

Sesión 6 : ansible

ansible

become

```
- name: servicio
  service:
    name: httpd
    state: started
  become: yes
```

```
- name: servicio
  service:
    name: httpd
    state: started
  become: yes
  become_user: apache
```

adduser

add-user.yaml

```
- hosts: all
  tasks:
    - include: add-user-debian.yaml
      when: ansible_os_family == 'Debian'
    - include: add-user-redhat.yaml
      when: ansible_os_family == 'RedHat'
```

add-user-debian.yaml

```
- name: add user
  user:
    name: operador
    comment: nuestro usuario operador
    shell: /bin/bash
    home: /home/operador
    groups: sudo
    append: yes
  become: true

- name: Set authorized key taken from file
  authorized_key:
    user: operador
    state: present
    key: "{{ lookup('file', '/home/devops/.ssh/id_ed25519.pub') }}"
  become: true
```

add-user-redhat.yaml

```

- name: check centos correct suoders line
  lineinfile:
    path: /etc/sudoers
    state: present
    regexp: '^%wheel\s'
    line: '%wheel ALL=(ALL) NOPASSWD: ALL'
  become: true
  when: ansible_os_family == 'RedHat'
- name: add user
  user:
    name: operador
    comment: nuestro usuario operador
    shell: /bin/bash
    home: /home/operador
    groups: wheel
    append: yes
  become: true

- name: Set authorized key taken from file
  authorized_key:
    user: operador
    state: present
    key: "{{ lookup('file', '/home/devops/.ssh/id_ed25519.pub') }}"
  become: true

```

adduser2

otra-opcion.yaml

```

- hosts: "all"
  sudo: true
  vars:
    users:
      - "operador1"
      - "operador2"
      - "operador3"
  tasks:
    - name: "crear grupo operador"
      become: yes
      group:
        name: operador
        state: present

    - name: "Create user accounts"
      user:
        name: "{{ item }}"
        groups: "operador"
      with_items: "{{ users }}"

    - name: "Add authorized keys"
      authorized_key:
        user: "{{ item }}"
        key: "{{ lookup('file', 'files/' + item + '.pub') }}"  #

```

```

files/operador1.pub files/operador2.pub ...
  with_items: "{{ users }}"

- name: "Allow admin users to sudo without a password"
  lineinfile:
    dest: "/etc/sudoers"
    state: "present"
    regexp: "^%operador"
    line: "%operador ALL=(ALL) NOPASSWD: ALL"
    become: yes

- name: Install apache httpd but avoid starting it immediately
  (state=present is optional)
  package:
    name: httpd
    when: ansible_os_family == 'RedHat'
    become: yes

```

mysql install

mysql-install.yaml

```

#           Ansible needs python-mysqldb
- name: Install MySQL
  apt: pkg={{item}} state=latest update_cache=false
  register: ispconfig_install_step1
  with_items:
    - pwgen
    - mysql-client
    - mysql-server
    - python-mysqldb

#           Requires a system with pwgen, included in our base system
- name: Generate MySQL Random Password
  command: /usr/bin/pwgen -s 16
  register: mysql_root_password

- name: update mysql root password for all root accounts
  mysql_user: name=root host={{ item }}
  password={{mysql_root_password.stdout}} update_password=always state=present
  with_items:
    - "{{ inventory_hostname }}"
    - 127.0.0.1
    - ::1
    - localhost
  notify:
    - Restart MySQL

- name: copy my.cnf file with root password credentials to /root/.my.cnf
  template: src=my.cnf dest=/root/.my.cnf owner=root mode=0600

- name: Configure MySQL to listen on *:3306
  replace: dest=/etc/mysql/my.cnf regexp='bind-address' replace='#bind-

```

```
address'
```

- https://docs.ansible.com/ansible/latest/modules/mysql_user_module.html?highlight=mysql

roles

- https://docs.ansible.com/ansible/latest/user_guide/playbooks_reuse_roles.html#role-directory-structure
- <https://github.com/kpeiruza/ansible>

```
- hosts: all
roles:
  - rol1
  - rol2
  - rol3
```

