School of Computer Science

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

DEHRADUN, UTTARAKHAND

System Monitoring and Configuration Management

Lab File

(2024)

for

6th Semester

Submitted To:

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[6h Semester]
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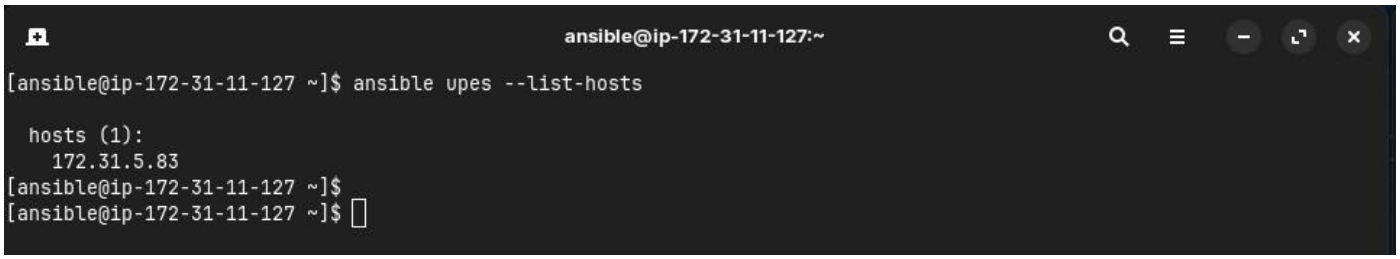
LAB EXERCISE 12

