LispEdit

October 5, 2011

1 Introduction

LispEdit is a Geany plugin that provides shortcuts for sending s-expressions (symbolic expressions) to a Lisp process running in Geany's embedded terminal.

This plugin was inspired by LispIDE written by Niek Albers. I used LispIDE for writing my Common Lisp programs in Windows but I wanted something similar for running in Linux. Since I could not find an editor with functionality similar to LispIDE save for learning Emacs I decided to write a plugin for Geany :D

The feature I found extremely useful in LispIDE was the ability to select and send s-expressions to the Lisp listener using keyboard shortcuts. The two things I did most often was to either evaluate an s-expression or call marcoexpand-1 to print a macro expansion. Therefore these are the only features I implemented in the plugin.

NOTE: This plugin has only been tested with Geany version 0.20. For windows I recommend LispIDE, http://www.daansystems.com/lispide/.
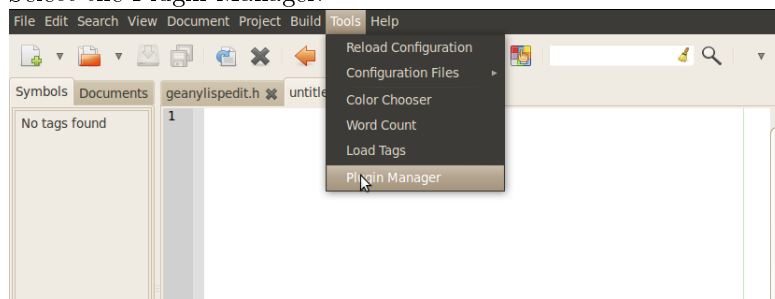
2 Installing the plugin

To install download the file https://github.com/tgutu/geanylispedit/blob/master/install/geanylispedit.so?raw=true and copy it to the directory /usr/lib/geany/, this of course assumes you have Geany installed.

If you do not have Geany installed or you have an older version running on your machine:

1. Download the archive https://github.com/tgutu/geanylispedit/blob/master/geanylispedit.tar.gz?raw=true.

2. Extract the contents and select a Geany installation from install/Geany/ depending on your *NIX variant e.g. Ubuntu or Fedora.

3. Execute the script install/install.sh or just copy install/geanylispedit.so to /usr/lib/geany/

3   Configuring the plugin

1. Select the Tools menu.

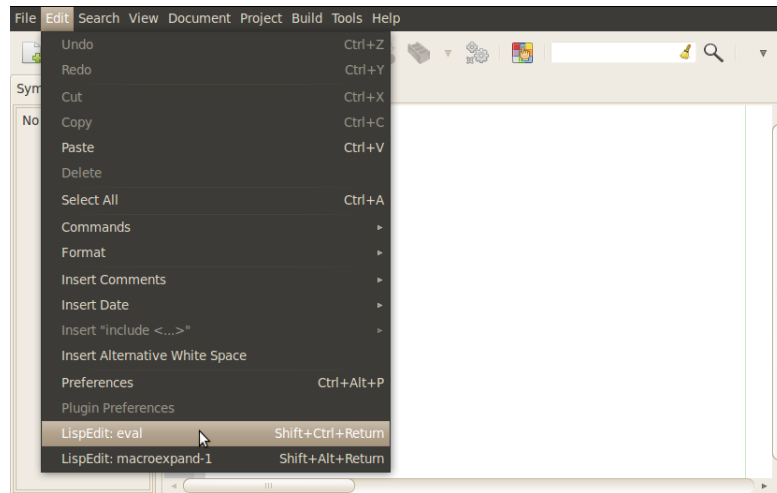2. Select the Plugin Manager.


