

# The termcal-de package

<https://github.com/SFr682k/termcal-de>

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*“To achieve great things, two things are needed;  
a plan, and not quite enough time”*

— LEONARD BERNSTEIN —

## Abstract

The termcal-de package provides a German localization to the termcal package written by Bill Mitchell, which is intended to print a term calendar for use in planning a class.

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## Dependencies and other requirements

The `termcal-de` package requires  $\TeX 2_{\epsilon}$  and the following packages:

<code>termcal</code>	The main <code>termcal</code> package
<code>pgfkeys</code> <code>pgfopts</code>	Packages required for defining PGF flavoured key-value sets and processing them as package options
<code>datetime2</code> <code>datetime2-german</code>	<code>termcal-de</code> uses <code>datetime2</code> and its German language module, <code>datetime2-german</code> , to print the date to the calendar cells. Please ensure that at least version 2.0 of <code>datetime2-german</code> is installed.

## Installation

Extract the package file first:

1. Run  $\TeX$  over the file `termcal-de.ins`
2. Move the resulting `.sty` file to `TEXMF/tex/latex/termcal-de/`

Then, you can compile the documentation yourself by executing

```
lualatex termcal-de-doc.dtx
makeindex -s gind.ist termcal-de-doc.idx
makeindex -s gglo.ist -o termcal-de-doc.gls termcal-de-doc.glo
lualatex termcal-de-doc.dtx
lualatex termcal-de-doc.dtx
```

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

In both cases, copy the files `termcal-de-doc.pdf` and `README.md` to `TEXMF/doc/latex/termcal-de/`

## License

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The latest version of this license is available at <http://www.latex-project.org/lppl.txt> and version 1.3c or later is part of all distributions of  $\TeX$  version 2008-05-04 or later.

This work has the LPPL maintenace status ‘maintained’. The current maintainer of this work is Sebastian Friedl.

This work consists of the following files:

- `termcal-de.dtx`,
- `termcal-de.ins`,
- the derived file `termcal-de.sty` and
- `termcal-de-doc.dtx`

## File I

# The documentation

## 1 Getting started

### 1.1 Loading the package

Load the package as usual with `\usepackage{termcal-de}`. Now, `termcal-de` looks for `termcal` and loads it when necessary.

`termcal-de` only adds a German localization to the `termcal` package.

So, if you are already familiar with `termcal`, you should read section 3 about differences to plain `termcal` *in any case*.

However, if you never used `termcal`, you could ...

- a) first read `termcal`'s documentation and take a look at section 3 afterwards or
- b) read the short tutorial on using `termcal` with `termcal-de` in section 2

### 1.2 Package options

## 2 A short tutorial

## 3 Differences to plain `termcal`

`termcal-de` does not only change the format of the printed dates, it also changes the date parameter's format expected by the standard `termcal` commands.

In following, affected commands are listed:

- `\begin{calendar}{<starting date>}{<nr of weeks>}`
- `\options{<date>}{<option list>}`
- `\caltext{<date>}{<text>}`

Plain `termcal` expects `<starting date>` and `<date>` to be given in the `m/d/y` format (e. g. `4/16/17` for April 16, 2017). Due to redefinition in `termcal-de`, both arguments, `<starting date>` and `<date>` have to be given in the `D.M.YYYY` format (for April 16, 2017: `16.4.2017`).

See table 1 for some examples.

plain <code>termcal</code>	with <code>termcal-de</code> package
<code>\begin{calendar}{3/16/11}{4}</code>	<code>\begin{calendar}{16.3.2011}{4}</code>
<code>\options{12/21/12}{\noclass}</code>	<code>\options{21.12.2012}{\noclass}</code>
<code>\caltext{2/17/18}{Exam}</code>	<code>\caltext{17.2.2018}{Exam}</code>

Table 1: Comparison between plain `termcal` and `termcal` extended with `termcal-de`

## File II

# The package code

### Initialize

Identify the package and require  $\LaTeX 2\epsilon$

```
1 \ProvidesPackage{termcal-de}[2018/03/06 German locals to the termcal package]
2 \NeedsTeXFormat{LaTeX2e}
```

### Require a basic set of packages

Require the “original” termcal package

```
3 \RequirePackage{termcal}
```

Require packages providing the key-value option stuff

```
4 \RequirePackage{pgfkeys}
5 \RequirePackage{pgfopts}
```

### Define options

Define variables:

```
6 \newif\if@termcalde@compat
7 \newif\if@termcalde@drawbox
8 \newif\if@termcalde@dtmconf@frompreamble
9 \newif\if@termcalde@dtmconf@useregional
10 \newif\if@termcalde@dtmconf@numeric
```

Set variables to default values:

```
11 \@termcalde@compatfalse
12 \@termcalde@drawboxfalse
13 \@termcalde@dtmconf@frompreamblefalse
14 \@termcalde@dtmconf@useregionaltrue
15 \@termcalde@dtmconf@numerictrue
```

Define »variable commands«, p.r.n. with default values:

```
16 \def\termcalde@setdrawbox{}
17 \def\termcalde@dtmdialect{german}
```

Define a compat option for switching on compatibility mode

```
18 \pgfkeys{%
19   /termcal-de/compat/.code={\@termcalde@compattrue}}
```

Define a drawdateframe option for configuring whether a frame is drawn around the date:

`always` Always draw a frame around the date

`atNewMonth` Draw a frame around the date at the beginning of a month

`never` Never draw a frame around the date

```

20% \changes{2.0}{2018-03-06}{Configurable date frame}
21 \pgfkeys{%
22   /termcal-de/drawdateframe/.cd, .is choice, .default=always,
23   always/.code={\def\termcalde@setdrawbox{\@termcalde@drawboxtrue}},
24   atNewMonth/.code={\def\termcalde@setdrawbox{%
25     \ifnewmonth\@termcalde@drawboxtrue%
26     \else\@termcalde@drawboxfalse%
27     \fi}},
28   never/.code={\def\termcalde@setdrawbox{\@termcalde@drawboxfalse}}}

```

Define a `datetime2` option for configuring `datetime2`:

**local** Defines which language module should be loaded.

Possible values are `german`, `de-DE`, `de-AT` and `de-CH` loading `datetime2-german's` according sub-module and `useregional`, which determines the used sub-module based on the language settings of `babel` or `polyglossia`

**numeric** Influences whether to use the numeric style when printing dates.

Possible values are `true` and `false`. Is the `numeric` key set without a value, it is assumed to be `true`.

**frompreamble** This option has to be set when `datetime2` is loaded in the preamble. Overrides all other options.

```

29 \pgfkeys{%
30   /termcal-de/datetime2/.code={\pgfkeys{/termcal-de/datetime2/.cd, #1}},
31   /termcal-de/datetime2/local/.cd, .is choice, .default=useregional,
32   useregional/.code={\@termcalde@dtmconf@useregionaltrue},
33   german/.code={%
34     \@termcalde@dtmconf@useregionalfalse%
35     \def\termcalde@dtmdialect{german}},
36   de-DE/.code={%
37     \@termcalde@dtmconf@useregionalfalse%
38     \def\termcalde@dtmdialect{de-DE}},
39   de-AT/.code={%
40     \@termcalde@dtmconf@useregionalfalse%
41     \def\termcalde@dtmdialect{de-AT}},
42   de-CH/.code={%
43     \@termcalde@dtmconf@useregionalfalse%
44     \def\termcalde@dtmdialect{de-CH}},
45   /termcal-de/datetime2/numeric/.cd, .is choice, .default=true,
46   true/.code={\@termcalde@dtmconf@numerictrue},
47   false/.code={\@termcalde@dtmconf@numericfalse},
48   /termcal-de/datetime2/frompreamble/.code={\@termcalde@dtmconf@frompreambletrue}
49 }

```

Process the options

```
50 \ProcessPgfPackageOptions{/termcal-de}
```

## Require and configure `datetime2`

`\termcalde@dtmnumeric` Define an auxiliary command, adding `=numeric` to `datetime2's` `useregional` key and adding `-numeric` to `datetime2's` module names, depending on the current configuration

of `datetime2`

```
51 \def\termcalde@dtmnumeric{%
52   \if@termcalde@dtmconf@numeric%
53     \if@termcalde@dtmconf@useregional=\else-\fi%
54     numeric\fi}
```

Require `datetime2` for printing dates inside the calendar boxes and configure it as long as the `datetime2=frompreamble` key is not set.

```
55 \if@termcalde@dtmconf@frompreamble\RequirePackage{datetime2}%
56 \else%
57   \RequirePackage[%
58     \if@termcalde@dtmconf@useregional{useregional}%
59     \else\termcalde@dtmdialect\fi%
60     %
61     \if@termcalde@dtmconf@useregional\termcalde@dtmnumeric\fi]{datetime2}%
62 \fi
```

When `datetime2`'s language module is loaded by using the module name, a hook executing `\DTMsetstyle` at the begin of the document is required for setting the date style to the numeric format.

```
63 \if@termcalde@dtmconf@frompreamble%
64   \if@termcalde@dtmconf@useregional\else%
65     \if@termcalde@dtmconf@numeric%
66       \AtBeginDocument{\DTMsetstyle{\termcalde@dtmdialect\termcalde@dtmnumeric}}%
67 \fi\fi\fi
```

## Redefinitions

`\setdate` Use D.M.YYYY instead of M/D/YY when entering dates from the code unless the `compat` option is given

```
68 \if@termcalde@compat\else%
69   \def\setdate@#1.#2.#3!{%
70     \setcounter{date}{#1}%
71     \setcounter{month}{#2}%
72     \setcounter{year}{#3}%
73     \global\newmonthtrue\setleap}%
74 \fi
```

`\curdate` This command is used internally by `termcal`.  
Redefine `\curdate`'s output format to be the same as `\setdate`'s

```
75 \if@termcalde@compat\else%
76   \def\curdate{\arabic{date}.\arabic{month}.\arabic{year}}%
77 \fi
```

`\currentdate` Provides a facility to print the date inside a cell's content.  
The date format can be configured via configuring `\DTMdisplaydate`.

```
78 \def\currentdate{\DTMdisplaydate{%
79   \arabic{year}}{\arabic{month}}{\arabic{date}}{-1}}
```

`\calprintdate` Prints the date displayed in the cell heading.

The date format can be configured via configuring `\DTMDisplaydate`.

```
80 \def\calprintdate{%  
81   \termcalde@setdrawbox%  
82   \if@termcalde@drawbox\framebox{%  
83     \DTMDisplaydate{\arabic{year}}{\arabic{month}}{\arabic{date}}{-1}}%  
84   \else\DTMDisplaydate{\arabic{year}}{\arabic{month}}{\arabic{date}}{-1}}%  
85   \fi}
```

## Change History

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