



# Python Mashup!

Casi d'uso: virtualenv, Fabric, uWSGI, nginx,  
Vagrant...



*Python Milano Meetup*

# The 'Spyker'

Who are we, What we do,  
why, how...

Lorenzo Mele @greenkey  
Cesare Placanica @keobox  
Christian Strappazzon @cstrap

Slack

<http://pythonmilano.herokuapp.com/>

<http://pythonmilano.xyz/>

Join us!



*Python Milano Meetup*

# Vagrant

<https://www.vagrantup.com/>



Vagrant provides easy to configure, reproducible, and portable work environments built on top of industry-standard technology and controlled by a single consistent workflow to help maximize the productivity and flexibility of you and your team.

Once you or someone else creates a single Vagrantfile, you just need to vagrant up and everything is installed and configured for you to work.

*Python Milano Meetup*

# virtualenv

<https://virtualenv.pypa.io/en/stable/>



`virtualenv` is a tool to create isolated Python environments.

What if you want to install an application and leave it be? If an application works, any change in its libraries or the versions of those libraries can break the application.

Also, what if you can't install packages into the global site-packages directory? For instance, on a shared host.

In all these cases, `virtualenv` can help you. It creates an environment that has its own installation directories, that doesn't share libraries with other `virtualenv` environments (and optionally doesn't access the globally installed libraries either).



## INSTALLING THE XKCD DEVELOPMENT ENVIRONMENT

1. SPIN UP A VM
2. SPIN UP A VM INSIDE THAT VM
3. CONTINUE SPINNING UP NESTED VMS  
AND CONTAINERS UNTIL YOU GET FIRED

<http://xkcd.com/1764/>

# Fabric

<http://www.fabfile.org/>



Fabric is a Python (2.5-2.7) library and command-line tool for streamlining the use of SSH for application deployment or systems administration tasks.

It provides a basic suite of operations for executing local or remote shell commands (normally or via sudo) and uploading/downloading files, as well as auxiliary functionality such as prompting the running user for input, or aborting execution.

*Python Milano Meetup*

# uWSGI

<https://uwsgi-docs.readthedocs.io/en/latest/>



The uWSGI project aims at developing a full stack for building hosting services.

Thanks to its pluggable architecture it can be extended to support more platforms and languages.

The “WSGI” part in the name is a tribute to the namesake Python standard, as it has been the first developed plugin for the project.

Versatility, performance, low-resource usage and reliability are the strengths of the project (and the only rules followed).



# nginx

<https://www.nginx.com/>



NGINX is a free, open-source, high-performance HTTP server and reverse proxy, as well as an IMAP/POP3 proxy server. NGINX is known for its high performance, stability, rich feature set, simple configuration, and low resource consumption.

NGINX is one of a handful of servers written to address the C10K problem. Unlike traditional servers, NGINX doesn't rely on threads to handle requests. Instead it uses a much more scalable event-driven (asynchronous) architecture. This architecture uses small, but more importantly, predictable amounts of memory under load. Even if you don't expect to handle thousands of simultaneous requests, you can still benefit from NGINX's high-performance and small memory footprint. NGINX scales in all directions: from the smallest VPS all the way up to large clusters of servers.

*Python Milano Meetup*



# mod\_wsgi

[https://github.com/GrahamDumpleton/mod\\_wsgi](https://github.com/GrahamDumpleton/mod_wsgi)

The mod\_wsgi package implements a simple to use Apache module which can host any Python web application which supports the Python WSGI specification. The package can be installed in two different ways:

- Install as module of existing Apache installation.
- Install from PyPI.

Deployment recipe:

[http://thecodeship.com/deployment/deploy-django-apache-virtualenv-and-mod\\_wsgi/](http://thecodeship.com/deployment/deploy-django-apache-virtualenv-and-mod_wsgi/)

# Your Current Status



*Python Milano Meetup*



*Python Milano Meetup*



# Demo



Open discussion



<http://cultofthepartyparrot.com/>