3. Select the LispEdit plugin.
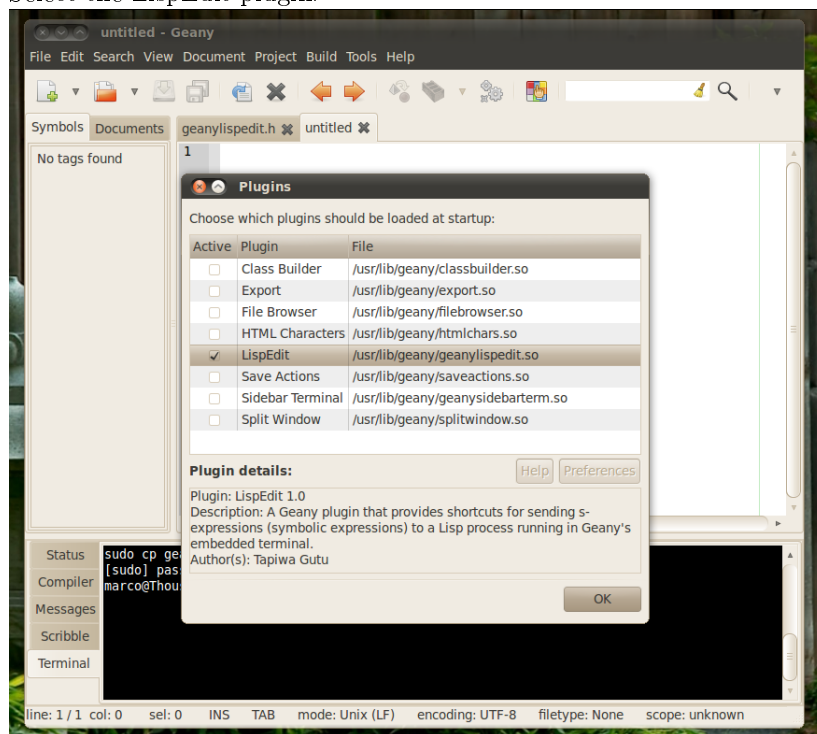
4 Using the plugin

Your plugin should have been successfully installed. You can verify by checking that two new entries for the plugin have been added to Edit menu.


Start any Lisp process in the embedded terminal. If you don't have any Common Lisp implementation installed I recommend CLisp or SBCL. If you are on a Debian based system such as Ubuntu you can type either `sudo apt-get install clisp` or `sudo apt-get install sbcl`.

For this example I will be using SBCL. To start a Lisp process in the embedded terminal just type `sbcl`.
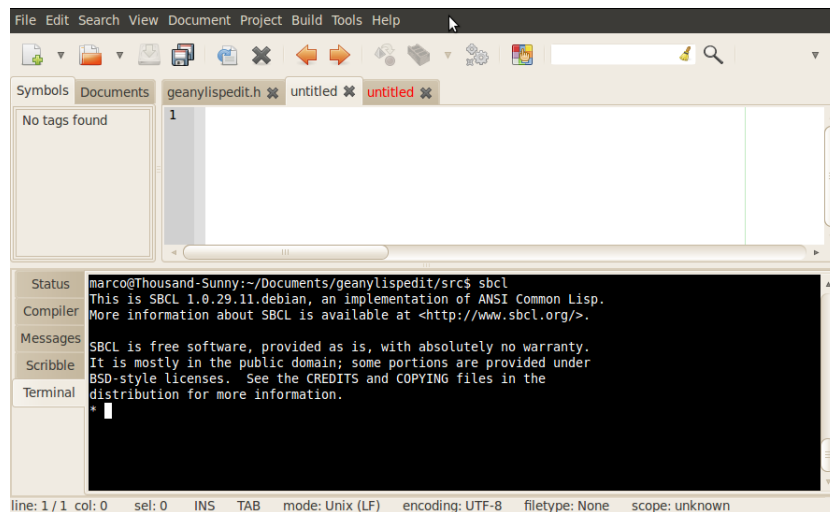

