557          \iso@printday{#2}/\iso@printmonth{#1}\ifiso@printyear/\fi}{%
```

ISO date format: mm-dd

```
558          \ifthenelse{\equal{\iso@dateformat}{iso}}{%
559          \iso@printmonth{#1}\iso@isodash\iso@printday{#2}}{%
```

LATEX date format: mm/dd

```
560          \ifthenelse{\equal{\iso@dateformat}{TeX}}{%
561            \iso@printmonth{#1}/\iso@printday{#2}}{%
```

Original date format: ddd mmm

```
562            \ifthenelse{\equal{\iso@dateformat}{orig}\or
563                    \equal{\iso@dateformat}{shortorig}}{%
564              \begingroup
565 %                \edef\lday{#2}\def\day{\lday}%
```

```
566            \edef\lmonth{#1}\def\month{\lmonth}%
567            \iso@printday{#2}~\month@english%
568            \endgroup
569          }{}}}}%
570        }
```

\iso@printdate@australian Prints the date given as three arguments ({yyyy}{mm}{dd}) in the actual date format.

```
571      \def\iso@printdate@australian#1#2#3{%
```

ISO date format: yyyy-\iso@printmonthday@australian

```
572        \ifiso@printyear
573          \ifthenelse{\equal{\iso@dateformat}{iso}}{%
574            \iso@yearfour{\number#1}\iso@isodash}{%
```

LATEX date format: yyyy/\iso@printmonthday@australian

```
575            \ifthenelse{\equal{\iso@dateformat}{TeX}}{%
576              \iso@yearfour{\number#1}/}{}%
577          }%
578        \fi
579        \iso@printmonthday@australian{\number#2}{\number#3}%
```

Numeric date format: \iso@printmonthday@australian yyyy

```
580        \ifiso@printyear
581          \ifthenelse{\equal{\iso@dateformat}{numeric}}{%
582            \iso@yearfour{\number#1}}{%
```

Original date format: \iso@printmonthday@australian~yyyy

```
583            \ifthenelse{\equal{\iso@dateformat}{orig}}{%
584              ~\iso@yearfour{\number#1}}{%
```

Short original date format: \iso@printmonthday@australian~yy

```
585              \ifthenelse{\equal{\iso@dateformat}{shortorig}}{%
586                ~\iso@twodigitsign\iso@yeartwo{\number#1}}{%
```

Short date format: \iso@printmonthday@australian yy

```
587                \ifthenelse{\equal{\iso@dateformat}{short}}{%
588                  \iso@yeartwo{\number#1}}{%
589                  }}}%
590          }%
591        \fi
592      }
```

\iso@printdate@newzealand Just a second name for \iso@printdate@UKenglish.

```
593      \def\iso@printdate@newzealand{\iso@printdate@australian}
```

\iso@dateaustralian This command redefines the \today command to print in the actual date format.

```
594      \def\iso@dateaustralian{%
595        \def\today{\iso@printdate@australian{\year}{\month}{\day}}}%
```

\iso@daterange@... Define date-range commands for dialects of Australian.

```
596      \expandafter\def\csname iso@daterange@\CurrentOption\endcsname{%
597        \iso@daterange@australian}%
```

29

`\iso@daterange@australian` This command takes six arguments (`{yyyy1}{mm1}{dd1}{yyyy2}{mm2}{dd2}`) and prints the corrosponding date range in the actual date format.

```
598        \def\iso@daterange@australian#1#2#3#4#5#6{%
```

ISO or LATEX date format.

```
599            \ifthenelse{\equal{\iso@dateformat}{iso}\or%
600                       \equal{\iso@dateformat}{TeX}}{%
```

Print the start date.

```
601                \csname iso@printdate@\iso@languagename\endcsname{%
602                    #1}{#2}{#3}\iso@rangesign%
```

If year and month are equal, only print the day of the end date. If only the year is equal, only print month and day of the end date. Otherwise print the whole end date.

```
603                \ifthenelse{\equal{\number#1}{\number#4}}{%
604                    \ifthenelse{\equal{\number#2}{\number#5}}{\iso@printday{#6}%
605                      }{\iso@printmonthday@australian{#5}{#6}}}{%
606                    \csname iso@printdate@\iso@languagename\endcsname{#4}{#5}{#6}}}{%
```

Numeric, short, or original date format.

If year and month are equal, only print the day of the start date. If only the year is equal, only print month and day of the start date. Otherwise print the whole start date.

```
607                \ifthenelse{\equal{\number#1}{\number#4}}{%
608                    \ifthenelse{\equal{\number#2}{\number#5}}{%
609                      \ifthenelse{\equal{\iso@dateformat}{orig}}{%
610                        \begingroup
611 %                        \edef\lday{#3}\def\day{\lday}%
612                        \iso@printday{#3}\endgroup}{\iso@printday{#3}}%
613                      }{\iso@printmonthday@australian{#2}{#3}}}{%
614                    \csname iso@printdate@\iso@languagename\endcsname{#1}{#2}{#3}}%
```

Print the end date.

```
615                \iso@rangesign\csname iso@printdate@\iso@languagename\endcsname{%
616                    #4}{#5}{#6}%
617            }{%
618            }%
619        }
```

Define the language name that will the active language for isodate if none of the packages babel.sty, german.sty, and ngerman.sty is loaded and if this is the last language that is used for isodate. If one of the above packages is used this definition will be overridden by the command `\languagename` that will always return the current used language.

```
620        \def\iso@languagename{australian}%
```

The end of the Australian section.

Third, handle American.

```
621    }{%
622    \typeout{Define commands for American date format}
```

`\iso@printmonthday@american` Prints the month and the day given as two arguments (`{mm}{dd}`) in the current date format.