[add-user-with-rol.yaml](#)

```
- hosts: all
roles:
  - add-user-rol
```

[add-user-rol/tasks/main.yaml](#)

```
- include: add-user-debian.yaml
  when: ansible_os_family == 'Debian'
- include: add-user-redhat.yaml
  when: ansible_os_family == 'RedHat'
```

[add-user-rol/tasks/add-user-debian.yaml](#)

```
- name: add user
  user:
    name: operador
    comment: nuestro usuario operador
    shell: /bin/bash
    home: /home/operador
    groups: sudo
    append: yes
    become: true

- name: Set authorized key taken from file
  authorized_key:
    user: operador
    state: present
# la clave pública en el directorio files del rol
  key: "{{ lookup('file', '{{ role_path }}/files/id_ed25519.pub') }}"
  become: true
```

[add-user-rol/tasks/add-user-redhat.yaml](#)

```
- name: check centos correct suoders line
```

```

lineinfile:
  path: /etc/sudoers
  state: present
  regexp: '^%wheel\s'
  line: '%wheel ALL=(ALL) NOPASSWD: ALL'
become: true
when: ansible_os_family == 'RedHat'
- name: add user
  user:
    name: operador
    comment: nuestro usuario operador
    shell: /bin/bash
    home: /home/operador
    groups: wheel
    append: yes
    become: true

- name: Set authorized key taken from file
  authorized_key:
    user: operador
    state: present
    key: "{{ lookup('file', lookup('env','HOME')+'/.ssh/id_ed25519.pub') }}"
    become: true

```

git

- HEAD : RAMA+COMMIT
- HEAD~2 : 2 commits atrás del HEAD actual
- comandos
 - git clone
 - git add .
 - git log
 - git commit [-m «mensaje»]
 - git push
 - git rm <fichero>
 - git tag <version o tag> <commit>
 - git checkout [-b] <rama> : crear o cambiar de rama
 - git diff <tag/commit> <commit> [<fichero>]
 - git init
 - git remote set-url origin <direccion>

docker-machine

instalar docker en máquinas de diferentes proveedores:

- máquina remota
- digital-ocean
- amazonec2

info:

- <https://docs.docker.com/machine/>

- <https://docs.docker.com/machine/get-started/>

comandos:

- `docker-machine create --driver digitalocean --digitalocean-access-token xxxxx docker-sandbox`
- `docker-machine create --driver virtualbox default`
- `docker-machine create --driver amazonec2 --amazonec2-access-key AKI***** --amazonec2-secret-key 8T93C***** aws-sandbox`
- `docker-machine create \`
`--driver generic \`
`--generic-ip-address=203.0.113.81 \`
`--generic-ssh-key ~/.ssh/id_rsa \`
`vm`

boot2docker.iso : imagen usada en el driver por defecto para lanzar un docker. Usada en windows/mac

<https://docs.yugabyte.com/latest/deploy/docker-swarm/>

Prometheus

- <https://prometheus.io> : motor de métricas
- monitoring stack
- federados + árbol
- alertar por umbrales → alertmanager
- recepción de métricas de monitorización → pushgateway
- se usa Grafana para acceder a los datos
- origen de las métricas:
 - node_exporter
 - cadvisor prometheus
 - docker metrics
- despliegue en docker swarm: <https://github.com/stefanprodan/swarmprom>

otros

- `cat /bin/bash > /dev/dsp`
- <https://ed25519.cr.yp.to/>
- vim-nox
- no confirmar claves de sistemas remotos:

`~/.ssh/config`

```
host *
  StrictHostKeyChecking no
```

- TICK : Telegraf + InfluxDB + Chronograf + Kapacitor



- <https://hackertyper.net/>

From:
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