For a simple "Hello, world!", open a new document and type (`print "Hello,`

`world!`"). That expression including the parenthesis is called a symbolic expression or s-expression for short. To send the s-expression to the Lisp process, place the cursor next to the closing parenthesis ")", select the `Edit` menu and the select the `LispEdit: eval` menu option. You can do the same thing faster using the keyboard shortcut Ctrl+Shift+Return.
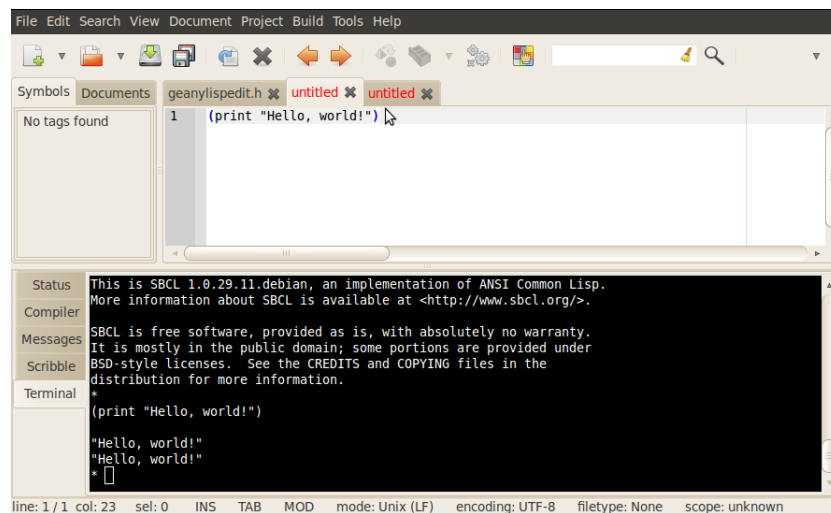
You can also send an s-expression nested inside another s-expression. Just place the cursor next to the closing parenthesis of the s-expression you want to evaluate and send.
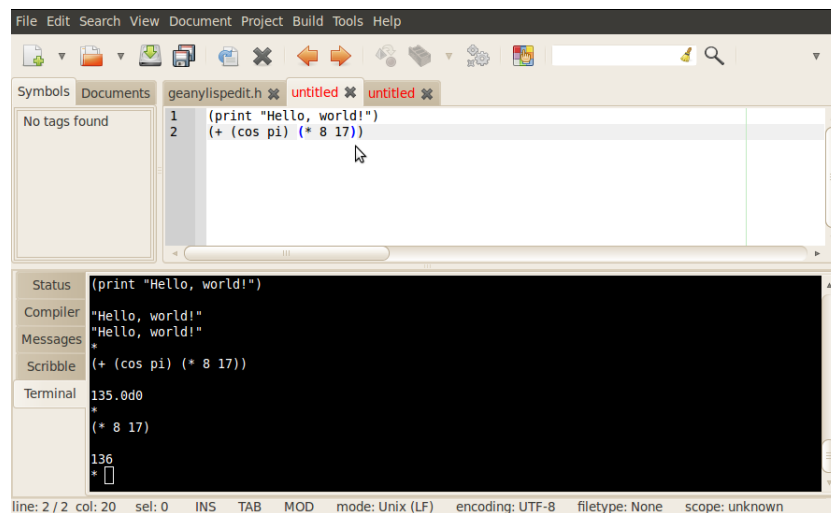
The plugin also provides a shortcut for printing the expansion of a macro, the shortcut `Alt+Shift+Return` sends the s-expression (`macroexpand-1 '_s-expression_here_`) to the Lisp process.

5   Compiling the plugin

The source code for the plugin is available in the `src/` directory inside the archive you downloaded in Section 2. To be able to compile the plugin you need the Geany source code and some development packages for GTK and its dependencies. If you already have Geany installed proceed to installing the GTK development files.

To install the development files for GTK and its dependencies on a Debian based *NIX use the command `apt-get install libgtk2.0-dev intltool`. This will install all necessary files to be able to compile plugins for Geany. On other distributions, the package names and commands to use may differ.

In the `src/` directory type `make` to compile the plugin and `make install` to install the plugin.