```
623        \def\iso@printmonthday@american#1#2{%
```

Numeric and short date format: `mm/dd/`

```
624          \ifthenelse{\equal{\iso@dateformat}{numeric}\or%
625           \equal{\iso@dateformat}{short}}{%
626           \iso@printmonth{#1}/\iso@printday{#2}\ifiso@printyear/\fi}{%
```

ISO date format: `mm-dd`

```
627          \ifthenelse{\equal{\iso@dateformat}{iso}}{%
628            \iso@printmonth{#1}\iso@isodash\iso@printday{#2}}{%
```

LAT_EX date format: `mm/dd`

```
629          \ifthenelse{\equal{\iso@dateformat}{TeX}}{%
630            \iso@printmonth{#1}/\iso@printday{#2}}{%
```

Original date format: `mmm d`

```
631          \ifthenelse{\equal{\iso@dateformat}{orig}\or
632                      \equal{\iso@dateformat}{shortorig}}{%
633            \begingroup%
634            \edef\lmonth{#1}%
635             \def\month{\lmonth}\month@english%
636            \endgroup
637            ~\iso@printday{#2}%
638            }{}}}%
639        }%
640      }
```

`\iso@printdate@american` Prints the date given as three arguments (`{yyyy}{mm}{dd}`) in the actual date format.

```
641        \def\iso@printdate@american#1#2#3{%
```

ISO date format: `yyyy-\iso@printmonthday@american`

```
642        \ifiso@printyear
643         \ifthenelse{\equal{\iso@dateformat}{iso}}{%
644           \iso@yearfour{\number#1}\iso@isodash}{%
```

LAT_EX date format: `yyyy/\iso@printmonthday@american`

```
645          \ifthenelse{\equal{\iso@dateformat}{TeX}}{%
646            \iso@yearfour{\number#1}/}{}}%
647        \fi
648        \iso@printmonthday@american{\number#2}{\number#3}%
```

Numeric date format: `\iso@printmonthday@american yyyy`

```
649        \ifiso@printyear
650         \ifthenelse{\equal{\iso@dateformat}{numeric}}{%
651           \iso@yearfour{\number#1}}{%
```

Original date format: `\iso@printmonthday@american,~yyyy`

```
652          \ifthenelse{\equal{\iso@dateformat}{orig}}{%
653            ,~\iso@yearfour{\number#1}}{%
```

Short original date format: \iso@printmonthday@american,~yyyy

```
654        \ifthenelse{\equal{\iso@dateformat}{shortorig}}{%
655            ,~\iso@twodigitsign\iso@yeartwo{\number#1}}{%
```

Short date format: \iso@printmonthday@american yy

```
656        \ifthenelse{\equal{\iso@dateformat}{short}}{%
657            \iso@yeartwo{\number#1}}{}}}%
658      }%
659     \fi
660    }
```

\iso@printdate@USenglish   Just a second name for \iso@printdate@UKamerican.

```
661     \def\iso@printdate@USenglish{\iso@printdate@american}
```

\iso@dateamerican   This command redefines the \today command to print in the actual date format.

```
662     \def\iso@dateamerican{%
663       \def\today{\iso@printdate@american{\year}{\month}{\day}}}%
```

\iso@daterange@...   Define date-range commands for dialects of American.

```
664     \expandafter\def\csname iso@daterange@\CurrentOption\endcsname{%
665       \iso@daterange@american}%
```

\iso@daterange@american   This command takes six arguments ({yyyy1}{mm1}{dd1}{yyyy2}{mm2}{dd2})
and prints the corrosponding date range in the actual date format.

```
666     \def\iso@daterange@american#1#2#3#4#5#6{%
```

ISO or LATEX date format.

```
667        \ifthenelse{\equal{\iso@dateformat}{iso}\or%
668                   \equal{\iso@dateformat}{TeX}}{%
```

Print the start date.

```
669         \csname iso@printdate@\iso@languagename\endcsname{#1}{#2}{#3}%
670         \iso@rangesign%
```

If year and month are equal, only print the day of the end date. If only the year is
equal, only print month and day of the end date. Otherwise print the whole end
date.

```
671         \ifthenelse{\equal{\number#1}{\number#4}}{%
672          \ifthenelse{\equal{\number#2}{\number#5}}{\iso@printday{#6}%
673            }{\iso@printmonthday@american{#5}{#6}}}{%
674          \csname iso@printdate@\iso@languagename\endcsname{%
675            #4}{#5}{#6}}}{%
```

Original date format.

If year and month are equal, print mmm d1 to d2, yyyy. If only the year is
equal, print mmm1 d1 to mmm2 d2, yyyy. Otherwise print the whole start and
end date.

```
676         \ifthenelse{\equal{\iso@dateformat}{orig}\or
677                   \equal{\iso@dateformat}{shortorig}}{%
678          \ifthenelse{\equal{\number#1}{\number#4}}{%
```

```
679              \ifthenelse{\equal{\number#2}{\number#5}}{%
680                \iso@printmonthday@american{#2}{#3}\iso@rangesign%
681                \iso@printday{#6},~%
682                \ifthenelse{\equal{\iso@dateformat}{orig}}{%
683                  \number#4}{\iso@twodigitsign\iso@yeartwo{\number#4}}%
684                }{%
685                \iso@printmonthday@american{#2}{#3}\iso@rangesign%
686                \csname iso@printdate@\iso@languagename\endcsname{%
687                  #4}{#5}{#6}}}{%
688              \csname iso@printdate@\iso@languagename\endcsname{#1}{#2}{#3}%
689              \iso@rangesign%
690              \csname iso@printdate@\iso@languagename\endcsname{%
691                #4}{#5}{#6}}}{%
```

Numeric or short date format.

If year and month are equal, only print the day of the end date. Otherwise print the whole end date.

