

graphviz-dot-mode Manual

edition 0.3.10.a
for graphviz-dot-mode version 0.3.10

graphviz-dot-mode by Pieter Pareit, et al.
manual by Daniel Birket

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This is the `graphviz-dot-mode` *Manual*, edition 0.3.10.a, by Daniel Birket, updated 4 July 2017, which describes how to install and use the Emacs package `graphviz-dot-mode`, version 0.3.10, released 25 May 2015, which was written by and Copyright © 2002-2015 Pieter Pareit, et al. (See <http://ppareit.github.io/graphviz-dot-mode/>)

This manual is based upon (and frequently copied verbatim from) the documentation in the `graphviz-dot-mode.el` source code, which begins with:

```
;;; graphviz-dot-mode.el --- Mode for the dot-language used by graphviz (att).

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```

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1 Introduction

This manual describes how to install and use `graphviz-dot-mode`, an Emacs package for working with *Graphviz* DOT-format files. The features of this package help you to create `.dot` or `.gv` files containing syntax compatible with the separate *Graphviz* package and use *Graphviz* to convert these files to diagrams.

Graphviz is a set of open source graph visualization tools created by AT&T Labs Research. A *graph* is a way of representing information as a network of connected *nodes* (shapes) and *edges* (lines). *Graphviz* is documented at <http://graphviz.org>.

The powerful text editor, Emacs, was created in 1976 by Richard Stallman. It is highly extensible and has 40 years of other extensions. *GNU Emacs* is documented at <https://www.gnu.org/software/emacs/>. *XEmacs* is documented at <http://www.xemacs.org>.

2 Installing

This chapter describes how to install `graphviz-dot-mode`.

2.1 Recommended Installation

The recommended way to install the package `graphviz-dot-mode` is to use `package.el` and *M-x package-install*.

To install `graphviz-dot-mode`, first add the MELPA Stable archive to the list of archives used by `package.el` (if it is not already there) by adding the following lines to your `.emacs` or other Emacs startup file. Then restart Emacs.

```
(require 'package)
(add-to-list 'package-archives
  '("melpa-stable" . "https://stable.melpa.org/packages/"))

