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. Windows: 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 `pdfcrop` are in your path. You can get inkscape using `choco install inkscape`. `pdfcrop` 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
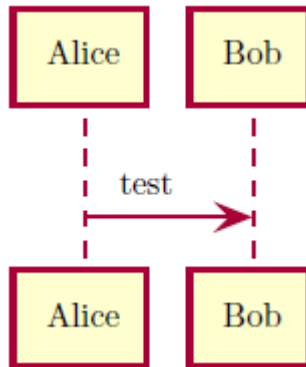
LaTeX source:

Figure 1: Minimal example

```latex
\documentclass{scrartcl}
\usepackage{graphics}
\usepackage{epstopdf}
\epstopdfDeclareGraphicsRule{.svg}{pdf}{.pdf}{
  inkscape "#1" --export-filename="\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}
```

For older Inkscape use this LaTeX source:

```latex
\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`
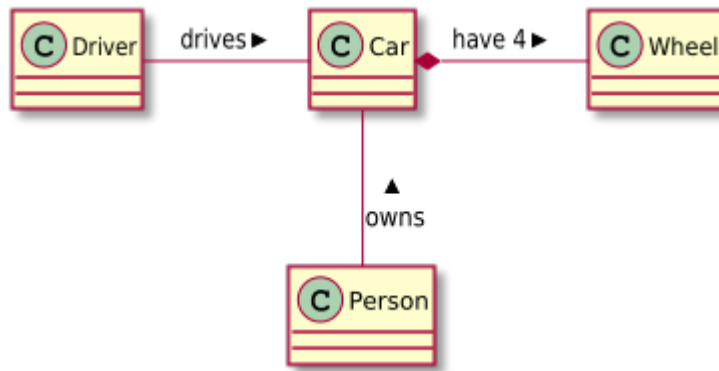
Result:

Figure 2: Class relations rendered using SVG

Installation

Your latex distribution should take care.

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

Development

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

Release preparation:

1. Adapt copyright year (line 1)
2. Adapt as date and version number (line 6) in `plantuml.sty`.
3. Adapt `CHANGELOG.md`.
4. 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.

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