```
692              \ifthenelse{\equal{\number#1}{\number#4}}{%
693              \iso@printmonthday@american{#2}{#3}}{%
694              \csname iso@printdate@\iso@languagename\endcsname{#1}{#2}{#3}}%
```

Print the end date.

```
695            \iso@rangesign\csname iso@printdate@\iso@languagename\endcsname{%
696              #4}{#5}{#6}}%
697          }%
698        }
```

Define the language name that will the active language for isodate if none of the packages babel.sty, german.sty, and ngerman.sty is loaded and if this is the last language that is used for isodate. If one of the above packages is used this definition will be overridden by the command `\languagename` that will always return the current used language.

```
699        \def\iso@languagename{american}%
```

The end of the American section.

```
700    }
701 }
```

Sets the word between start and end date in a date range to " to".

```
702 \expandafter\def\csname iso@rangesign@\CurrentOption\endcsname{~to~}
```

Redefine the command date*language* that is used by babel.sty, german.sty, and ngerman.sty to switch to the original English/American date format to enable the use of different date formats. This has to be done after the preamble in order to ensure to overwrite the babel command.

Do this only if `\iso@date`language is defined.

```
703 \AtBeginDocument{%
704   \ifx\undefined\iso@dateenglish\else
705     \def\dateenglish{\iso@dateenglish}%
706     \def\datebritish{\iso@dateenglish}%
```

```
707    \def\dateUKenglish{\iso@dateenglish}%
708  \fi
709  \ifx\undefined\iso@dateaustralian\else
710    \def\dateaustralian{\iso@dateaustralian}%
711    \def\datenewzeeland{\iso@dateaustralian}%
712  \fi
713  \ifx\undefined\iso@dateamerican\else
714    \def\dateamerican{\iso@dateamerican}%
715    \def\dateUSenglish{\iso@dateamerican}%
716  \fi
717 }
718 ⟨/english⟩
```

D.4   Language definition file french.idf

\iso@languageloaded   Define the command \iso@languageloaded in order to enable isodate.sty to
determine if at least one language is loaded.

```
719 ⟨∗french⟩
720 \let\iso@languageloaded\active
721 \typeout{Define commands for French date format}

722 \def\month@french{\ifcase\month\or
723  janvier\or f\'evrier\or mars\or avril\or mai\or juin\or
724  juillet\or ao\^ut\or septembre\or octobre\or novembre\or
725  d\'ecembre\fi}
726 \def\iso@printmonthday@french#1#2{%
727  \ifthenelse{\equal{\iso@dateformat}{numeric}\or%
728    \equal{\iso@dateformat}{short}}{%
729    \iso@printday{#2}/\iso@printmonth{#1}\ifiso@printyear/\fi}{%
730    \ifthenelse{\equal{\iso@dateformat}{iso}}{%
731      \ifiso@printyear\iso@isodash\fi\iso@printmonth{#1}%
732      \iso@isodash\iso@printday{#2}}{%
733      \ifthenelse{\equal{\iso@dateformat}{TeX}}{%
734        \ifiso@printyear/\fi\iso@printmonth{#1}/\iso@printday{#2}}{%
735        \ifthenelse{\equal{\iso@dateformat}{orig}\or
736                    \equal{\iso@dateformat}{shortorig}}{%
737          \begingroup
738          \edef\lday{#2}\edef\day{\lday}%
739          \edef\lmonth{#1}\def\month{\lmonth}%
740          \number\day\ifnum1=\day \noexpand\ier\fi~\month@french%
741          \endgroup
742          }{}}}}%
743  }
744 \def\iso@printdate@french#1#2#3{%
745  \ifthenelse{\equal{\iso@dateformat}{iso}\or%
746    \equal{\iso@dateformat}{TeX}}{%
747    \ifiso@printyear\iso@yearfour{\number#1}\fi}{}%
748  \iso@printmonthday@french{\number#2}{\number#3}%
749  \ifiso@printyear
```

34

```
750     \ifthenelse{\equal{\iso@dateformat}{numeric}}{\iso@yearfour{\number#1}}{%
751       \ifthenelse{\equal{\iso@dateformat}{orig}}{~\iso@yearfour{\number#1}}{%
752         \ifthenelse{\equal{\iso@dateformat}{shortorig}}{%
753           ~\iso@twodigitsign\iso@yeartwo{\number#1}}{%
754           \ifthenelse{\equal{\iso@dateformat}{short}}{%
755             \iso@yeartwo{\number#1}}{}}}}%
756   \fi
757 }

758 \def\iso@datefrench{%
759   \def\today{\iso@printdate@french{\year}{\month}{\day}}}%
```

\iso@daterange@...   Define date-range commands for dialects.

