

# Ansible on Arch 101

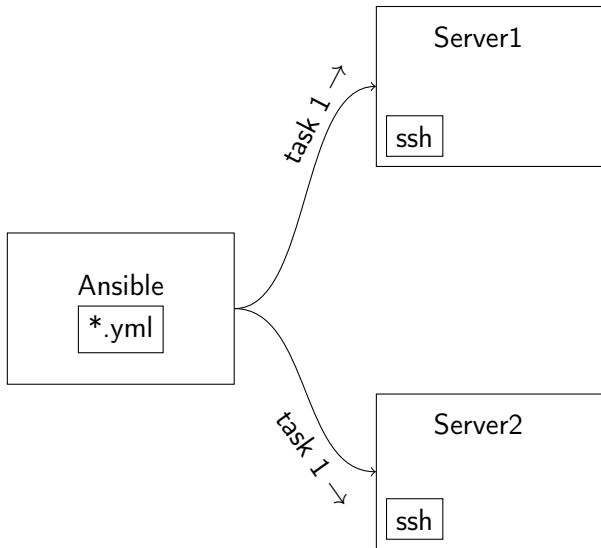
Julien Girardin

November 10, 2015

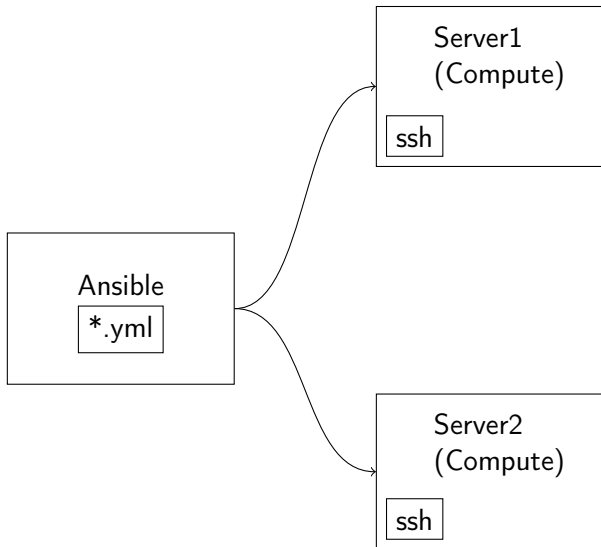
# Why Ansible?

|              | Puppet            | Chef              | Ansible     |
|--------------|-------------------|-------------------|-------------|
| Architecture | Server & Agent    | Server & Agent    | Workstation |
| Security     | Certificates(PKI) | Certificates(PKI) | SSH         |
| Language     | DSL               | Ruby              | DSL         |
| Extension    | Ruby              | Ruby              | Python      |
| Push/Pull    | Pull              | Pull              | Push        |

