

# langcode.sty

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## Simple Language-Dependent Settings Based on Language Codes\*

Uwe Lück<sup>†</sup>

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### Abstract

langcode.sty in the first instance provides a command

```
\uselangcode{<chars>}
```

to adjust language-dependent settings, such as key words, typographical conventions, and language codes (ISO-639-1). An author frequently writing documents in two or more languages can use the same commands independently of the language, provided they are gathered in a list macro to be used by the `dowith` package. If  $\langle cmd \rangle$  is in the list, it is set to work like  $\langle chars \rangle \langle cmd \rangle$ , and a macro `\langcode` will expand to  $\langle chars \rangle$  (the respective tokens), usable in URLs.—The package is “generic,” based on `plainpkg`. The code has been used with `morehype` and `catchdq` (`catcodes`), but may be useful more generally.

**Related packages:** `babel`, `polyglossia`

**Keywords:** languages other than English; German, macro programming (programming structures), hypertext

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\*This document describes version [v0.2](#) of langcode.sty as of 2012/09/20.

<sup>†</sup><http://contact-ednotes.sty.de.vu>

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## 1 Installing and Calling

The file `langcode.sty` is provided ready, installation only requires putting it somewhere where  $\TeX$  finds it (which may need updating the filename data base).<sup>1</sup> The packages `dowith`, `plainpkg`, and `stacklet` (`catcodes`) must be installed as well.

As to calling (loading): `langcode` is a “`plainpkg` package” in the sense of the `plainpkg`<sup>2</sup> documentation that you may consult for details. So roughly,

- load it by `\usepackage{langcode}` if you can,
- otherwise by `\RequirePackage{langcode}`  
(perhaps from within another “`plainpkg` package”),
- or by `\input{langcode.sty}`
- or even by `\input{langcode.sty}` . . .

<sup>1</sup><http://www.tex.ac.uk/cgi-bin/texfaq2html?label=inst-wlcf>

<sup>2</sup>[ctan.org/pkg/plainpkg](http://ctan.org/pkg/plainpkg)

## 2 Header—plainpkg and Legalese

On the right hand side, that `plainpkg.tex` is loaded, before the package version is declared, for “generic” function:

```

1                                     \input plainpkg
2   \ProvidesPackage{langcode}[2012/09/20 v0.2 language adjustment (UL)]
3
4   %% Copyright (C) 2012 Uwe Lueck,
5   %% http://www.contact-ednotes.sty.de.vu
6   %% -- author-maintained in the sense of LPPL below --
7   %%
8   %% This file can be redistributed and/or modified under
9   %% the terms of the LaTeX Project Public License; either
10  %% version 1.3c of the License, or any later version.
11  %% The latest version of this license is in
12  %%   http://www.latex-project.org/lppl.txt
13  %% We did our best to help you, but there is NO WARRANTY.
14  %%
15  %% Please report bugs, problems, and suggestions via
16  %%
17  %%   http://www.contact-ednotes.sty.de.vu

```

## 3 Required

`langcode` is based on `dowith`:

```

18  \RequirePackage{dowith}

```

## 4 General Commands

`\uselangcode{<code>}` sets `\langcode` to `<code>`, runs `\langcodeadjust` on the items stored in `\langcodedependent`, and finally executes what is stored in `\langcodeextras`:

```

19  \def\uselangcode#1{%
20      \def\langcode{#1}%                               %% 2012/01/07:
21      \DoWithAllIn\langcodeadjust\langcodedependent
22      \langcodeextras}

```

`\langcodeadjust<letters>` defines `<letters>` to expand to `<code><letters>`:

```

23  \def\langcodeadjust#1{%
24      %   \edef#1{\expandafter\noexpand
25      %   \csname\langcode
26      %% <- 2012/09/17 ->
27      \edef#1{\withcsname\noexpand \langcode
28          \expandafter@gobble\string#1\endcsname}}

```

## 5 Sample Settings

Such settings once should be in some .cfg file [TODO](#)

