Geany 0.3

Enrico Troeger

Geany 0.3 by Enrico Troeger

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Chapter 1. Introduction

1.1. About

Geany is a small and lightweight integrated development environment. It was developed to provide a small and fast IDE, which has only a few dependencies from other packages. Another goal was to be as independent as possible from a special Desktop Environment like KDE or GNOME. So it is using only the GTK2 toolkit and therefore you need only the GTK2 runtime libraries to run Geany.

The basic features of Geany are:

- syntax highlighting
- · code completion
- · auto completion of often used constructs like if, for and while
- · auto completion of XML and HTML tags
- call tips
- many supported filetypes like C, Java, PHP, HTML, Python, Perl, Pascal
- symbol lists

1.2. Where to get

You can obtain Geany from http://geany.uvena.de or perhabs from your distributor.

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Chapter 2. Installation

2.1. Requirements

For compiling Geany yourself, you will need the GTK (>= 2.6.0) libraries and header files. You will also need the Pango, Glib and ATK libraries and header files. All these files are available at http://www.gtk.org.

Further more you need, of course, a C compiler, for the included Scintilla library a C++ compiler and the make tool.

2.2. Source Compilation

Compiling Geany is quite easy. The following should do it:

```
% ./configure
% make
```

% make install

The configure script supports several common options, for a detailed list, type

```
% ./configure --help
```

If there are any errors during compilation, check your build environment and try to find the error, otherwise contact the author at <enrico.troeger@uvena.de>.

2.3. Binary Packages

2.3.1. Fedora

There are not yet packages for Fedora available.

2.3.2. Debian

At the moment, there is only a binary package for Debian Sarge (stable). It is available at http://debian.uvena.de/ (http://debian.uvena.de). You can add the following line to your apt sources.list to get automatically get the latest version of Geany:

deb http://debian.uvena.de/ ./

2.3.3. SuSE

There are not yet packages for SuSE available.

2.3.4. Fedora

There are not yet packages for Fedora available.

Chapter 3. Usage

3.1. Getting Started

You can start Geany in the following ways:

• From the Desktop Environment menu

Choose in your application menu of your used Desktop Environment: Development→Geany.

• From the command line

To start Geany from a command line, type the following and press Return:

% geany

3.2. Commandline options

Table 3-1.	Commandline	Options
------------	-------------	---------

Short option	Long option	Function
-n	no-ctags	Don't load auto completion and call tip data. Use this option, if you don't want to use them. For more information see Section 3.3.
-c directory_name	config=directory_name	Use an alternate configuration directory. Default configuration directory is ~/.geany/ and there resides geany.conf and some template files.
-d	debug	Runs Geany in debug mode, which means being verbose and printing lots of information.
-?	help	Show help information and exit.

Short option	Long option	Function
-V	version	Show version information and exit.
	[files]	Opens all given files at startup. This option causes Geany to ignore loading stored files from the last session (if enabled).

Geany supports all generic GTK options, a list is available on the help screen.

3.3. General

At startup, Geany loads the 15 first files from the last time, Geany was launched. You can disable this feature in the settings dialog(see Figure 3-2). If you specify some files on the commandline, only these files will be opened. But you can find the files from the last session in the file menu. There is an item "Recent files". It contains the last 15 recently opened files.

If a C file(with extension is c, cpp, h, etc.) is opened, a global tags file is loaded once, which contains many function declarations from the glibc and some other libraries, like X, Bonobo, Gnome, GTK, Glib and so on. These declarations are used for call tips and auto completion. These tags are only useful if you are writing C or C++ source code. So if you know, that you don't need these things, you can skip loading this tag file. To do so, start Geany with the argument "-n" or "--no-ctags", for more information see Section 3.2.

3.4. Search and Replace

You can use regular expressions in the search dialog, just by activating the check box(see the image

below). Detailed information about special characters can be found in the Table 3-2.