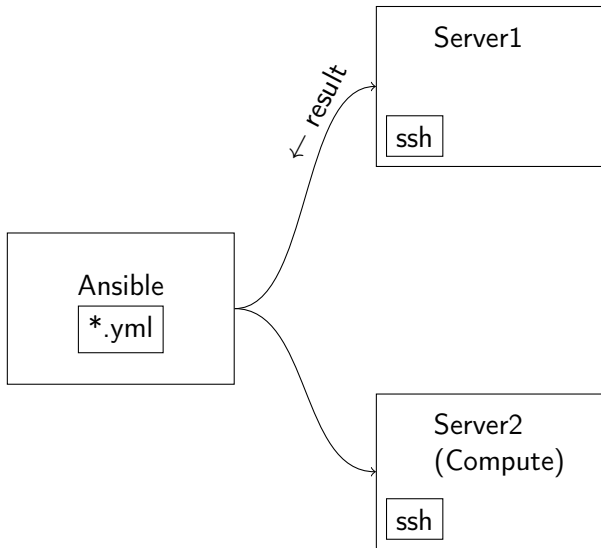
# How it works



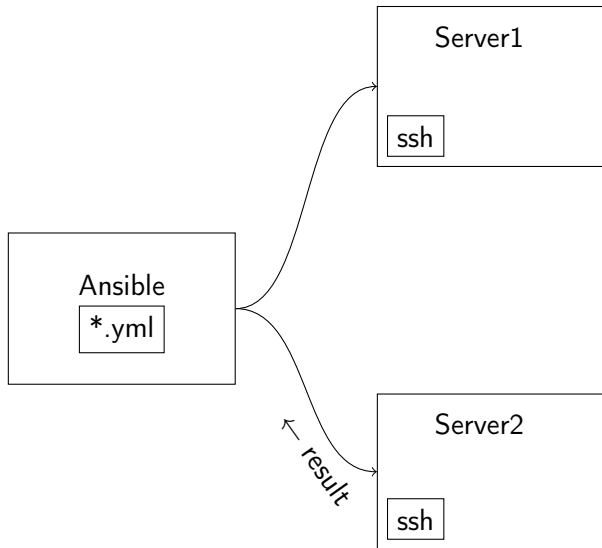
# How it works



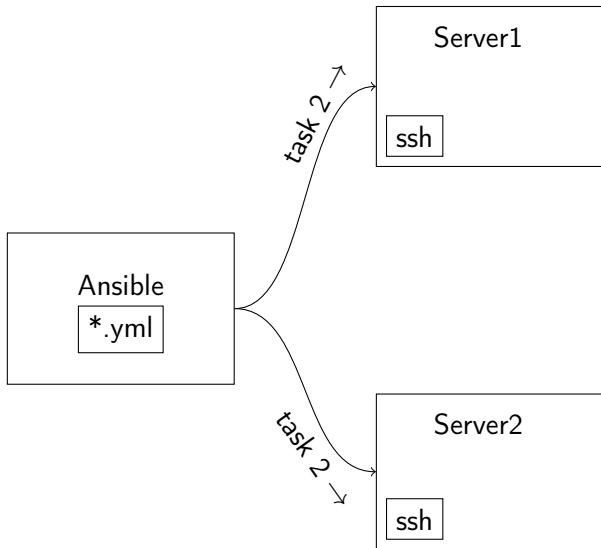
# How it works



# How it works



# How it works



## For archlinux ?

```
/etc/ansible/hosts or -i filename
```

```
[webservers]
```

```
foo1.arkena.test ansible_python_interpreter=python2
```

```
foo2.arkena.test option_for_a_non_arch=server
```

```
[dbservers]
```

```
bar.arkena.test ansible_python_interpreter=python2
```

AND

Dependencies

```
pacman -S python2 openssh
```



## Specific tasks in playbooks.yml

```
- hosts: my_archlinux_server
  tasks:
    - pacman:
      name: {package}
      state: {absent|present|latest}
```

## Specific tasks in playbooks.yml

```
- hosts: my_archlinux_server
  tasks:
    - pacman:
      name: {package}
      state: {absent|present|latest}
```

## Some problems

- Can't pass package file like other package manager in ansible
- Group install make change (orange color) every time

# AUR helper with ansible

```
- git:
  repo: https://aur.archlinux.org/{{package_name}}.git
  dest: >
    /tmp/{{ lookup('pipe',
    'tr -dc A-Za-z0-9 < /dev/urandom | head -c${1:-8};echo;') }}
  register: git_clone

- shell: >
  . ./PKGBUILD; echo "${makedepends[@]}"
  | xargs pacman -Sy --asdeps --needed --noconfirm;
  chmod 777 .
  args:
    chdir: '{{ git_clone.invocation.module_complex_args.dest}}'

- command: makepkg
  become: yes
  become_user: nobody
  args:
    chdir: '{{ git_clone.invocation.module_complex_args.dest}}'

- command: 'ls -l'
  register: file_list
  args:
    chdir: '{{ git_clone.invocation.module_complex_args.dest}}'

- command: >
  pacman -U --noconfirm
  {% for pkg in file_list.stdout_lines if pkg|match('.*pkg\.tar\.xz') %}
  {{ pkg }} {% endfor %}
  args:
    chdir: '{{ git_clone.invocation.module_complex_args.dest}}'
```

## Role dependencies

```
myplaybook.yml
roles/
  myrole/
    tasks/main.yml  # playbook
    meta/main.yml
  aur_helper/
    tasks/main.yml
```

## roles/myrole/meta/main.yml

```
dependencies:
  - role: aur_helper
    package_name: shinken
```

## myplaybook.yml

```
- hosts: my_archlinux_server
  roles:
    - myrole
```

## Some problems

- Reproducibility
- Build tools chain on 'server'
- Broken update

## Some problems

- Reproducibility
- Build tools chain on 'server'
- Broken update

## builder & repo

- Jenkins
- Buildbot
- ...

Questions!?

DEMO

code available at

[https://github.com/Zempashi/buildbot\\_pkg\\_ansible](https://github.com/Zempashi/buildbot_pkg_ansible)



Questions!?