```
760     \expandafter\def\csname iso@daterange@\CurrentOption\endcsname{%
761       \iso@daterange@french}%

762 \def\iso@daterange@french#1#2#3#4#5#6{%
763   \ifthenelse{\equal{\iso@dateformat}{iso}\or%
764               \equal{\iso@dateformat}{TeX}}{%
765     \csname iso@printdate@\iso@languagename\endcsname{#1}{#2}{#3}%
766     \iso@rangesign%
767     \ifthenelse{\equal{\number#1}{\number#4}}{%
768       \ifthenelse{\equal{\number#2}{\number#5}}{\iso@printday{#6}%
769         }{\iso@printmonthday@french{#5}{#6}}}{%
770       \csname iso@printdate@\iso@languagename\endcsname{#4}{#5}{#6}}}{%

771     \ifthenelse{\equal{\number#1}{\number#4}}{%
772       \ifthenelse{\equal{\number#2}{\number#5}}{%
773         \ifthenelse{\equal{\iso@dateformat}{orig}}{%
774           \begingroup
775             \edef\lday{#3}\edef\day{\lday}%
776             \number\day\ifnum1=\day \noexpand\ier\fi
777             \endgroup}{\iso@printday{#3}}%
778         }{\iso@printmonthday@french{#2}{#3}}}{%
779       \csname iso@printdate@\iso@languagename\endcsname{#1}{#2}{#3}%
780     \iso@rangesign\csname iso@printdate@\iso@languagename\endcsname{%
781       #4}{#5}{#6}%
782 }{%
783     }%
784 }

785 \expandafter\def\csname iso@rangesign@\CurrentOption\endcsname{~au~}
```

Define the language name that will the active language for isodate if none of the packages babel.sty, german.sty, and ngerman.sty is loaded and if this is the last language that is used for isodate. If one of the above packages is used this definition will be overridden by the command \languagename that will always return the current used language.

```
786 \def\iso@languagename{french}%
```

\datefrenchb has to be defined additionally because babel starts with language frenchb instead of french.

```
787 \AtBeginDocument{%
788   \ifx\undefined\iso@datefrench\else
789     \def\datefrench{\iso@datefrench}%
790     \def\datefrenchb{\iso@datefrench}%
791   \fi
792 }
793 ⟨/french⟩
```

D.5   Language definition file german.idf

\iso@languageloaded   Define the command \iso@languageloaded in order to enable isodate.sty to determine if at least one language is loaded.

```
794 ⟨∗german⟩
795 \let\iso@languageloaded\active
796 \typeout{Define commands for German date format (\CurrentOption)}
```

Define spaces between day and month resp. month and year. dm stands for day-month and my for month-year. The defaults are taken from the Duden [2].

```
797 \def\iso@dmsepgerman{\,}%
798 \def\iso@mylongsepgerman{~}%
799 \def\iso@myshortsepgerman{\,}%
```

\daymonthsepgerman   Change space between day and month in numeric date formats for the German language. The only parameter is the new spacing.

```
800 \DeclareRobustCommand*\daymonthsepgerman[1]{\def\iso@dmsepgerman{#1}}
801 %    \begin{macrocode}
802 % \end{macro}
803 % \begin{macro}{\monthyearsepgerman}
804 % Change space between month and year in numeric date formats for the
805 % German language. The first parameter is the new spacing for the long
806 % format and the second for the short format.
807 %    \begin{macrocode}
808 \DeclareRobustCommand*\monthyearsepgerman[2]{%
809   \def\iso@mylongsepgerman{#1}%
810   \def\iso@myshortsepgerman{#2}}
```

```
811 \def\month@german{\ifcase\month\or
812   Januar\or Februar\or M\"arz\or April\or Mai\or Juni\or
813   Juli\or August\or September\or Oktober\or November\or Dezember\fi}
814 \def\month@ngerman{\month@german}
815 \def\month@austrian{\ifnum1=\month
816   J\"anner\else \month@german\fi}
817 \def\month@naustrian{\month@austrian}
```

```
818 \@namedef{iso@printmonthday@\CurrentOption}#1#2{%
819   \ifthenelse{\equal{\iso@dateformat}{numeric}\or%
820               \equal{\iso@dateformat}{short}}{%
821     \iso@printday{#2}.\iso@dmsepgerman\iso@printmonth{#1}.}{%
822     \ifthenelse{\equal{\iso@dateformat}{iso}}{%
```

36

```
823     \iso@printmonth{#1}\iso@isodash\iso@printday{#2}}{%
824     \ifthenelse{\equal{\iso@dateformat}{TeX}}{%
825       \iso@printmonth{#1}/\iso@printday{#2}}{%
826       \ifthenelse{\equal{\iso@dateformat}{orig}\or
827                   \equal{\iso@dateformat}{shortorig}}{%
828       \iso@printday{#2}.~\begingroup
829       \edef\lmonth{#1}%
830       \def\month{\lmonth}\csname month@\iso@languagename\endcsname%
831       \endgroup
832       }{}}}}%
833 }
834 \@namedef{iso@printdate@\CurrentOption}#1#2#3{%
835   \ifiso@printyear
836     \ifthenelse{\equal{\iso@dateformat}{iso}}{%
837       \iso@yearfour{\number#1}\iso@isodash}{%
838       \ifthenelse{\equal{\iso@dateformat}{TeX}}{%
839       \iso@yearfour{\number#1}/}{}}%
840   \fi
841   \csname iso@printmonthday@\iso@languagename\endcsname{%
842     \number#2}{\number#3}%
843   \ifiso@printyear
844     \ifthenelse{\equal{\iso@dateformat}{numeric}}{%
845       \iso@mylongsepgerman\iso@yearfour{\number#1}}{%
846       \ifthenelse{\equal{\iso@dateformat}{orig}}{~\iso@yearfour{\number#1}}{%
847         \ifthenelse{\equal{\iso@dateformat}{shortorig}}{%
848         ~\iso@twodigitsign\iso@yeartwo{\number#1}}{%
849         \ifthenelse{\equal{\iso@dateformat}{short}}{%
850           \iso@myshortsepgerman\iso@yeartwo{\number#1}}{}}}}%
851   \fi
852 }
853 \@namedef{iso@daterange@\CurrentOption}#1#2#3#4#5#6{%
854   \ifthenelse{\equal{\iso@dateformat}{iso}\or%
855               \equal{\iso@dateformat}{TeX}}{%
856     \csname iso@printdate@\iso@languagename\endcsname{#1}{#2}{#3}%
857     \iso@rangesign%
858     \ifthenelse{\equal{\number#1}{\number#4}}{%
859       \ifthenelse{\equal{\number#2}{\number#5}}{\iso@printday{#6}%
860         }{\csname iso@printmonthday@\iso@languagename\endcsname{#5}{#6}}}{%
861       \csname iso@printdate@\iso@languagename\endcsname{#4}{#5}{#6}}}{%
862     \ifthenelse{\equal{\number#1}{\number#4}}{%
863       \ifthenelse{\equal{\number#2}{\number#5}}{%
864         \ifthenelse{\equal{\iso@dateformat}{orig}}{%
865           \iso@printday{#3}}{\iso@printday{#3}.%
866         }{\csname iso@printmonthday@\iso@languagename\endcsname{%
867           #2}{#3}}}{%
868       \csname iso@printdate@\iso@languagename\endcsname{#1}{#2}{#3}%
869     \iso@rangesign\csname iso@printdate@\iso@languagename\endcsname{%
870       #4}{#5}{#6}%
871   }%
```