Figure 3-1. Search dialog

Find	οx
Enter the search text here	
	┓┓
Case sensitive	
Match only a whole word	
Match only word <u>s</u> tart	
☑ Use regular expressions	
Search backwards	
🗶 Cancel 💽	ind

Table 3-2. Regular expressions

In a regular expression, the following characters are interpreted:		
	Matches any character.	
\(This marks the start of a region for tagging a match.	
\mathcal{V}	This marks the end of a tagged region.	
\n	Where n is 1 through 9 refers to the first through ninth tagged region when replacing. For example, if the search string was Fred\([1-9]\)XXX and the replace string was Sam\1YYY, when applied to Fred2XXX this would generate Sam2YYY.	
<	This matches the start of a word.	
>	This matches the end of a word.	
\x	This allows you to use a character x that would otherwise have a special meaning. For example, \[would be interpreted as [and not as the start of a character set.	

In a regular expression, the following characters are interpreted:		
[]	This indicates a set of characters, for example, [abc] means any of the characters a, b or c. You can also use ranges, for example [a-z] for any lower case character.	
[^]	The complement of the characters in the set. For example, [^A-Za-z] means any character except an alphabetic character.	
\$	This matches the end of a line.	
*	This matches 0 or more times. For example, Sa*m matches Sm, Sam, Saam, Saaam and so on.	
+	This matches 1 or more times. For example, Sa+m matches Sam, Saam, Saaam and so on.	

3.5. Preferences

should be written

Figure 3-2. General tab in preferences dialog

♥ Preferences		OX
General Editor Tools Tem	plates	
Miscellaneous		
Load files from the last	st session	
Save window position	and geometry	
🗹 Confirm exit		
Toolbar		
Show search field		
Show symbol list		
Fonts		
Symbol list font	Cursor	8
Message window font	Cursor	8
	💥 Cancel 🛛 🖉 Of	<

Figure 3-3. Editor tab in preferences dialog

Preferences	
General Editor Tools Temp	plates
New files	
Insert GPL notice at th	ne beginning
Insert GPL notice at th	ne beginning (only with template usage)
Tab Width 4	
Saving files	
 Strip trailing spaces 	
 Ensure new line at file 	end
Miscellaneous	
Editor font	Courier New 9
Editor font	Counter New
Long line marker	72
Long line marker color	

Preference	S	
General Editor	Tools Templates	
	e the paths to the make tool and the compiler u do not need can be let blank)	
C Compiler	/usr/bin/gcc -Wall	b
C++ Compiler	/usr/bin/g++ -Wall	b
Java Compiler	/usr/bin/javac -verbose	b
Java executable	/usr/bin/java	b
Pascal Compiler	/usr/bin/fpc	b
Make	/usr/bin/make	b
Terminal	/usr/bin/terminal	ß
Browser	/usr/bin/mozilla	b
	💥 Cancel 🥔 🖓	<

Figure 3-5. Template tab in preferences dialog

Preferences			
General Edi	tor Tools Templates		
Specify here information you want to use in templates. See documentation if you don't know, how templates work.			
Developer	Enrico Troeger		
Initials	ET		
Mail address	deadeye@uvena.de		
Company			
Initial Version	1.0		
	Notice: For all changes you make here, you need to restart Geany to take effect.		
	🎇 Cancel 🥥 OK		

3.6. File types

should be written

3.7. Templates

Geany supports several templates for file headers, multiline comments(frame comments), function descriptions, a typical ChangeLog entry and a short GPL notice. To use this templates, just open the edit menu or open the popup menu by right-clicking in the editor widget, and choose "Insert Comments" and insert templates as you want.

Some templates like file header or ChangeLog entry, will always be inserted at the top of the file.

To insert a function description, the cursor must be inside of the function, so that the function name can be determined automatically. The description will be positioned correctly one line above the function, just check it out. If the cursor is not inside of a function or the function name cannot be determined, you cannot insert a function description.

