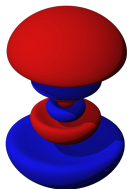# Using Virtualenv

## ATOM - Austin's Thing of the Month

Simplify your python project dependency management.

- Austin Godber
- Mail: godber@uberhip.com
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- Source: http://github.com/godber/ATOM

# What does it do?

Creates isolated environments for your python dependencies.

- Have you ever had project A need version 0.75 of libX and project B need version 0.82 of the same library?

- Solving mixed dependencies on complex projects gets messy fast.

- Works on windows, though this presentation is Unix-ish.

# **Getting Started**

Installing with easy_install:

```
sudo easy_install virtualenv
```

Creating environments:

```
virtualenv <envname>
virtualenv project1
virtualenv --relocatable relocatable-project
virtualenv --no-site-packages isolated-project
```

# What do you get?

```
project1/
|-- bin
|-- include
|   +-- python2.6 -> /usr/include/python2.6
+-- lib
    +-- python2.6
        |-- config -> /usr/lib/python2.6/config
        |-- distutils
        |-- encodings -> /usr/lib/python2.6/encodings
        |-- lib-dynload -> /usr/lib/python2.6/lib-dynload
        +-- site-packages
```

# What is in bin/?

A few helper scripts and any package executables go here:

```
activate{,.csh,.fish}
activate_this.py
easy_install
pip
python
```

On windows it is: `activate.bat` and `deactivate.bat`

# How to use it.

Activate!

```
source project1/bin/activate
```

Work!

```
pip install django #NO SUDO!!!!
```

Deactivate!

```
deactivate
```

# **Go Orbital with virutalenvwrapper**

Install

```
sudo easy_install virtualenvwrapper
# prep your environment
export WORKON_HOME=~/python-environments
mkdir -p $WORKON_HOME
ln -s $WORKON_HOME ~/.virtualenvs
source /usr/local/bin/virtualenvwrapper.sh
```

Put the source line in your shell startup file.

# **What does this provide?**

- Common environment installation location

- Tab Completion and Hooks

- Convenient shortcuts

  - `mkvirtualenv` - Creates environment

  - `workon` - Activates

  - `lssitepackages` - Show packages

# **References**

- virtualenv
- virtualenvwrapper
- P5M1 Orbital Image
- Presentation Source - http://github.com/godber/ATOM