Digestif

luarocks v0.5-1 build passing

Digestif is a code analyzer, and a <u>language server</u>, for LaTeX, ConTeXt et caterva. It provides context-sensitive completion, documentation, code navigation, and related functionality to any text editor that speaks the LSP protocol.

Features

- Completion for commands, environments, key-value options (for instance, TikZ options), cross-references and citations.
- Popup help messages, including command signature and documentation. For the best results, make sure you have the <u>LaTeX reference manual</u> installed as an <u>info node</u>.
- Find definition and references to labels and citations.
- · Document outline.

• Multi-file documents are supported via TeXShop-style magic comments. Just add a comment like this near the top of each child document:

```
% !TeX root = somefile.tex
```

- Digestif is fuzzy! For citations, it tries an exact match against the BibTeX identifier and a fuzzy match against author and title. In the GIF above, the user types groalhom, which matches **Gro**thendieck's "Sur quelques points d'algébre homologique"; selecting this inserts the BibTeX identifier Tohoku . Similarly, for cross-references, Digestif tries an exact match against the label and a fuzzy match against the text around the label.
- Support for LaTeX, ConTeXt, plain TeX, DocTeX (.dtx | files) and Texinfo.
- Bibliography support via BibTeX, BibLaTeX and amsrefs.
- Lua API, independent of the language server protocol, for use in editors capable of loading Lua modules. See API on the wiki for details.

Installation

Digestif has minimal dependencies and can run on LuaTeX or on a standalone Lua interpreter. Correspondingly, there are two ways to install it.

LuaTeX with the self-installing script



The only dependencies for this are git and a recent TeX installation.

- 1. Download the digestif wrapper script (or, on Windows, digestif.cmd).
- 2. Place it in your \$PATH (say, ~/.local/bin).
- 3. Make it executable (chmod +x ~/.local/bin/digestif).

In the first run, the script will automatically download the package, by default to ~/.digestif. To update or uninstall, simply delete that folder.

Standalone Lua via LuaRocks

Run luarocks install digestif. This should be done either as root or with the --local option, in which case the executable script will land in ~/.luarocks/bin/digestif; make sure this is in your \$PATH or adapt your text editor configuration accordingly.

Editor setup

Next, you need to enable Digestif as a language server in your favorite text editor.

Emacs with the Eglot package

Digestif works out-of-the-box with Eglot. Just install the package

(M-x package-install RET eglot RET), open some TeX document and enable Eglot
(M-x eglot). Voilà! Some hints:

- If you want automatic snippet insertion upon choosing a completion candidate, make sure to activate yas-minor-mode before starting up Eglot.
- Try the <u>consult-eglot</u> package to access the index of a multifile project (this is exposed via the the workspace/symbols LSP method.)

Emacs with the **Isp-mode** package

To ensure that Digestif is used, add the following to your init file:

```
(setq lsp-tex-server 'digestif)
```

Vim with the **Coc** plugin

See instructions here.

Other editors

It shouldn't be hard to set up other editors to use Digestif. Please open an issue if you want to include additional instructions here.

Supported TeX packages

Digestif tries to learn about the commands provided by a package by looking at its source code, but this has limitations, since the typical TeX literate documentation is ostensibly not machine readable.

For full support, a detailed "tags" file should be created for each package. Among other things, this file lists all defined macros together with their signatures and docstrings. To generate a stub tags file from a .sty, .cls or .dtx file, use the command

```
digestif --generate FILES
```

After filling in the missing details, the resulting tags file can be added to this repository (pull requests are welcome!). The format of the tags files should be more or less self explanatory. See the data folder for examples.

License

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