Aim-Create Run Ansible Playbooks

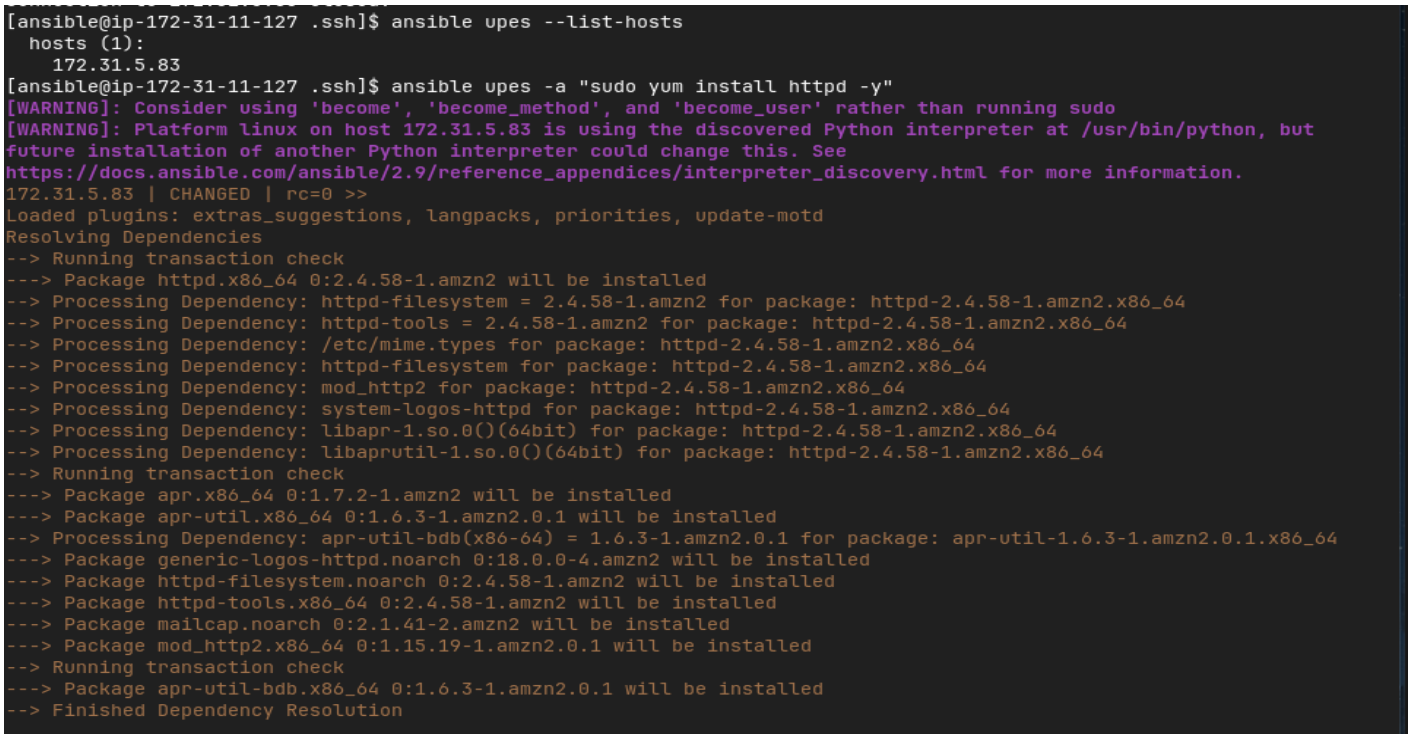
Steps

1. Repeat the steps in Experiment 11 to create the initial setup

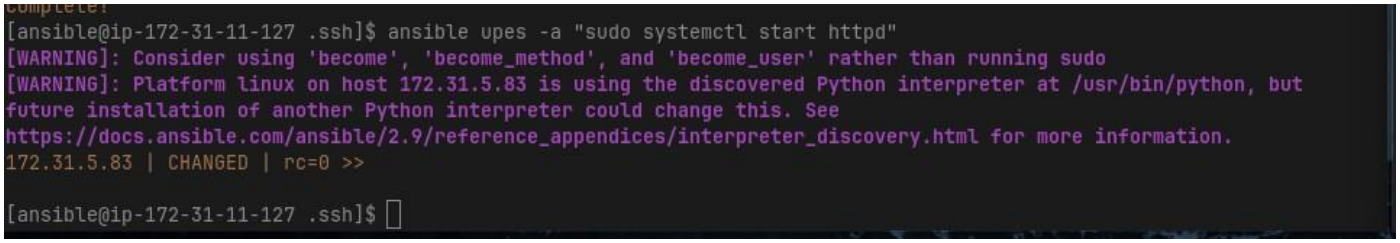
2. Test adhoc commands

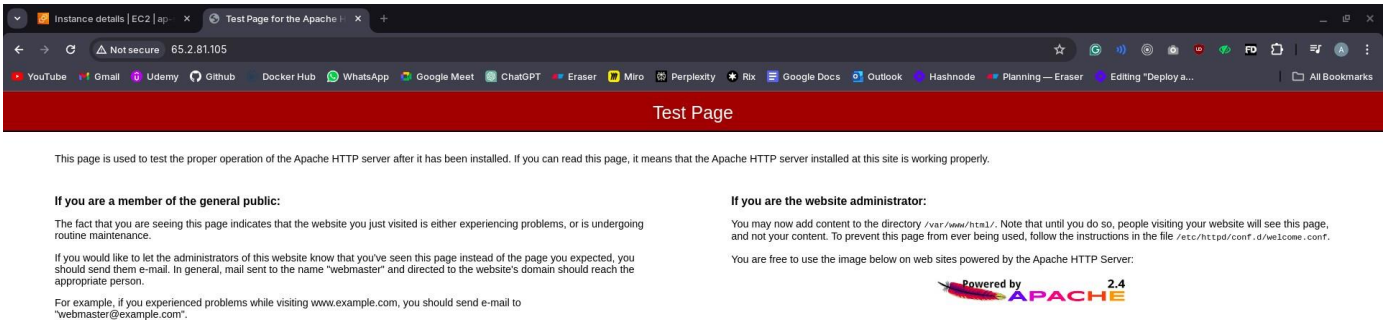


3. Install Apache server on node server using adhoc command



4. Start the httpd service using ansible

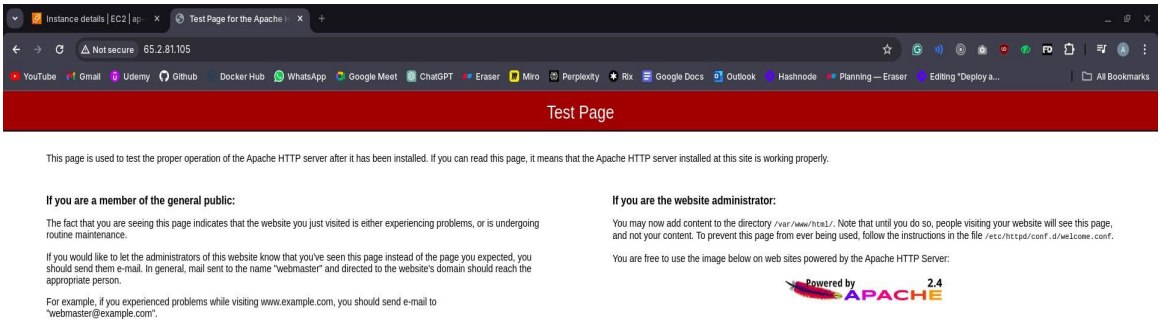




5. Remove ansbile and then reinstall using ansible playbook

```
[ansible@ip-172-31-11-127 .ssh]$ ansible upes -a "sudo yum remove httpd -y"
[WARNING]: Consider using 'become', 'become_method', and 'become_user' rather than running sudo
[WARNING]: Platform linux on host 172.31.5.83 is using the discovered Python interpreter at /usr/bin/python, but
future installation of another Python interpreter could change this. See
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
172.31.5.83 | CHANGED | rc=0 >>
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Resolving Dependencies
--> Running transaction check
---> Package httpd.x86_64 0:2.4.58-1.amzn2 will be erased
--> Processing Dependency: httpd-mmn = 20120211x8664 for package: mod_http2-1.15.19-1.amzn2.0.1.x86_64
--> Running transaction check
---> Package mod_http2.x86_64 0:1.15.19-1.amzn2.0.1 will be erased
--> Finished Dependency Resolution

Dependencies Resolved
```

```
ansible@ip-172-31-11-127:~/.ssh
[ansible@ip-172-31-11-127 .ssh]$ cat pb1.yml
- hosts: upes
  user: ansible
  become: yes
  connection: ssh
  vars:
    pkgname: httpd
    currstatus: present
  tasks:
    - name: Install HTTPD
      yum:
        name: '{{ pkgname }}'
        state: '{{ currstatus }}'

    - name: Start HTTPD service
      service:
        name: httpd
        state: started

[ansible@ip-172-31-11-127 .ssh]$ ansible-playbook pb1.yml

PLAY [upes] ********************************************************************************************************

TASK [Gathering Facts] *********************************************************************************************
[WARNING]: Platform linux on host 172.31.5.83 is using the discovered Python interpreter at /usr/bin/python, but
future installation of another Python interpreter could change this. See
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
ok: [172.31.5.83]

