

Question:

You ran an Ansible playbook to install Python3 on multiple servers, but it failed on one of the servers. The error message was:

fatal: [server2]: failed! => {"msg": "no package matching 'python3' found available"}

Questions:

- Why did this error occur?
- How can you modify your playbook to handle this issue dynamically using Ansible Facts?
- Write a playbook snippet that ensures Python3 gets installed correctly on any Linux distribution.

Solutions:

i. Why did the error occur?

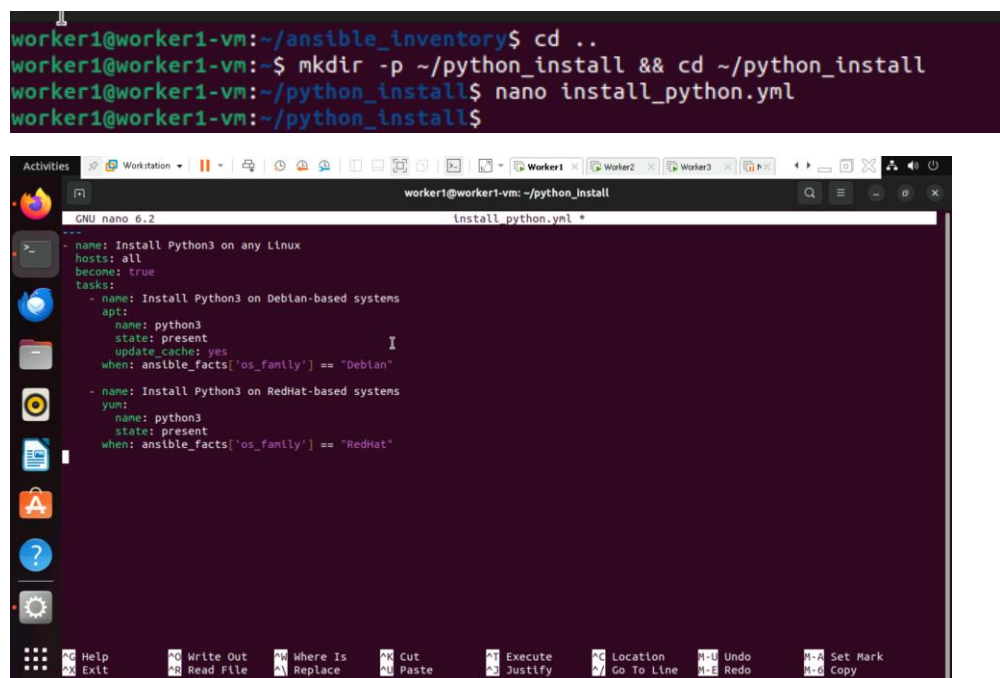
Because the playbook used name: python3, but on some systems, the package name might be python36 or python3.x, and not python3.

ii. How to fix?

Use Ansible facts to install the correct package based on the OS type (Debian vs RedHat).

iii. Playbook Snippet: Cross-Platform Python3 Install

1. Create Playbook



```
worker1@worker1-vm:~/ansible_inventory$ cd ..
worker1@worker1-vm:~$ mkdir -p ~/python_install && cd ~/python_install
worker1@worker1-vm:~/python_install$ nano install_python.yml
worker1@worker1-vm:~/python_install$
```

```
GNU nano 6.2 install_python.yml
--
- name: Install Python3 on any Linux
  hosts: all
  becomes: true
  tasks:
    - name: Install Python3 on Debian-based systems
      apt:
        name: python3
        state: present
        update_cache: yes
        when: ansible_facts['os_family'] == "Debian"
    - name: Install Python3 on RedHat-based systems
      yum:
        name: python3
        state: present
        when: ansible_facts['os_family'] == "RedHat"
```

2. Create Inventory file

```
worker1@worker1-vm: ~/python_install  
worker1@worker1-vm:~/python_install$ nano hosts  
worker1@worker1-vm:~/python_install$  
  
GNU nano 6.2 hosts *  
[all]  
worker1 ansible_host=192.168.153.131 ansible_user=worker1 ansible_become=true  
worker2 ansible_host=192.168.153.133 ansible_user=worker2 ansible_become=true
```

3. Run the playbook

```
worker1@worker1-vm:~/python_install$ ansible-playbook -i hosts install_python.yml --ask-become-pass  
BECOME password:  
  
PLAY [Install Python3 on any Linux] *****  
  
TASK [Gathering Facts] *****  
ok: [worker1]  
ok: [worker2]  
  
TASK [Install Python3 on Debian-based systems] *****  
ok: [worker1]  
ok: [worker2]  
  
TASK [Install Python3 on RedHat-based systems] *****  
skipping: [worker1]  
skipping: [worker2]  
  
PLAY RECAP *****  
worker1      : ok=2    changed=0    unreachable=0    failed=0    skipped=1    rescued=0    ignored=0  
worker2      : ok=2    changed=0    unreachable=0    failed=0    skipped=1    rescued=0    ignored=0  
  
worker1@worker1-vm:~/python_install$
```