

# PlantUML-Mode - UML Drawings

| Description                                                                                  | Keystroke                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Function                                                    | Note                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| <a href="#">PlantUML - Mode</a>                                                              |  The <a href="#">plantuml-mode</a> external package allows you to render <b>PlantUML markup</b> to create UML drawing image or ASCII-art text. <ul style="list-style-type: none"><li>See also the <a href="#">The Hitchhiker's Guide to PlantUML</a>.</li></ul>                                                                                                                                                            |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                              |  The <a href="#">flycheck-plantuml</a> external package integrates plantuml-mode with flycheck to automatically check the syntax of the plantuml files on the fly.                                                                                                                                                                                                                                                         |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                              |  PEL activates the <a href="#">plantuml-mode</a> package when the <b>pel-use-plantuml</b> is non-nil. You can set it to <b>t</b> or to <b>server</b> . When set to <b>t</b> it forces the use of a local plantuml.jar program to render the markup. When set to <b>server</b> it sends the plantuml markup to the PlantUML server to render it. These values are set in the <b>plantuml-default-exec-mode</b> user option. |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                              |  PEL activates the <a href="#">flycheck-plantuml</a> package when the <b>pel-use-flycheck-plantuml</b> user option is set to <b>t</b> .                                                                                                                                                                                                                                                                                    |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                              |  The plantuml-mode package can also be customized via the <b>plantuml</b> customization group: use <b>&lt;F11&gt; &lt;f1&gt; G</b> plantuml                                                                                                                                                                                                                                                                                |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                              |  PEL provides 2 different key prefixes: <ul style="list-style-type: none"><li>pel:plantuml, mapped to <b>&lt;f11&gt; D u</b>, for global commands that be be issued from any major mode,</li><li>pel:for-plantuml, mapped to <b>&lt;f12&gt;</b> once the buffer major mode is plantuml-mode. To put a buffer in plantuml-mode use <b>&lt;f11&gt; D u u</b>.</li></ul>                                                      |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                              |  Text rendering of PlantUML diagrams is limited to 4096 bytes of text. Attempting to render a larger description in 'txt' (text) mode fails. Rendering of diagrams larger than 4096 bytes of text works in graphics mode. Tested on macOS with Graphviz Dot 2.44.0 and PlantUML 1.2020.15.                                                                                                                                 |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Open this PDF file.<br>See also: <a href="#">Help/Info</a>                                   | <b>&lt;f11&gt; SPC M-u &lt;f1&gt;</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>(pel-help-pdf</b> &optional OPEN-WEB-PAGE)               | Open the <a href="#">PlantUML</a> local PDF. If the prefix argument (like <b>C-u</b> or <b>M--</b> ) is used, then it opens the remote GitHub hosted raw PDF instead. If the <b>pel-flip-help-pdf-arg</b> user-option is set it's the other way around.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                              | <b>&lt;f12&gt; &lt;f1&gt;</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <a href="#">Customize</a> PEL<br>PlantUML support                                            | <ul style="list-style-type: none"><li><b>&lt;f11&gt; D u &lt;f2&gt;</b></li><li><b>&lt;f11&gt; SPC M-u &lt;f2&gt;</b></li></ul>                                                                                                                                                                                                                                                                                                                                                                             | <b>(pel-customize-pel</b> &optional OTHER-WINDOW)           | Customize PEL PlantUML support. <ul style="list-style-type: none"><li>If OTHER-WINDOW is non-nil (use <b>C-u</b>), display in another window.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                              | <b>&lt;f12&gt; &lt;f2&gt;</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <a href="#">Customize</a> Emacs<br>PlantUML support                                          | <ul style="list-style-type: none"><li><b>&lt;f11&gt; D u &lt;f3&gt;</b></li><li><b>&lt;f11&gt; SPC M-u &lt;f3&gt;</b></li></ul>                                                                                                                                                                                                                                                                                                                                                                             | <b>(pel-customize-library</b> &optional OTHER-WINDOW)       | Customize Emacs PlantUML support. <ul style="list-style-type: none"><li>If OTHER-WINDOW is non-nil (use <b>C-u</b>), display in another window.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                                              | <b>&lt;f12&gt; &lt;f3&gt;</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Download & install latest version of PlantUML JAR file                                       | <b>&lt;f11&gt; D u M-d</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>(plantuml-download-jar)</b>                              | Download the latest PlantUML JAR file and install it into 'plantuml-jar-path' (a user option that can be customized).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Se the PlantUML Execution mode                                                               | <b>&lt;f11&gt; D u M-x</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>(plantuml-set-exec-mode MODE)</b>                        | Set the execution mode MODE for PlantUML. Prompts for mode. The following modes are available: executable, jar, server.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Activate PlantUML mode                                                                       | <b>&lt;f11&gt; D u u</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>(plantuml-mode)</b>                                      | Activate plantuml-mode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Enable PlantUML debug messages                                                               | <b>&lt;f11&gt; SPC M-u M-d</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>(plantuml-enable-debug)</b>                              | Enables debug messages into the "PLANTUML Messages" buffer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                                                                              | <b>&lt;f12&gt; M-d</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Disable PlantUML debug messages                                                              | <b>&lt;f11&gt; D u M-D</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>(plantuml-disable-debug)</b>                             | Stops any debug messages to be added into the "PLANTUML Messages" buffer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                                              | <b>&lt;f12&gt; M-D</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Indent the PlantUML line                                                                     | <b>&lt;f11&gt; SPC M-u &lt;tab&gt;</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>(plantuml-indent-line)</b>                               | Indent the current line to its desired indentation level. <ul style="list-style-type: none"><li>Restore point to same position in text of the line as before indentation.