```
872 }
873 \expandafter\def\csname iso@rangesign@\CurrentOption\endcsname{~bis~}
874 \ifthenelse{\equal{\CurrentOption}{german}}{%
875   \def\iso@dategerman{%
876     \def\today{\iso@printdate@german{\year}{\month}{\day}}}%
```

Define the language name that will the active language for isodate if none of the packages babel.sty, german.sty, and ngerman.sty is loaded and if this is the last language that is used for isodate. If one of the above packages is used this definition will be overridden by the command \languagename that will always return the current used language.

```
877   \def\iso@languagename{german}%
878 }{%
879 \ifthenelse{\equal{\CurrentOption}{ngerman}}{%
880   \def\iso@datengerman{%
881     \def\today{\iso@printdate@ngerman{\year}{\month}{\day}}}%
```

Define the language name that will the active language for isodate if none of the packages babel.sty, german.sty, and ngerman.sty is loaded and if this is the last language that is used for isodate. If one of the above packages is used this definition will be overridden by the command \languagename that will always return the current used language.

```
882   \def\iso@languagename{ngerman}%
883 }{%
884 \ifthenelse{\equal{\CurrentOption}{austrian}}{%
885   \def\iso@dateaustrian{%
886     \def\today{\iso@printdate@austrian{\year}{\month}{\day}}}%
```

Define the language name that will the active language for isodate if none of the packages babel.sty, german.sty, and ngerman.sty is loaded and if this is the last language that is used for isodate. If one of the above packages is used this definition will be overridden by the command \languagename that will always return the current used language.

```
887   \def\iso@languagename{austrian}%
888 }{%
889 \ifthenelse{\equal{\CurrentOption}{naustrian}}{%
890   \def\iso@datenaustrian{%
891     \def\today{\iso@printdate@naustrian{\year}{\month}{\day}}}%
```

Define the language name that will the active language for isodate if none of the packages babel.sty, german.sty, and ngerman.sty is loaded and if this is the last language that is used for isodate. If one of the above packages is used this definition will be overridden by the command \languagename that will always return the current used language.

```
892   \def\iso@languagename{naustrian}%
893 }{%
894 }}}}
```

Redefine the command `date`language that is used by babel.sty, german.sty, and ngerman.sty to switch to the original German date format to enable the use of different date formats. This has to be done after the preamble in order to ensure to overwrite the babel command.

Do this only if `\iso@date`language is defined.

```
895 \AtBeginDocument{%
896   \ifx\undefined\iso@dategerman\else
897     \def\dategerman{\iso@dategerman}%
898   \fi
899   \ifx\undefined\iso@datengerman\else
900     \def\datengerman{\iso@datengerman}%
901   \fi
902   \ifx\undefined\iso@dateaustrian\else
903     \def\dateaustrian{\iso@dateaustrian}%
904   \fi
905   \ifx\undefined\iso@datenaustrian\else
906     \def\datenaustrian{\iso@datenaustrian}%
907   \fi
908 }
909 ⟨/german⟩
```

D.6   Language definition file italian.idf

`\iso@languageloaded` Define the command `\iso@languageloaded` in order to enable isodate.sty to determine if at least one language is loaded.

```
910 ⟨*italian⟩
911 \let\iso@languageloaded\active
912 \typeout{Define commands for Italian date format}

913 \def\month@italian{\ifcase\month\or
914   gennaio\or febbraio\or marzo\or aprile\or maggio\or giugno\or
915   luglio\or agosto\or settembre\or ottobre\or novembre\or
916   dicembre\fi}

917 \def\iso@printmonthday@italian#1#2{%
918   \ifthenelse{\equal{\iso@dateformat}{numeric}\or%
919     \equal{\iso@dateformat}{short}}{%
920     \iso@printday{#2}/\iso@printmonth{#1}\ifiso@printyear/\fi}{%
921     \ifthenelse{\equal{\iso@dateformat}{iso}}{%
922       \ifiso@printyear\iso@isodash\fi\iso@printmonth{#1}%
923       \iso@isodash\iso@printday{#2}}{%
924       \ifthenelse{\equal{\iso@dateformat}{TeX}}{%
925         \ifiso@printyear/\fi\iso@printmonth{#1}/\iso@printday{#2}}{%
926         \ifthenelse{\equal{\iso@dateformat}{orig}\or
927                     \equal{\iso@dateformat}{shortorig}}{%
928           \begingroup
929           \edef\lday{#2}\edef\day{\lday}%
930           \edef\lmonth{#1}\def\month{\lmonth}%
931           \number\day\ifnum1=\day \noexpand\textordmasculine\fi~\month@italian%
```

39

