

Modular Python

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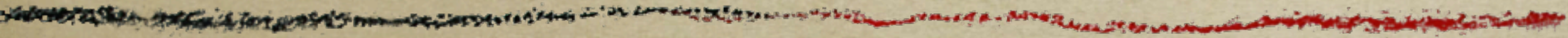
Introduction

- *Problem description*
- *Use eggs: virtualenv, easy_install*
- *Create eggs: setup.py, setuptools, custom pypi*

Problem

- *Write re-usable code*
- *Use across applications*

Using eggs



easy_install

```
$ easy_install httpLib2
```

```
$ python
```

```
>>> import httpLib2
```

(Execute this inside a virtualenv)

virtualenv

```
$ virtualenv foo
```

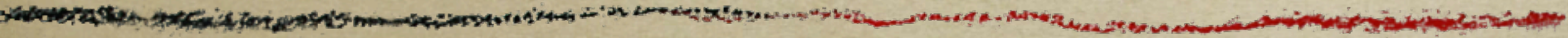
```
$ source foo/bin/activate
```

```
(foo)$ easy_install httpplib2
```

```
(foo)$ python
```

```
>>> import httpplib2
```

Building eggs



setup.py

```
#!/usr/bin/env python
from setuptools import setup, find_packages
setup(
    name = 'mypkg',
    version = '0.1',
    description = 'Some stupid functionality',
    packages = find_packages(),
)
```

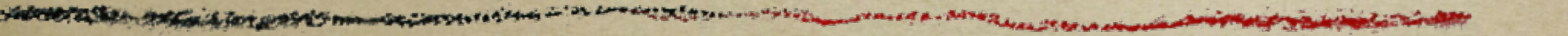

Build and use

```
$ python setup.py bdist_egg  
$ easy_install dist/mypkg-0.1-py2.6.egg  
$ python  
>>> import mypkg
```

Dependencies

```
#!/usr/bin/env python
from setuptools import setup, find_packages
setup(
    name = 'mypkg',
    version = '0.1',
    description = 'Some stupid functionality',
    packages = find_packages(),
    install_requires = [
        'barpkg < 1',
    ],
)
```

Your own pypi



apache.conf

```
<VirtualHost *>  
    Options Indexes  
    ServerName pypi  
    DocumentRoot /var/www/pypi  
</VirtualHost>
```

File structure

```
$ cd /var/www/pypi
$ find .
./simple
./simple/babel
./mypkg
./mypkg/mypkg-0.1-py2.6.egg
./mypkg/mypkg-0.2-py2.6.egg
./revpkg
./revpkg/revpkg-0.1.dev_r1348-py2.6.egg
./revpkg/revpkg-0.1.dev_r1353-py2.6.egg
```

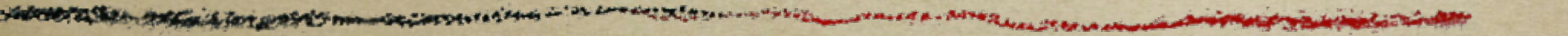
Use it

```
$ easy_install --index-url http://pypi/simple/ \
  mypkg
```

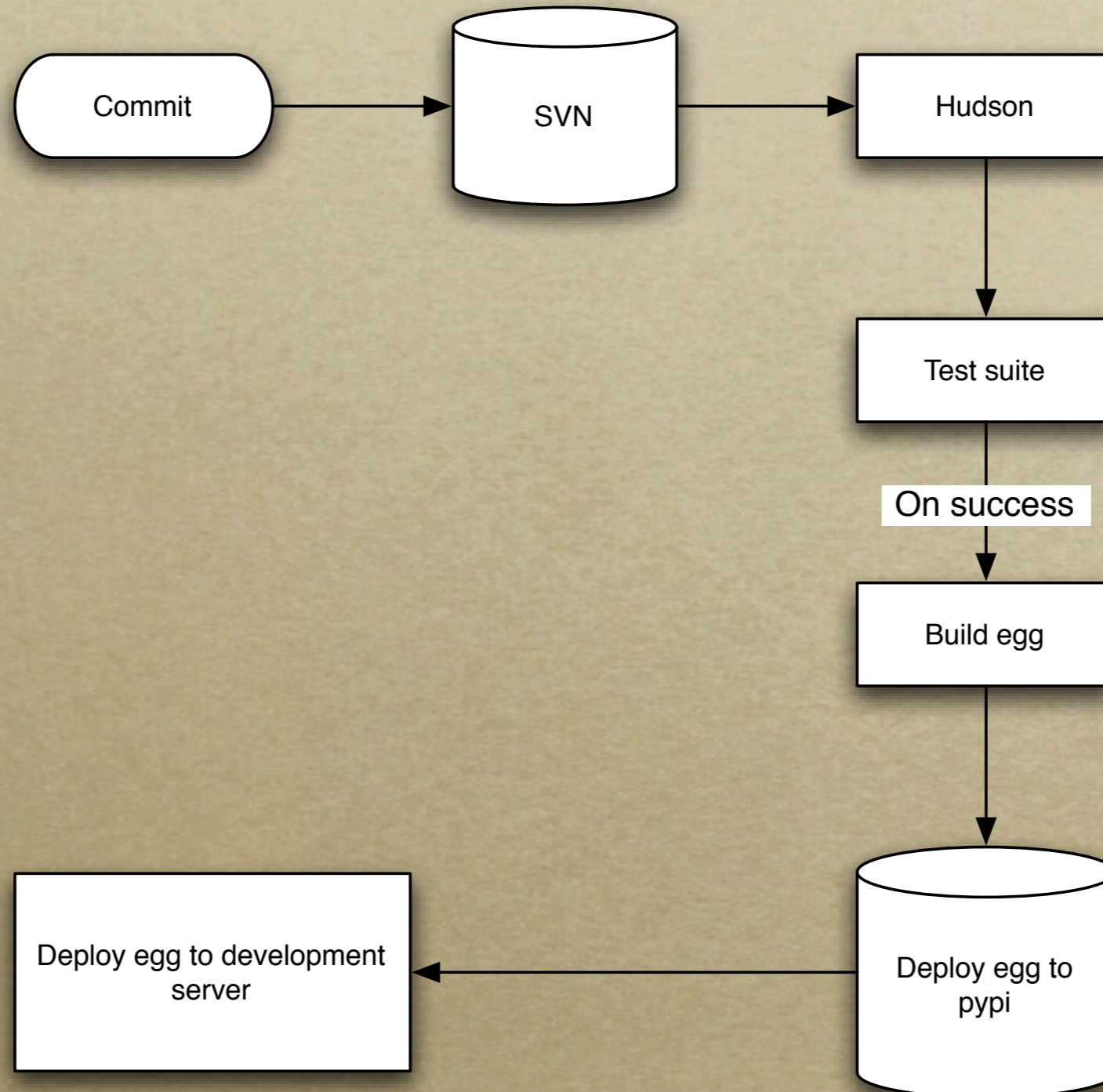
or:

```
$ easy_install --find-links \
  http://pypi/simple/mypkg/ mypkg
```

Real-life workflow



At Nektoon



Thank you

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