TASK [Install HTTPD] ***********************************************************************************************
ok: [172.31.5.83]

TASK [Start HTTPD service] *****************************************************************************************
changed: [172.31.5.83]

PLAY RECAP *********************************************************************************************************
172.31.5.83                : ok=3    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

[ansible@ip-172-31-11-127 .ssh]$
```



6. Testing other playbooks

```
[ansible@ip-172-31-11-127 .ssh]$ nano pb2.yml
[ansible@ip-172-31-11-127 .ssh]$ cat pb2.yml
---
- hosts: upes
  user: ansible
  become: yes
  connection: ssh
  tasks:
    - name: Debian Family
      command: apt-get install apache2 -y
      when: ansible_os_family == "Debian"
    - name: RedHat Family
      command: yum install httpd -y
      when: ansible_os_family == "RedHat"
[ansible@ip-172-31-11-127 .ssh]$ ansible-playbook pb2.yml

PLAY [upes] ********************************************************************************************************************

TASK [Gathering Facts] *********************************************************************************************************
[WARNING]: Platform linux on host 172.31.5.83 is using the discovered Python interpreter at /usr/bin/python, but
future installation of another Python interpreter could change this. See
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
ok: [172.31.5.83]

TASK [Debian Family] ***********************************************************************************************************
skipping: [172.31.5.83]

TASK [RedHat Family] ***********************************************************************************************************
[WARNING]: Consider using the yum module rather than running 'yum'.  If you need to use command because yum is
insufficient you can add 'warn: false' to this command task or set 'command_warnings=False' in ansible.cfg to get rid
of this message.
changed: [172.31.5.83]

PLAY RECAP *********************************************************************************************************************
172.31.5.83                : ok=2    changed=1    unreachable=0    failed=0    skipped=1    rescued=0    ignored=0

[ansible@ip-172-31-11-127 .ssh]$
```