

Packager

son projet Django

Bruno Renié
Djangocong 2012

distribuer / déployer
du code

git

dépendances
rollback
traçabilité

Paas

contraintes

géographiques
architecturales
culturelles

packaging

installer son **application** comme
une simple **bibliothèque***

* configuration laissée au soin de l'utilisateur

simplicité
traçabilité
reproductibilité

Application OS **deb / RPM**
setup.py



ATTENTION PYTHON COMRADES
NEW ORDERS FROM THE MINISTRY OF PACKAGING!

SONS AND DAUGHTERS OF THE GLORIOUS
PEOPLE'S PYTHONIC REPUBLIC

USE **DISTRIBUTE** AND **PIP**

THAT IS ALL.

THIS MESSAGE HAS BEEN APPROVED BY @JEZDEZ, HIGH CHANCELLOR OF PACKAGING

django

nettoyez-moi tout ça

arrêter d'altérer sys.path

```
project/  
  __init__.py  
  urls.py  
  app1/  
    __init__.py  
    models.py  
  app2/
```

```
from project.app1.views import stuff
```

Application réutilisable : **package séparé**

```
from registration.models import RegistrationProfile
```

Application non réutilisable : **embarquée**

```
from project.app.models import Stuff
```

requirements : **versions explicites**

Django==1.4

PIL==1.1.6

pas de liens git

setup.py

```
from distutils.core import setup
from setuptools import find_packages

with open('requirements.txt') as reqs:
    install_requires = reqs.read().split('\n')

setup(
    name='project',
    version=__import__('project').__version__,
    packages=find_packages(),
    include_package_data=True,
    zip_safe=False,
    install_requires=install_requires,
)
```


MANIFEST.in

pour tout ce qui est non-python

```
include requirements.txt
recursive-include project *

recursive-exclude project *.pyc
recursive-exclude project *.scss
exclude project/settings.py
```

settings

Packagé : project/default_settings.py

Déployé : settings.py

```
from project.default_settings import *  
  
DATABASES = {  
    ...  
}
```

layout final

requirements.txt

setup.py

MANIFEST.in

project/

 __init__.py

 default_settings.py

 settings.py

 app1/

 app2/

Déploiement

```
env/  
public/  
    static/  
settings.py  
wsgi.py
```

```
./env/bin/gunicorn wsgi:application
```

utiliser add2virtualenv pour rendre **wsgi** et **settings** importables sans toucher PYTHONPATH

pip et paquets privés

--find-links : file:///path/to/packages

--index-url : structure de type
<http://pypi.python.org/simple/>

bien héberger **tous** ses paquets
pypi tombe, les versions disparaissent

Workflow final

Déployer

(incrément n° de version)

```
python setup.py sdist
```

(upload)

```
pip install -U project --find-links ...
```

Rollback

```
pip install project==X.Y.Z --find-links ...
```

<https://github.com/brutasse/fab-bundle>

@brutasse
bruno@renie.fr