

# plantuml

Version

A LuaLaTeX package for PlantUML in LaTeX

PlantUML is a program which transforms text into UML diagrams. This package allows for embedding PlantUML diagrams using the PlantUML source.

Currently, this project runs with lualatex only. Check issue #1 for the current state of affairs for support pdflatex.

## Preconditions

1. Environment variable `PLANTUML_JAR` set to the location of `plantuml.jar`. You get it from <https://sourceforge.net/projects/plantuml/files/plantuml.jar/download>.
2. Environment variable `GRAPHVIZ_DOT` set to the location of `dot.exe`. Example: `C:\Program Files (x86)\Graphviz2.38\bin\dot.exe`. You can install graphviz using `choco install graphviz`.
3. lualatex available with command line parameter `-shell-escape` included.
4. In case you want to have the images as PDFs (and not using TikZ or PNG), ensure that `inkscape.exe` and `pdftocrop` are in your path. You can get inkscape using `choco install inkscape`. `pdftocrop` should be part of your latex distribution.

## Examples

### Minimal Example

LaTeX source:

```
\documentclass{scrartcl}
\usepackage{plantuml}
\begin{document}
\begin{plantuml}
  @startuml
  Alice -> Bob: test
  @enduml
\end{plantuml}
\end{document}
```

Compilation: `lualatex -shell-escape example-minimal`

Result:

### Example Class Relations Rendered Using SVG

LaTeX source:

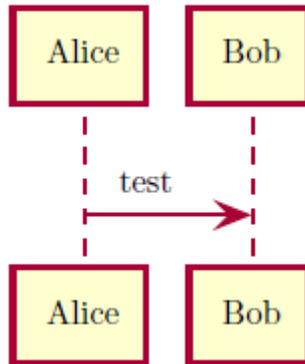


Figure 1: Minimal example

```

\documentclass{scrartcl}
\usepackage{graphics}
\usepackage{epstopdf}
\epstopdfDeclareGraphicsRule{.svg}{pdf}{.pdf}{
  inkscape -z --file=#1 --export-pdf=\OutputFile
}
\usepackage[output=svg]{plantuml}
\begin{document}
\begin{plantuml}
@startuml
class Car

Driver - Car : drives >
Car *- Wheel : have 4 >
Car -- Person : < owns
@enduml
\end{plantuml}
\end{document}

```

**Compilation:** `lualatex -shell-escape example-class-relations`

**Result:**

## Installation

Your latex distribution should take care.

For manual installation, copy `plantuml.*` to your local texmf folder in the subdirectory `tex/latex/plantuml`. See the discussion at `tex.sx` for the concrete location of the folder on your system.

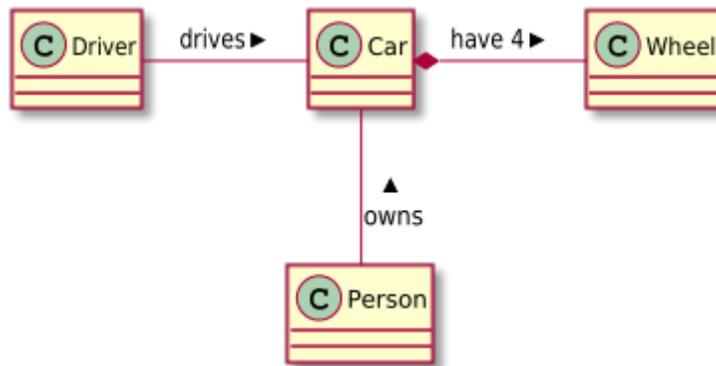


Figure 2: Class relations rendered using SVG

## Development

The release is built using GitHub Actions (workflow file) using `release.sh`.

Release preparation:

1. Adapt date and version number in `plantuml.sty`.
2. Adapt `CHANGELOG.md`.
3. Set a git tag and push.

## Alternative Solutions

TikZ-UML is a very powerful package based on TikZ. More alternative solutions are collected at the CTAN topic UML.

## License

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