(package-initialize)
```

(For more detailed and comprehensive instructions about using MELPA, please see <https://melpa.org/#/getting-started>.)

After restarting Emacs, type the following to install `graphviz-dot-mode`.

M-x package-install RET graphviz-dot-mode RET.

When installed this way using the package manager, `graphviz-dot-mode` will be activated automatically for file names ending in either `.dot` or `.gv`.

2.2 Manual Installation

You can manually download and install `graphviz-dot-mode`, but it is best to use the recommended method above if you don't already know how to manually install an Emacs program.

You may download `graphviz-dot-mode.el` from <http://ppareit.github.io/graphviz-dot-mode/> and follow the instructions there.

3 Using graphviz-dot-mode

This chapter describes how to use `graphviz-dot-mode`.

3.1 Compiling & Viewing

This section describes how to use compile and view functions. See Section 4.1 [Compile & View Variables], page 5.

`C-c c` compile

This command compiles the current dot file visited by the *Emacs* buffer. The output file is in the same directory and has the extension determined by the variable `graphviz-dot-preview-extension`.

`C-x '` or `next-error`

This command will jump to the location in the source file of the next error from the most recent compile. Use `C-c c` to compile first.

`C-c p` `graphviz-dot-preview`

This command compiles and then (if it compiled successfully) shows the output of the current dot file visited by the *Emacs* buffer, provided that *GNU Emacs* or *XEmacs* is running on a graphical display capable of displaying the graphic file output by `dot`.

See `image-file-name-extensions` in *GNU Emacs* or `image-formats-alist` in *XEmacs* to customize the graphic files that can be displayed.

`C-c v` `graphviz-dot-view`

This command invokes an external viewer specified by the variable `graphviz-dot-view-command`. If `graphviz-dot-view-edit-command` is `t`, you will be prompted to enter a new `graphviz-dot-view-command`. If `graphviz-dot-save-before-view` is `t`, the buffer is saved before the external viewer command is invoked.

(See <http://graphviz.org/content/resources> for a list of *Graphviz* viewers and editors.)

3.2 Editing

This section describes how to edit with `graphviz-dot-mode`. See Section 4.2 [Editing Variables], page 6.

3.2.1 Indenting

`C-M-q` `graphviz-dot-indent-graph`

This command will indent the graph, digraph, or subgraph at point and any subgraph within it.

`TAB` This key will indent the line.

`RET` `electric-graphviz-dot-terminate-line`

If the variable `graphviz-dot-auto-indent-on-newline` is `t`, `RET` will insert a newline and indent the next line.

`{ electric-graphviz-dot-open-brace`
If the variable `graphviz-dot-auto-indent-on-braces` is `t`, `{` will insert a `{`,
newline and indent the next line.

`} electric-graphviz-dot-close-brace`
If the variable `graphviz-dot-auto-indent-on-braces` is `t`, `}` will insert a `}`,
newline and indent the next line.

`; electric-graphviz-dot-semi`
If the variable `graphviz-dot-auto-indent-on-semi` is `t`, `;` will insert a `;`,
newline and indent the next line.

3.2.2 Completion

`M-t graphviz-dot-complete-word`
This command will complete the attribute or value keyword at point. If more
than one completion is possible, a list is displayed in the minibuffer.

See Section 4.2.2 [Completion Variables], page 6,

3.2.3 Commenting

`M-; comment-dwim`
This command will insert a new comment line.

`M-j comment-indent-newline`
This command will insert and indent a new comment line.

`C-c C-c comment-region`
This command will comment-out the region.

`C-c C-u graphviz-dot-uncomment-region`
This command will un-comment the region.

4 Customizing

This section describes the customizable variables of `graphviz-dot-mode`. You may customize variables by typing

M-x graphviz-dot-customize RET

This function invokes the Emacs customization facility to allow you to view and change the `graphviz-dot-mode` variables below.

4.1 Compile & View Variables

This section describes variables related to compiling and viewing. See Section 3.1 [Compiling & Viewing], page 3,

`graphviz-dot-dot-program`

string, default: “dot”

This variable determines the command name (and path, if necessary) used to invoke the *Graphviz* dot program. The `C-c c compile` function invokes this command.

`graphviz-dot-preview-extension`

string, default “png”

This variable determines the file extension used for the `C-c c compile` and `C-c p graphviz-dot-preview` functions. The format for the compile command is `dot -T<extension> <filename>.dot > <filename>.<extension>`

`graphviz-dot-save-before-view`

boolean, default `t`

This variable controls whether the buffer will be saved to the visited file before the `C-c v graphviz-dot-view` function invokes the external dot-file viewer command. Set this boolean variable to `t` (true) or `nil` (false).

`graphviz-dot-view-command`

string, default: “doted %s”

This variable determines the command name (and path, if necessary) used to invoke an external dot-file viewer program. The `C-c v graphviz-dot-view` function invokes this command. The name of the file visited by the buffer will be substituted for `%s` in this string.

(See <http://graphviz.org/content/resources> for a list of *Graphviz* viewers and editors.)

`graphviz-dot-view-edit-command`

boolean, default: `nil`

This variable controls whether you will be prompted for the external dot-file viewer command name when you use `C-c v graphviz-dot-view`. Set this to `t` (true) to be prompted to edit the viewer command variable `graphviz-dot-view-command` every time you use `C-c v` or `nil` to avoid the prompt.

4.2 Editing Variables

This section describes variables related to editing. See Section 3.2 [Editing], page 3,

4.2.1 Indenting Variables

This subsection describes variables related to indenting.

graphviz-dot-auto-indent-on-braces

{ } boolean, default **nil**

This variable controls whether the functions **electric-graphviz-dot-open-brace** and **electric-graphviz-dot-close-brace** are called when { and } are typed. Set this boolean variable to **t** (true) or **nil** (false).

graphviz-dot-auto-indent-on-newline

boolean, default **t**

This variable controls whether the function **electric-graphviz-dot-terminate-line** is called when a line is terminated with a newline. Set this boolean variable to **t** (true) or **nil** (false).

graphviz-dot-auto-indent-on-semi

boolean, default **t**

This variable controls whether the function **electric-graphviz-dot-semi** is called when a semicolon ; is typed. Set this boolean variable to **t** (true) or **nil** (false).

graphviz-dot-indent-width

integer, default: **default-tab-width**

This variable determines the indentation used in **graphviz-dot-mode** buffers.

4.2.2 Completion Variables

This subsection describes variables related to completion.

graphviz-dot-delete-completions

boolean, default: **nil**

This variable controls whether the completion buffer is automatically deleted when a key is pressed. Set this boolean variable to **t** (true) or **nil** (false).

graphviz-dot-toggle-completions

boolean, default: **nil**

This variable controls whether repeated use of **M-t graphviz-dot-complete-word** will toggle the display of possible completions in the minibuffer. If this variable is set to **nil**, when there are more than one possible completions, a buffer will display all completions. Set this boolean variable to **t** (true) or **nil** (false).

4.3 Keyword Variables

This section describes the variables containing DOT-language keywords, which may change if *Graphviz* is updated. You may update these variables after new releases of *Graphviz* from <http://www.graphviz.org/doc/schema/attributes.xml>.

graphviz-dot-attr-keywords

list of strings, default: (“graph” “digraph” ...)

This variable holds a list of keywords for attribute names in a graph. This is used by the *M-t* auto completion function. The actual completion tables are built when the mode is loaded, so changes to this variable are not immediately visible.

graphviz-dot-value-keywords

list of strings, default: (“true” “false” ...)

This variable holds a list of keywords for attribute values in a graph. This is used by the *M-t* auto completion function. The actual completion tables are built when the mode is loaded, so changes to this variable are not immediately visible.

4.4 Mode Hook

graphviz-dot-mode-hook

list of functions, default: nil

This variable determines which functions are called when **graphviz-dot-mode** starts. To use it, add a line like below to your **.emacs** or other startup file.

```
(add-hook 'graphviz-dot-mode-hook 'my-hook)
```

5 Credits

`graphviz-dot-mode` was written by:

- Pieter Pareit pieter.pareit@gmail.com
- Rubens Ramos rubensr@users.sourceforge.net
- Eric Anderson <http://www.ece.cmu.edu/~andersoe/>

Other contributors are noted in the version history in the `graphviz-dot-mode.el` file and the commit history on GitHub.

The source code is maintained on GitHub at <https://github.com/ppareit/graphviz-dot-mode> by Pieter Pareit (pieter.pareit@gmail.com). Please email software comments, suggestions and corrections there.

This manual is maintained on GitHub at <https://github.com/daniel-birket/graphviz-dot-mode> by Daniel Birket (danielb@birket.com). Please email document errata there.

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Version 2, June 1991

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```
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```

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```

```
signature of Ty Coon, 1 April 1989
Ty Coon, President of Vice
```

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