Each template can be customized to your needs. The templates are in the configuration directory, which is in ~/.geany/ (see Section 3.2 for further information about configuration directory). Just open the desired template with an editor (ideally Geany ;-)) and edit the template as your needs. There are some wildcards which will be automatically replaced by Geany at startup.

All wildcards must be enclosed by "{" and "}", e.g. {date}.

In the configuration dialog you can find a tab "Templates" (see Figure 3-5). You can define the default values which will be inserted in the templates. You should restart Geany after made changes, because they are only read at startup.

Since Geany 0.3 there are also templates for creating new files. They can be found in ~/.geany/, too. All template files for creating new files begin with template.filetype. followed by the filetype. At creating a new file with a filetype template, the template for the fileheader is automatically prepended. Please note, that the complete behaviour is still under development and will probably be changed in one of the next releases. Sorry.

Wildcard	Description	Available in following templates
developer	The name of the developer.	filetypes, file header, function description, ChangeLog entry
initial	The initials of the developer name, e.g. "ET" for Enrico Troeger or "JFD" for John Foobar Doe.	filetypes, file header, function description, ChangeLog entry
mail	The email address of the developer.	file header, function description, ChangeLog entry
company	The company name, the developer is working for.	filetypes, file header, function description, ChangeLog entry
year	The current year in the format: YYYY	filetypes, file header, function description, ChangeLog entry
version	The initial version of a new file.	filetypes, file header, function description, ChangeLog entry

 Table 3-3. Template wildcards

Wildcard	Description	Available in following templates
date	The current date in the format: YYYY-MM-DD	filetypes, file header, function description, ChangeLog entry
untitled	The string "untitled" (this will be translated to your locale), used in filetype templates	filetypes, file header, function description, ChangeLog entry
datetime	The current date and time in the format: DD.MM.YYYY HH:mm:ss ZZZZ	file header, function description
filename	The filename of the current file. Only available for the file header template.	file header
gpl	This wildcard inserts a short GPL notice.	file header
functionname	The function name of the function at cursor position. This wildcard will only be replaced in the function description template.	function description

If you need any other wildcards or a special date/time format, please email the author <enrico.troeger@uvena.de>.

Appendix A. Geany key mapping

A.1. Geany key mapping

The following table lists several useful key codes, which you can use in Geany.

Кеу	Function
File operations	
Ctrl-N	Create new file
Ctrl-O	Open file
Ctrl-S	Save current file
Ctrl-Shift-S	Save all open files
Ctrl-W	Close current file
Alt-D	Close all open files
Editing operations	
Ctrl-X	Cut the current selection and copy it into the clipboard
Ctrl-C	Copy the current selection into the clipboard
Ctrl-V	Paste the content of the clipboard at the current position
Ctrl-Z	Undo the last action
Ctrl-Y	Redo the last action
Ctrl-G	Duplicate the current line
Ctrl-A	Select all
Ctrl-D	Comment current line or selection
Ctrl-Space	Show auto completion list
Ctrl-Return	Show list of available(in the workspace) macros and variables
Alt-Space	Show call tips for the current function or method
Shift-Space	Insert just a blank. Useful after typing if or while, to explicitly suppress the use of construct auto completion
Ctrl-R	Reload the tag/symbol list
Finding text	
Ctrl-F	Open find dialog
F3	Find next

Table A-1. Key Table

Кеу	Function
Building files	
F8	Compile the current file
F9	Build the current file
Ctrl-F9	Build the current file with the make tool
F5	Execute the current file in a terminal emulation
Miscellaneous	
Ctrl-LEFT	Switch to the previous open document
Ctrl-RIGHT	Switch to the next open document
Ctrl-+	Zoom in the text
Ctrl	Zoom out the text
Ctrl-P	Open preferences dialog
F1	Show help
F11	Switch to fullscreen mode
F12	Switch to Scribble widget
Ctrl-Q	Quit

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If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

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The hypothetical commands 'show w' and 'show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than 'show w' and 'show c'; they could even be mouse-clicks or menu items--whatever suits your program.

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