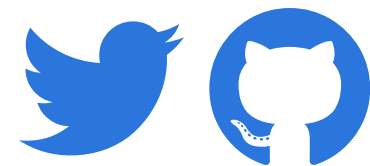


ANSIBLE TO RULE THE WORLD

by Aitzol Naberan



CodeSyntax

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Pyramid™

OUR SYSTEMS BACKGROUND

- 2001 ~ 2005: 3 shared servers
- 2005 ~ 2009: n VPS
- 2009 ~ today: m physical servers ($20 < m < 30$)
- today ~ : ∞ cloud servers

BUT...

This was meant to be a nightmare



Automate, ok...
but WHAT to automate?



APPLICATION DEPLOYMENT

zc.buildout, fabric, ...

✓ Already achieved

OUR NEEDS

1. Server provisioning
2. Configuration update/change

ANSIBLE TO THE RESCUE

ANSIBLE

ANSIBLE

Ansible is a radically simple IT automation engine that automates cloud provisioning, configuration management, application deployment, intra-service orchestration, and many other IT needs.

ANSIBLE

- Write a YAML file
- Run it
- Everything done



[cheers and applause]

ANSIBLE EXAMPLE

```
---  
- hosts: all  
  tasks:  
    - name: Add user setlem  
      user: name=setlem state=present shell=/bin/bash  
  
    - name: Ensure additional packages via apt  
      apt: pkg=nginx state=present
```



EXTENDING ANSIBLE: ANSIBLE GALAXY

- pypi for ansible
- Roles for almost anything: package configuration, application deployment, swap files, exim configuration, ...

OUR ANSIBLE SETUP

We ended having 5 main configuration files for our servers:

- Common setup
- Setup for Plone project
- Setup for Django projects (Common + Mysql)
- Setup for WordPress projects (Common - nginx + Apache + PHP + Mysql)
- apt package update (we use Debian)

OUR FIRST TIME

- After some tests, we run it on production
- 4 servers with special firewall rules
- 10 servers with old ssh keys
- n incorrectly configured exim mail servers

DYNAMIC INVENTORIES

- Dynamic list of hosts
- No need to keep a stone-written list of hosts
- Everything automated

CURRENT STATUS

- We create all our servers using Ansible
- We regularly run Ansible to ensure that nobody has changed the configuration
- We keep updating our Ansible config file to address a few glitches

(SMALL) PROBLEMS

- Server specific setups
- Different firewall rules
- Domain-dependant mailserver configuration
- Project specific requirements

FUTURE DEVELOPMENTS

- Automate Plone hotfix installing
- Automate django deployments
- Automate nginx configuration
- Autocontained projects: server setup + application deployment (DevOps culture)

Q & A

