python package managers

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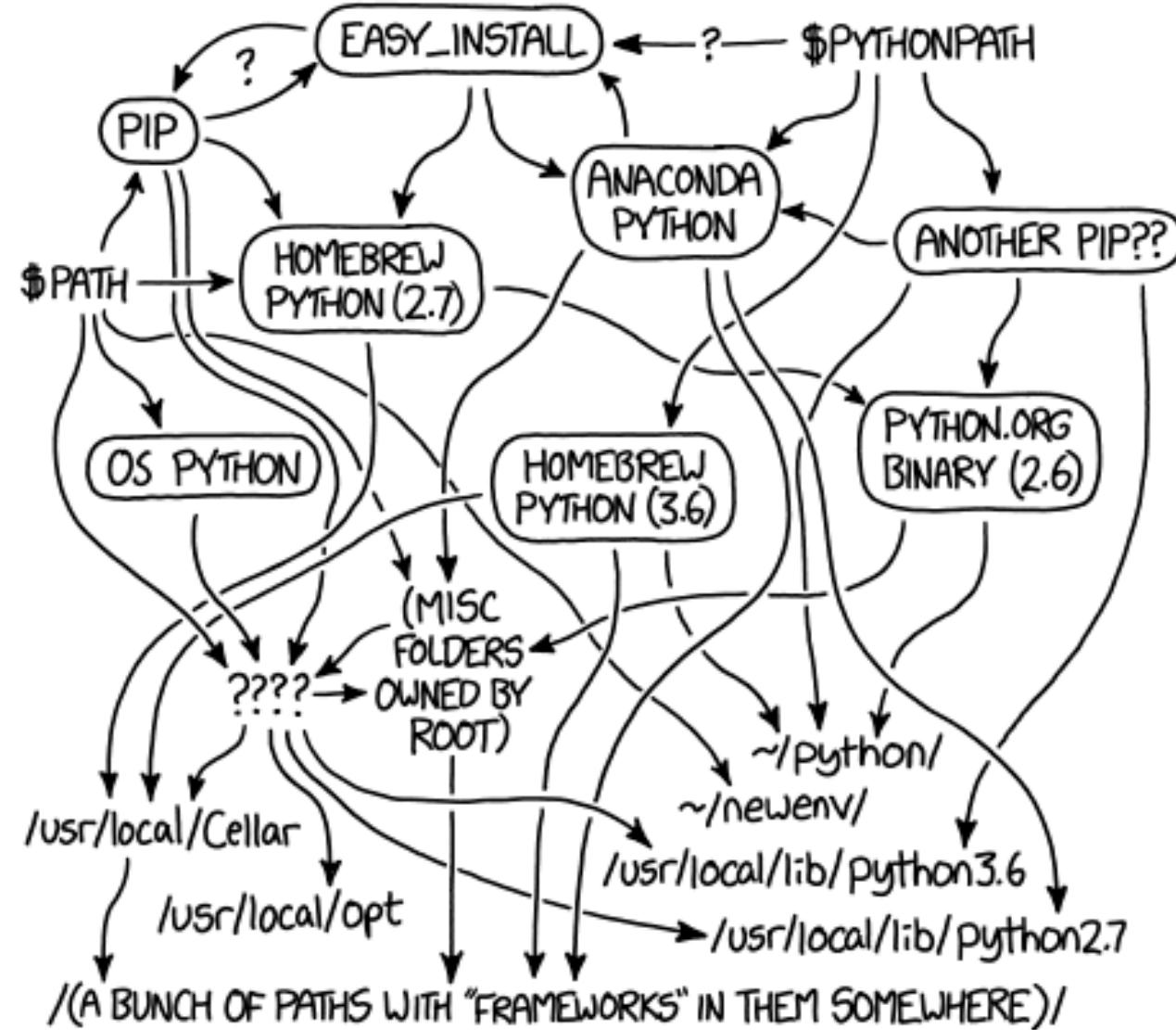
MY PYTHON ENVIRONMENT HAS BECOME SO DEGRADED THAT MY LAPTOP HAS BEEN DECLARED A SUPERFUND SITE.

package managers

python has a plentitude of package managers and package formats (contradicts zen of python), so don't get confused

- pip (standard package manager)
- virtualenv (multiple versions of python installations)
- conda = pip + virtualenv + (other goodies)
- easy_install (deprecated)
- wheel (distribution format PEP427)
- egg (old package format replaced by wheel)

conda

- conda is a package manager in user space.
- tool to create isolated python installations
- it allows you to use multiple versions of python
- commercial tool: anaconda
- 2 versions miniconda (free), anaconda (commercial)
- works on linux, MS-win, macOS
- packages are provided by channels (anaconda, conda-forge, bioconda, intel

conda

```
$ conda create –n my_env python=3.6
$ conda install –c conda-forge scipy=0.15.0
$ conda list
$ conda search numpy
$ conda update –all
$ conda info numpy
```

pip

- simple packages management tool for python
- comes preinstalled with python

```
$ pip install SomePackage              # latest version
$ pip install SomePackage==1.0.4       # specific version
$ pip install 'SomePackage>=1.0.4'     # minimum version
$ pip install --upgrade SomePackage    # upgrade
```