### 5.1 What Must Be Varied

`\langcodedependent` is a list of commands that must be adjusted:

```
29 \def\langcodedependent{%                               %% 2012/01/07
30     \langcodeextras\dqtd\qtd\pardash\lastrev\toptopofpage
31     \monthname}                                       %% 2012/01/17
```

### 5.2 English vs. German

#### 5.2.1 Months

`\enmonthname{<num>}` yields the English name of the  $\langle num \rangle$ th month of the year:

```
32 \def\enmonthname#1{%
33     \ifcase #1\or
34         January\or February\or March\or   April\or
35         May\or June\or   July\or   August\or
36         September\or October\or November\or December%
37     \fi}
```

`\dmonthname{<num>}` yields the *German* name of the  $\langle num \rangle$ th month of the year:

```
38 \def\dmonthname#1{%
39     \ifcase #1\or
40         Januar\or Februar\or M"arz\or   April\or
41         Mai\or Juni\or   Juli\or   August\or
42         September\or Oktober\or November\or Dezember%
43     \fi}
```

#### 5.2.2 Quotes

For `\dqtd` settings, see (load) `catchdq` (catcodes bundle).<sup>3</sup> `\enqtd{<en-text>}` and `\deqtd{<de-text>}` (overridable, e.g., with `blog.sty`):

```
44 \ifx\deqtd\undefined \def\deqtd#1{\glq#1\grq} \fi
45 \ifx\enqtd\undefined \def\enqtd#1{‘#1’} \fi
```

You may get `\glq` and `\grq` from `ngerman.sty`

```
(\usepackage{ngerman}\originalTeX
```

if needed. Here is a little “tessst ‘inner’”, due to the default `\uselangcode{en}`, we now issue `\uselangcode{de}` to get „tessst ‚inner“.

<sup>3</sup>The test below required loading `catchdq` *earlier* than `langcode`.

### 5.2.3 Dashes

I introduced `\pardash` thinking of (German „Gedankenstrich“ and) long dashes as a weak version of a paragraph break. A paragraph break somehow means moving from one thought to another—almost the same what a long dash may mean.—Here I have switched to ‘en’ again, in order to get `\enpardash` by `\pardash`:

```
46 \ifx\enpardash\undefined \let\enpardash\textendash \fi
```

The „Gedankenstrich“ `\depardash` is not as long as the “thought dash” – er ist nur halb so lang—but it is surrounded by regular spaces:

```
47 \ifx\depardash\undefined \def\depardash{ \textendash\space} \fi
```

Some people prefer a so-called “hair space” surrounding the long dash.

### 5.2.4 Wikipedia

The previous Wikipedia link was obtained by `\Wikiref{hair_lspace}`, working like `\Wikienref{hair_lspace}`. This is an example of how `texlinks` makes use of `\uselangcode{<two-chars>}`.

### 5.2.5 blog.sty

In the present sample of `\langcodedependent`,

`\lastrev` and `\totopofpage`

remain. I use them for HTML with `blog.sty`—sorry, at present I cannot afford separating settings for a wider audience from my own ones.

## 5.3 Other Settings

I haven’t used English extras so far:

```
48 \let\enlangcodeextras\empty           %% \empty 2012/01/17
```

With German, I have used the `dhua` package for certain abbreviations:

```
49 \def\delangcodeextras{\RequirePackage{dhua}}
```

However, this setting disables `\uselangcode{de}` after `\begin{document}`—which has not a problem with `blog.sty`, where I use it daily. For the tests above, I *emptied* `\delangcodeextras`. I had not thought of changing the language *within* one document before.

## 6 Default Language Code

The default `\langcode` is ‘en’ for English:

```
50 \uselangcode{en}
```

## 7 Leaving the Package File

51 \endinput

## 8 VERSION HISTORY

52 v0.1 2012/01/07 in 'texblog.fdf'  
53 2012/01/17  
54 v0.2 2012/09/17 own plainpkg package (\newcommand -> \def, ...)  
55 2012/09/20 doc. much expanded;  
56 more blog-independent settings;  
57 \Provides: v0.2, caption shortened (tld -> lc ->)  
58