```
932        \endgroup
933        }{}}}}%
934    }

935 \def\iso@printdate@italian#1#2#3{%
936    \ifthenelse{\equal{\iso@dateformat}{iso}\or%
937      \equal{\iso@dateformat}{TeX}}{%
938      \ifiso@printyear\iso@yearfour{\number#1}\fi}{}%
939    \iso@printmonthday@italian{\number#2}{\number#3}%
940    \ifiso@printyear
941      \ifthenelse{\equal{\iso@dateformat}{numeric}}{\iso@yearfour{\number#1}}{%
942        \ifthenelse{\equal{\iso@dateformat}{orig}}{~\iso@yearfour{\number#1}}{%
943          \ifthenelse{\equal{\iso@dateformat}{shortorig}}{%
944            ~\iso@twodigitsign\iso@yeartwo{\number#1}}{%
945            \ifthenelse{\equal{\iso@dateformat}{short}}{%
946              \iso@yeartwo{\number#1}}{}}}}%
947    \fi
948 }

949 \def\iso@dateitalian{%
950    \def\today{\iso@printdate@italian{\year}{\month}{\day}}}%
```

\iso@daterange@...   Define date-range commands for dialects.

```
951    \expandafter\def\csname iso@daterange@\CurrentOption\endcsname{%
952      \iso@daterange@italian}%

953 \def\iso@daterange@italian#1#2#3#4#5#6{%
954    \ifthenelse{\equal{\iso@dateformat}{iso}\or%
955              \equal{\iso@dateformat}{TeX}}{%
956      \csname iso@printdate@\iso@languagename\endcsname{#1}{#2}{#3}%
957      \iso@rangesign%
958      \ifthenelse{\equal{\number#1}{\number#4}}{%
959        \ifthenelse{\equal{\number#2}{\number#5}}{\iso@printday{#6}%
960          }{\iso@printmonthday@italian{#5}{#6}}}{%
961        \csname iso@printdate@\iso@languagename\endcsname{#4}{#5}{#6}}}{%
962      \ifthenelse{\equal{\number#1}{\number#4}}{%
963        \ifthenelse{\equal{\number#2}{\number#5}}{%
964          \ifthenelse{\equal{\iso@dateformat}{orig}}{%
965            \begingroup
966              \edef\lday{#3}\edef\day{\lday}%
967              \number\day\ifnum1=\day \noexpand\textordmasculine\fi
968              \endgroup}{\iso@printday{#3}}%
969          }{\iso@printmonthday@italian{#2}{#3}}}{%
970        \csname iso@printdate@\iso@languagename\endcsname{#1}{#2}{#3}}%
971      \iso@rangesign\csname iso@printdate@\iso@languagename\endcsname{%
972        #4}{#5}{#6}%
973 }{%
974    }%
975 }

976 \expandafter\def\csname iso@rangesign@\CurrentOption\endcsname{~al~}
```

40

Define the language name that will the active language for isodate if none of the packages babel.sty, german.sty, and ngerman.sty is loaded and if this is the last language that is used for isodate. If one of the above packages is used this definition will be overridden by the command \languagename that will always return the current used language.

977 \def\iso@languagename{italian}%

978 \AtBeginDocument{%
979   \ifx\undefined\iso@dateitalian\else
980   \def\dateitalian{\iso@dateitalian}%
981   \fi
982 }
983 ⟨/italian⟩

D.7   Language definition file norsk.idf

This file was provided by Svend Tollak Munkejord (svend.t.munkejord@energy.sintef.no).

\iso@languageloaded Define the command \iso@languageloaded in order to enable isodate.sty to determine if at least one language is loaded.

984 ⟨∗norsk⟩
985 \let\iso@languageloaded\active
986 \typeout{Define commands for Norwegian date format}

\month@norsk Prints the name of today's month in the long form for the original date format.

987 \def\month@norsk{\ifcase\month\or
988   januar\or februar\or mars\or april\or mai\or juni\or
989   juli\or august\or september\or oktober\or november\or desember\fi}

\iso@printmonthday@norsk Prints the month and the day given as two arguments ({mm}{dd}) in the current date format.

990   \def\iso@printmonthday@norsk#1#2{%

Numeric and short date format: dd/mm/

991   \ifthenelse{\equal{\iso@dateformat}{numeric}\or%
992   \equal{\iso@dateformat}{short}}{%
993   \iso@printday{#2}/\iso@printmonth{#1}\ifiso@printyear/\fi}{%

ISO date format: -mm-dd

994   \ifthenelse{\equal{\iso@dateformat}{iso}}{%
995   \ifiso@printyear\iso@isodash\fi
996   \iso@printmonth{#1}\iso@isodash\iso@printday{#2}}{%

LaTeX date format: /mm/dd

997   \ifthenelse{\equal{\iso@dateformat}{TeX}}{%
998   \ifiso@printyear/\fi\iso@printmonth{#1}/\iso@printday{#2}}{%

Original date format: d. mmm

999   \ifthenelse{\equal{\iso@dateformat}{orig}\or
1000   \equal{\iso@dateformat}{shortorig}}{%

41

```
1001              \iso@printday{#2}.~\begingroup
1002              \edef\lmonth{#1}\def\month{\lmonth}%
1003              \month@norsk%
1004              \endgroup
1005            }{}}}}%
1006        }
```

\iso@printdate@norsk Prints the date given as three arguments ({yyyy}{mm}{dd}) in the actual date format

```
1007    \def\iso@printdate@norsk#1#2#3{%
```

ISO or LaTeXdate format: yyyy\iso@printmonthday@norsk

