Ansible on arch 101

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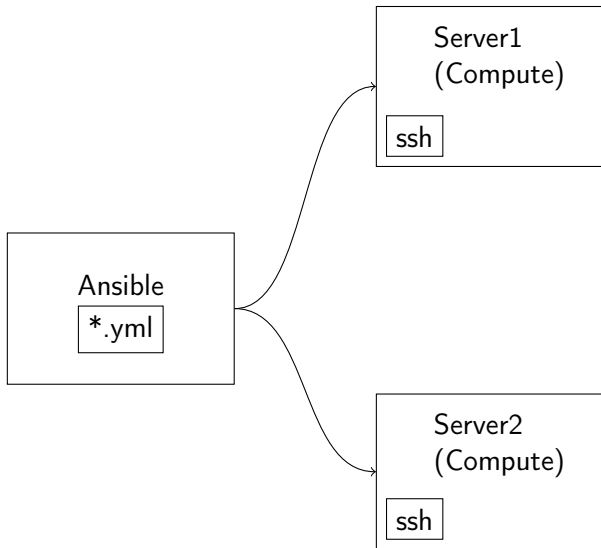
Why Ansible?

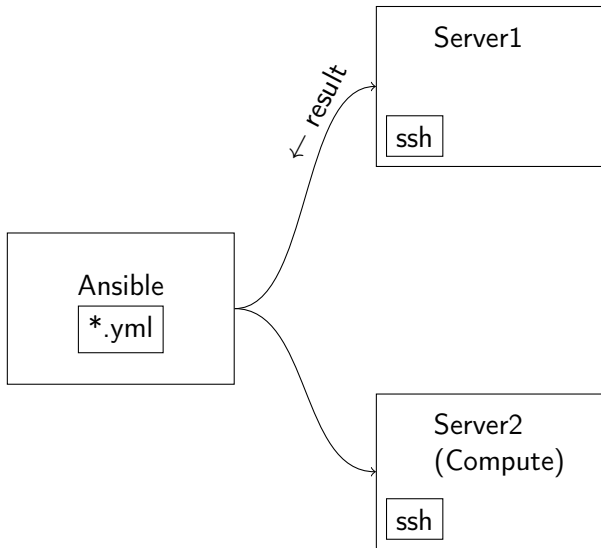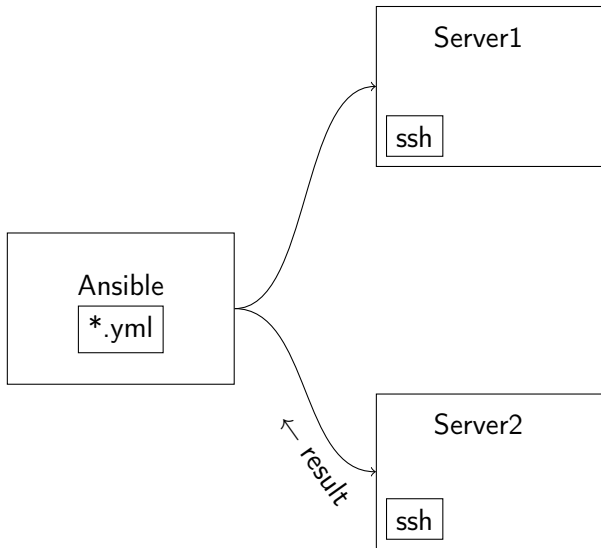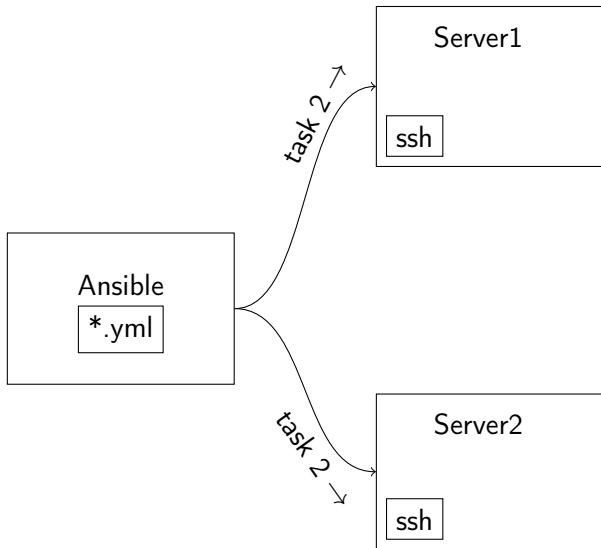|	Puppet	Chef	Ansible
Architecture	Server & Agent	Server & Agent	Workstation
Security	Certificates(PKI)	Certificates(PKI)	SSH
Language	DSL	Ruby	DSL
Extension	Ruby	Ruby	Python
Push/Pull	Pull	Pull	Push
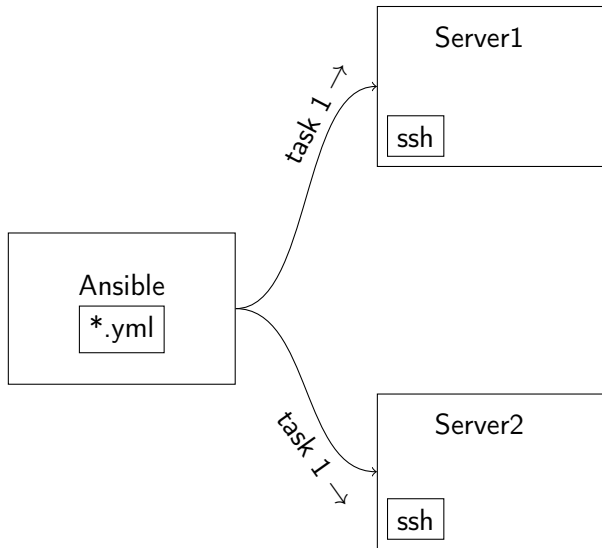
How it works

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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}
```

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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

```yaml
- 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 -1'
  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}}'
```

Roles

Role depencies

```
myplabook.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

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

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builder & repo

- Jenkins
- Buildbot
- ...

Questions!?