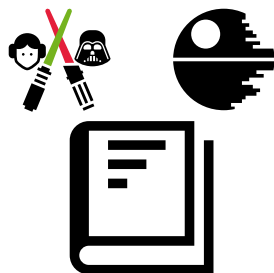

galactic installation guide

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0.0.9

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1 Introduction

py-galactic is a python package for studying formal concept analysis.



2 Install py-galactic

2.1 Prerequisite

py-galactic requires

- [python >= 3.6](#), a programming language that comes pre-installed on linux and Mac OS X, and which is available [on Windows](#);
- [PyGObject](#), which provides bindings for [GObject](#) based libraries such as GTK and many more;
- [graphviz](#), which is a graph visualization software.

2.1.1 Ubuntu

Install the [PyGObject](#) binding for [GObject](#) and [graphviz](#).

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```
# apt install python3-gi python3-gi-cairo gir1.2-gtk-3.0
# apt install libgraphviz-dev
```

Eventually export the installed python packages using the special variable PYTHONPATH

If you are using *python3.7* on linux, you have to add symbolic links for the [GObject](#) bindings:

```
# cd /usr/lib/python3/dist-packages/gi/
# ln -s \
>   _gi-cairo.cpython-36m-x86_64-linux-gnu.so \
>   _gi-cairo.cpython-37m-x86_64-linux-gnu.so
# ln -s \
>   _gi.cpython-36m-x86_64-linux-gnu.so \
>   _gi.cpython-37m-x86_64-linux-gnu.so
```

If you are using *python3.8* on linux, you have to add symbolic links for the [GObject](#) bindings:

```
# cd /usr/lib/python3/dist-packages/gi/
# ln -s \
>   _gi-cairo.cpython-36m-x86_64-linux-gnu.so \
>   _gi-cairo.cpython-38m-x86_64-linux-gnu.so
# ln -s \
>   _gi.cpython-36m-x86_64-linux-gnu.so \
>   _gi.cpython-38m-x86_64-linux-gnu.so
```

2.1.2 macOS

- install python ≥ 3.6 [on macOS](#)
- install [homebrew](#)
- install the [PyGObject](#) bindings for [GObject](#), [graphviz](#) and [gettext](#)

```
$ brew install pygobject3 gtk+3 adwaita-icon-theme
$ brew install graphviz
$ brew install gettext
$ brew link --force gettext
```

Eventually export the installed python packages using the special variable PYTHONPATH.

2.1.3 Windows

- go to [msys2](#) and download the x86_64 installer
- follow the instructions on the page for setting up the basic environment

- run `C:\msys64\mingw64.exe` - a terminal window should pop up

Execute:

```
| $ pacman -Suy
```

for updating the [msys2](#) environment.

Execute:

```
| $ pacman -S msys/gcc mingw-w64-x86_64-toolchain base-devel
```

for setting a basic development environment.

Execute:

```
| $ pacman -S mingw-w64-x86_64-python3 mingw-w64-x86_64-python3-pip
| $ cd /mingw64/bin
| $ ln -s python3w.exe pythonw3.exe
| $ cd /
```

for installing python and pip.

Execute:

```
| $ pacman -S mingw-w64-x86_64-graphviz
```

for installing [graphviz](#).

Execute:

```
| $ pacman -S mingw-w64-x86_64-gtk3 mingw-w64-x86_64-python3-gobject
```

for installing the [PyGObject](#) bindings.

Execute:

```
| $ pacman -S mingw-w64-x86_64-python3-numpy mingw-w64-x86_64-python3-scipy
```

for installing *numpy* and *scipy*.

2.2 Installation

Important

Make sure you have installed [python >= 3.6](#), [graphviz](#), and [PyGObject](#) before installing this package.

Install *py-galactic* using the command (replace `pip` with `python3 -m pip` on windows if you are using the MSYS2 system).

```
| $ pip install \
| > --find-links https://galactic.univ-lr.fr/packages \
| > py-galactic
```

To upgrade to the current stable branch, use

```
$ pip install \  
> --upgrade \  
> --find-links https://galactic.univ-lr.fr/packages \  
> py-galactic
```

To upgrade to the current develop branch, use

```
$ pip install \  
> --pre \  
> --upgrade \  
> --find-links https://galactic.univ-lr.fr/packages \  
> py-galactic
```

`pip` is a script that downloads and installs modules from the Python Package Index, [PyPI](#). It should come installed with your python distribution. If you are running linux, `pip` may be bundled separately. On a Debian-based system (including Ubuntu), you can install it using

```
# apt-get update  
# apt-get install python3-pip
```

2.3 Getting Help

Important

If you have any difficulties with *py-galactic*, please feel welcome to [file an issue](#) on gitlab so that we can help.