```
1008      \ifthenelse{\equal{\iso@dateformat}{iso}\or%
1009        \equal{\iso@dateformat}{TeX}}{%
1010        \ifiso@printyear\iso@yearfour{\number#1}\fi}{}%
1011      \iso@printmonthday@norsk{\number#2}{\number#3}%
```

numeric date format: \iso@printmonthday@norsk yyyy

```
1012      \ifiso@printyear
1013        \ifthenelse{\equal{\iso@dateformat}{numeric}}{\iso@yearfour{\number#1}}{%
```

original date format: \iso@printmonthday@norsk~yyyy

```
1014        \ifthenelse{\equal{\iso@dateformat}{orig}}{~\iso@yearfour{\number#1}}{%
```

short original date format: \iso@printmonthday@norsk~yyyy

```
1015          \ifthenelse{\equal{\iso@dateformat}{shortorig}}{%
1016            ~\iso@twodigitsign\iso@yeartwo{\number#1}}{%
```

short date format: \iso@printmonthday@norsk yy

```
1017          \ifthenelse{\equal{\iso@dateformat}{short}}{%
1018            \iso@yeartwo{\number#1}}{%
1019          }}}}%
1020      \fi
1021    }
```

\iso@datenorsk This command redefines the \today command to print in the actual date format.

```
1022    \def\iso@datenorsk{%
1023      \def\today{\iso@printdate@norsk{\year}{\month}{\day}}}%
```

\iso@daterange@... Define date-range commands for dialects.

```
1024    \expandafter\def\csname iso@daterange@\CurrentOption\endcsname{%
1025      \iso@daterange@norsk}%
```

\iso@daterange@norsk This command takes six arguments ({yyyy1}{mm1}{dd1}{yyyy2}{mm2}{dd2}) and prints the corrosponding date range in the actual date format.

```
1026    \def\iso@daterange@norsk#1#2#3#4#5#6{%
```

ISO or LaTeX date format.

```
1027    \ifthenelse{\equal{\iso@dateformat}{iso}\or%
1028                \equal{\iso@dateformat}{TeX}}{%
```

Print the start date.

```
1029     \csname iso@printdate@\iso@languagename\endcsname{#1}{#2}{#3}%
1030     \iso@rangesign%
```

If year and month are equal, only print the day of the end date. If only the year is equal, only print month and day of the end date. Otherwise print the whole end date.

```
1031     \ifthenelse{\equal{\number#1}{\number#4}}{%
1032       \ifthenelse{\equal{\number#2}{\number#5}}{\iso@printday{#6}%
1033         }{\iso@printmonthday@norsk{#5}{#6}}}{%
1034       \csname iso@printdate@\iso@languagename\endcsname{#4}{#5}{#6}}}{%
```

Numeric, short, or original date format.

If year and month are equal, only print the day of the start date. If only the year is equal, only print month and day of the start date. Otherwise print the whole start date.

```
1035     \ifthenelse{\equal{\number#1}{\number#4}}{%
1036       \ifthenelse{\equal{\number#2}{\number#5}}{%
1037         \ifthenelse{\equal{\iso@dateformat}{orig}\or
1038           \equal{\iso@dateformat}{shortorig}}{%
1039           \iso@printday{#3}.}{\iso@printday{#3}}%
1040         }{\iso@printmonthday@norsk{#2}{#3}}}{%
1041       \csname iso@printdate@\iso@languagename\endcsname{#1}{#2}{#3}%
```

Print the end date.

```
1042     \iso@rangesign\csname iso@printdate@\iso@languagename\endcsname{%
1043       #4}{#5}{#6}%
1044   }{%
1045   }%
1046 }
```

\iso@rangesign@norsk   Sets the word between start and end date in a date range to " til ".

```
1047 \expandafter\def\csname iso@rangesign@\CurrentOption\endcsname{~til~}
```

Define the language name that will the active language for isodate if none of the packages babel.sty, german.sty, and ngerman.sty is loaded and if this is the last language that is used for isodate. If one of the above packages is used this definition will be overridden by the command \languagename that will always return the current used language.

```
1048 \def\iso@languagename{norsk}%
```

Redefine the command \datenorsk that is used by babel to switch to the original Norsk date format to enable the use of different date formats. This has to be done after the preamble in order to ensure to overwrite the babel command.

```
1049 \AtBeginDocument{%
1050   \ifx\undefined\iso@datenorsk\else
1051     \def\datenorsk{\iso@datenorsk}%
1052   \fi
1053 }
1054 ⟨/norsk⟩
```

43

D.8 Language definition file swedish.idf

This file was provided by Christian Schlauer (christian.schlauer@web.de).

\iso@languageloaded Define the command \iso@languageloaded in order to enable isodate.sty to determine if at least one language is loaded.

```
1055 ⟨∗swedish⟩
1056 \let\iso@languageloaded\active
1057 \typeout{Define commands for Swedish date format}
```

\month@swedish Prints the name of today's month in the long form for the original date format.

```
1058 \def\month@swedish{\ifcase\month\or
1059     januari\or februari\or mars\or april\or maj\or juni\or
1060     juli\or augusti\or september\or oktober\or november\or december\fi}
```

\iso@printmonthday@swedish Prints the month and the day given as two arguments ({mm}{dd}) in the current date format.