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                                                                                              | <b>&lt;f12&gt; &lt;tab&gt;</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Preview UML diagram from plantUML source in current region (if marked) or entire buffer      | <b>&lt;f11&gt; SPC M-u p</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>(plantuml-preview PREFIX)</b>                            | Preview diagram from the PlantUML sources. <ul style="list-style-type: none"><li>Uses the current region if one is active, or the entire buffer otherwise.</li><li>Uses prefix (as PREFIX) to choose where to display it:<ul style="list-style-type: none"><li>4 (when prefixing the command with <b>C-u</b>) -&gt; new window</li><li>16 (when prefixing the command with <b>C-u C-u</b>) -&gt; new frame.</li><li>else -&gt; new buffer</li></ul></li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                              | <ul style="list-style-type: none"><li><b>&lt;f12&gt; p</b></li><li><b>C-c C-c</b></li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Preview UML diagram from plantUML source in current plantUML region of commented source code | <b>&lt;f11&gt; D u p</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>(pel-render-commented-plantuml PREFIX</b> &optional POS) | Render the PlantUML markup embedded in current mode comment. <ul style="list-style-type: none"><li>Use region if identified otherwise use PlantUML block at point.</li><li>Uses prefix (as PREFIX) to choose where to display it:<ul style="list-style-type: none"><li>4 (when prefixing the command with <b>C-u</b>) -&gt; new window</li><li>16 (when prefixing the command with <b>C-u C-u</b>) -&gt; new frame.</li><li>else -&gt; new buffer</li></ul></li><li>This can be used inside buffer using <b>any</b> major mode, when PlantUML markup is embedded inside source code comment.</li></ul>  Use this in source code to describe your code architecture with PlantUML markup, then generate the UML rendering by moving point inside the PlantUML block and issuing this command. |
| Preview UML diagram from plantUML source in current buffer                                   | <b>&lt;f11&gt; SPC M-u b</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>(plantuml-preview-buffer PREFIX)</b>                     | Preview diagram from the PlantUML sources in the current buffer. <ul style="list-style-type: none"><li>Uses prefix (as PREFIX) to choose where to display it:<ul style="list-style-type: none"><li>4 (when prefixing the command with <b>C-u</b>) -&gt; new window</li><li>16 (when prefixing the command with <b>C-u C-u</b>) -&gt; new frame.</li><li>else -&gt; new buffer</li></ul></li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                                                                              | <b>&lt;f12&gt; b</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Preview UML diagram from plantUML source in current plantUML block                           | <b>&lt;f11&gt; SPC M-u c</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>(plantuml-preview-current-block PREFIX)</b>              | Preview diagram from the PlantUML sources from the previous @startuml to the next @enduml. <ul style="list-style-type: none"><li>Uses prefix (as PREFIX) to choose where to display it:<ul style="list-style-type: none"><li>4 (when prefixing the command with <b>C-u</b>) -&gt; new window</li><li>16 (when prefixing the command with <b>C-u C-u</b>) -&gt; new frame.</li><li>else -&gt; new buffer</li></ul></li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                                                                              | <b>&lt;f12&gt; c</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Preview UML diagram from plantUML source in current plantUML region                          | <b>&lt;f11&gt; SPC M-u r</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>(plantuml-preview-region PREFIX BEGIN END)</b>           | Preview diagram from the PlantUML sources in from BEGIN to END. <ul style="list-style-type: none"><li>Uses the current region when called interactively.</li><li>Uses prefix (as PREFIX) to choose where to display it:<ul style="list-style-type: none"><li>4 (when prefixing the command with <b>C-u</b>) -&gt; new window</li><li>16 (when prefixing the command with <b>C-u C-u</b>) -&gt; new frame.</li><li>else -&gt; new buffer</li></ul></li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                                                                              | <b>&lt;f12&gt; r</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Complete PlantUML symbol                                                                     | <b>&lt;f11&gt; SPC M-u /</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>(plantuml-complete-symbol)</b>                           | Perform keyword completion on word before cursor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                                                                              | <b>&lt;f12&gt; /</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Select output type                                                                           | <b>&lt;f11&gt; SPC M-u o</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>(plantuml-set-output-type TYPE)</b>                      | Set the desired output type (as TYPE) for the current buffer. <ul style="list-style-type: none"><li>If the major mode of the current buffer mode is not plantuml-mode, set the default output type for new buffers.</li><li>The basic output modes are: svg, png and text. The sag and png mode are only available when Emacs runs in graphics mode.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                                                                              | <b>&lt;f12&gt; o</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

PlantUML — References

| Topic & Link               | Note                                                                                                                                                                                                                                                                                                                                          |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PlantUML @ Wikipedia       | Provides an overview                                                                                                                                                                                                                                                                                                                          |
| PlantUML home page         | PlantUML home page. This site has a lot of publicity, but it's really the official site. It has links to important documents, like: <ul style="list-style-type: none"><li>PlantUML PDF Guide</li><li>The Hitchhiker's Guide to PlantUML</li><li>PlantUML Standard Library</li><li>Preprocessing</li><li>F.A.Q</li><li>and others...</li></ul> |
| plantuml-mode @ GitHub     | Emacs plantuml-mode package to use PlantUML within Emacs                                                                                                                                                                                                                                                                                      |
| flycheck-plantuml @ Github | Emacs package: Flycheck for plantuml syntax                                                                                                                                                                                                                                                                                                   |