

The luavlna package

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1 Introduction

This is a small package for plain `luaTeX` and `luaLATeX`. In some languages, like Czech or Polish, there should be no single letter words at the line end, according to the typographical norms. There exists some external commands (like `vlna`) or packages (`encxvlna` for `encTeX`, `xevlna` for `XeTeX`, `impnattypo` for `luaLATeX`).

Other feature of this package is including of non-breakable space after initials, like in personal names.

The code is modified version of Patrick Gundlach's answer on `TeX.sx`¹. The difference is that it is possible to specify which single letters should be taken into account for different languages.

¹<http://tex.stackexchange.com/a/28128/2891>

2 Usage

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The usage is simple:

```
\input ucode
\uselanguage{czech}
% in the case of luacsplain, use instead:
% \chyp
% but language code for Czech is different than in LaTeX or normal
% luaTeX, so you will need to set single letters with somethinh like:
% \singlechars{5}{AIiVvOoUuSsZzKk}
\input luavlna
\preventsingleddebugon
\input luaotfload.sty
\font\hello={name:Linux Libertine 0:+rlig;+clig;+liga;+tlig} at 12pt
\hsize=3in
\hello
Příliš žluťoučký kůň úpěl ďábelské ódy.
Text s krátkými souhláskami a samohláskami i dalšími jevy
z nabídky možností (v textu možnými).
```

I začátek odstavce je třeba řešit, i když výskyt zalomení není pravděpodobný.

Co třeba í znaky š diakritikou?

Různé možnosti [v závorkách <i jiných znacích

Podpora iniciál: G. F. Hegel, Č. Zíbrt

```
\preventsingleddebugoff
\bye
```

Příliš *žlutoučký kůň* úpěl ďábelské ódy. Text s krátkými souhláskami a samohláskami i dalšími jevy z nabídky možností (v textu možnými).

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It is also possible to use the package with \LaTeX , just use

```
\usepackage{luavlina}
```

in the preamble.

3 Commands

```
\singlechars{language name}{letters}
```

Enable this feature for certain letters in given language.

Default values:

```
% only Czech and Slovak are supported out of the box
```

```
\singlechars{czech}{AIiVvOoUuSsZzKk}
```

```
\singlechars{slovak}{AIiVvOoUuSsZzKk}
```

```
\compoundinitials{language name}{compounds}
```

Declare compound letters for given language. Second argument should be comma separated list of compound letters, in exact form in which they can appear.

Default values:

```
\compoundinitials{czech}{Ch,CH}
```

3.1 Turning off language switching

By default, language of the nodes is taken into account. If you want to use settings for one language for a whole document, you can use following command:

```
\preventsinglelang{language name}
```

3.2 Turning off processing

If you want to stop processing of the spaces in the document you can use command

```
\preventsingleoff
```

To resume processing, use

```
\preventsingleon
```

3.3 Debugging commands

```
\preventsingledebugon
```

```
\preventsingledebugoff
```

Insert debugging marks on/off. Default off.

4 Lua module `langno.lua`

When we process glyph nodes with lua \TeX callbacks, there are `lang` fields available. These are numerical codes of languages, but no information about language names easily accesible from lua side is available.² These numbers are format dependent, majority of formats like lua \LaTeX use `language.dat` file provided by `babel` for assign numbers to languages, but for example `csplain` use its own system.

To allow easy setting of language dependent parameters, `langno` module was created. It's purpose is to translate language code to language name and the other way.

²Language names are stored in \TeX macros like `\l@langname`, but different formats use different naming of these macros