```
1061   \def\iso@printmonthday@swedish#1#2{%
```

Numeric and short date format: dd/mm/

```
1062     \ifthenelse{\equal{\iso@dateformat}{numeric}\or%
1063       \equal{\iso@dateformat}{short}}{%
1064       \iso@printday{#2}/\iso@printmonth{#1}\ifiso@printyear/\fi}{%
```

ISO date format: -mm-dd

```
1065       \ifthenelse{\equal{\iso@dateformat}{iso}}{%
1066         \ifiso@printyear\iso@isodash\fi\iso@printmonth{#1}%
1067         \iso@isodash\iso@printday{#2}}{%
```

LaTeX date format: /mm/dd

```
1068         \ifthenelse{\equal{\iso@dateformat}{TeX}}{%
1069           \ifiso@printyear/\fi\iso@printmonth{#1}/\iso@printday{#2}}{%
```

Original date format: d. mmm

```
1070           \ifthenelse{\equal{\iso@dateformat}{orig}\or
1071                     \equal{\iso@dateformat}{shortorig}}{%
1072           \iso@printday{#2}.~\begingroup
1073           \edef\lmonth{#1}\def\month{\lmonth}%
1074           \month@swedish%
1075           \endgroup
1076           }{}}}}%
1077     }
```

\iso@printdate@swedish Prints the date given as three arguments ({yyyy}{mm}{dd}) in the actual date format

```
1078   \def\iso@printdate@swedish#1#2#3{%
```

ISO or LaTeXdate format: yyyy\iso@printmonthday@swedish

```
1079     \ifthenelse{\equal{\iso@dateformat}{iso}\or%
1080       \equal{\iso@dateformat}{TeX}}{%
1081       \ifiso@printyear\iso@yearfour{\number#1}\fi}{}%
1082     \iso@printmonthday@swedish{\number#2}{\number#3}%
```

44

numeric date format: `\iso@printmonthday@swedish yyyy`

```
1083    \ifiso@printyear
1084      \ifthenelse{\equal{\iso@dateformat}{numeric}}{\iso@yearfour{\number#1}}{%
```

original date format: `\iso@printmonthday@swedish~yyyy`

```
1085        \ifthenelse{\equal{\iso@dateformat}{orig}}{~\iso@yearfour{\number#1}}{%
```

short original date format: `\iso@printmonthday@swedish~yy`

```
1086          \ifthenelse{\equal{\iso@dateformat}{shortorig}}{%
1087            ~\iso@twodigitsign\iso@yeartwo{\number#1}}{%
```

short date format: `\iso@printmonthday@swedish yy`

```
1088            \ifthenelse{\equal{\iso@dateformat}{short}}{%
1089              \iso@yeartwo{\number#1}}{%
1090              }}}}%
1091    \fi
1092  }
```

`\iso@dateswedish` This command redefines the `\today` command to print in the actual date format.

```
1093  \def\iso@dateswedish{%
1094    \def\today{\iso@printdate@swedish{\year}{\month}{\day}}}%
```

`\iso@daterange@...` Define date-range commands for dialects.

```
1095  \expandafter\def\csname iso@daterange@\CurrentOption\endcsname{%
1096    \iso@daterange@swedish}%
```

`\iso@daterange@swedish` This command takes six arguments (`{yyyy1}{mm1}{dd1}{yyyy2}{mm2}{dd2}`) and prints the corrosponding date range in the actual date format.

```
1097 \def\iso@daterange@swedish#1#2#3#4#5#6{%
```

ISO or LaTeX date format.

```
1098    \ifthenelse{\equal{\iso@dateformat}{iso}\or%
1099                \equal{\iso@dateformat}{TeX}}{%
```

Print the start date.

```
1100      \csname iso@printdate@\iso@languagename\endcsname{%
1101        #1}{#2}{#3}\iso@rangesign%
```

If year and month are equal, only print the day of the end date. If only the year is equal, only print month and day of the end date. Otherwise print the whole end date.

```
1102      \ifthenelse{\equal{\number#1}{\number#4}}{%
1103        \ifthenelse{\equal{\number#2}{\number#5}}{\iso@printday{#6}%
1104          }{\iso@printmonthday@swedish{#5}{#6}}}{%
1105        \csname iso@printdate@\iso@languagename\endcsname{#4}{#5}{#6}}}{%
```

Numeric, short, or original date format.

If year and month are equal, only print the day of the start date. If only the year is equal, only print month and day of the start date. Otherwise print the whole start date.

```
1106      \ifthenelse{\equal{\number#1}{\number#4}}{%
```

```
1107        \ifthenelse{\equal{\number#2}{\number#5}}{%
1108          \ifthenelse{\equal{\iso@dateformat}{orig}\or
1109                     \equal{\iso@dateformat}{shortorig}}{%
1110          \iso@printday{#3}.}{\iso@printday{#3}}%
1111          }{\iso@printmonthday@swedish{#2}{#3}}}{%
1112        \csname iso@printdate@\iso@languagename\endcsname{%
1113          #1}{#2}{#3}}%
```

Print the end date.

```
1114        \iso@rangesign\csname iso@printdate@\iso@languagename\endcsname{%
1115          #4}{#5}{#6}%
1116 }{%
1117      }%
1118 }
```

\iso@rangesign@swedish Sets the word between start and end date in a date range to " till ".

```
1119 \expandafter\def\csname iso@rangesign@\CurrentOption\endcsname{~till~}
```

Define the language name that will the active language for isodate if none of the packages babel.sty, german.sty, and ngerman.sty is loaded and if this is the last language that is used for isodate. If one of the above packages is used this definition will be overridden by the command \languagename that will always return the current used language.

```
1120 \def\iso@languagename{swedish}%
```

Redefine the command \dateswedish that is used by babel to switch to the original Swedish date format to enable the use of different date formats. This has to be done after the preamble in order to ensure to overwrite the babel command.

```
1121 \AtBeginDocument{%
1122   \ifx\undefined\iso@dateswedish\else
1123     \def\dateswedish{\iso@dateswedish}%
1124   \fi
1125 }
1126 ⟨/swedish⟩
```

Change History

47