

# ANSIBLE ASSIGNMENT

```
root@control-node:/home/ar x + v

Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\hp> ssh -i "C:\Users\hp\Downloads\control.pem" ec2-user@54.212.8.135
The authenticity of host '54.212.8.135 (54.212.8.135)' can't be established.
ED25519 key fingerprint is SHA256:ZiOkYyyRz6xN8kybnDfo0IMj5w3BaaKmFU1YzpcdnKg.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '54.212.8.135' (ED25519) to the list of known hosts.
Register this system with Red Hat Insights: insights-client --register
Create an account or view all your systems at https://red.ht/insights-dashboard
[ec2-user@ip-172-31-19-181 ~]$ sudo -i
[root@ip-172-31-19-181 ~]# hostnamectl set-hostname control-node
[root@ip-172-31-19-181 ~]# bash
[root@control-node ~]# lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
xvda         202:0    0   10G  0 disk
├─xvda1      202:1    0    1M  0 part
├─xvda2      202:2    0   200M  0 part /efi
│            /boot/efi
├─xvda3      202:3    0    1G  0 part /boot
└─xvda4      202:4    0   8.8G  0 part /
xvdb         202:16   0    1G  0 disk
[root@control-node ~]# mkswap /dev/xvdb
Setting up swapspace version 1, size = 1024 MiB (1073737728 bytes)
no label, UUID=d222ec4b-b9e0-4948-8e6c-39205f520295
[root@control-node ~]# blkid /dev/xvdb
/dev/xvdb: UUID="d222ec4b-b9e0-4948-8e6c-39205f520295" TYPE="swap"
[root@control-node ~]# vi /etc/fstab
[root@control-node ~]# 4L, 289B written
[root@control-node ~]# mount -a
[root@control-node ~]# swapon -a
[root@control-node ~]# free -h
              total        used        free      shared  buff/cache   available
Mem:           765Mi        247Mi        402Mi        5.0Mi        235Mi        518Mi
Swap:          1.0Gi          0B          1.0Gi

[root@control-node ~]# lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
xvda         202:0    0   10G  0 disk
```

```
root@control-node:/home/ar  +  v
└─xvda1 202:1    0    1M  0 part
└─xvda2 202:2    0 200M 0 part /efi
    /boot/efi
└─xvda3 202:3    0    1G  0 part /boot
└─xvda4 202:4    0  8.8G 0 part /
xvdb   202:16    0    1G  0 disk [SWAP]
[root@control-node ~]# dnf install https://dl.fedoraproject.org/pub/epel/epel-release-latest-9.noarch.rpm -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use "rhc" or "subscription-manager" to register.

Red Hat Enterprise Linux 9 for x86_64 - AppStream from RHUI (RPMs)                26 MB/s | 37 MB    00:01
Red Hat Enterprise Linux 9 for x86_64 - BaseOS from RHUI (RPMs)                16 MB/s | 25 MB    00:01
Red Hat Enterprise Linux 9 Client Configuration                               31 kB/s | 3.2 kB    00:00
epel-release-latest-9.noarch.rpm                                              43 kB/s | 19 kB    00:00
Dependencies resolved.
=====
Package                                Architecture      Version            Repository          Size
=====
Installing:
epel-release                           noarch            9-7.el9            @commandline        19 k
Transaction Summary
=====
Install 1 Package

Total size: 19 k
Installed size: 26 k
Downloading Packages:
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing      :                                1/1
  Installing     : epel-release-9-7.el9.noarch    1/1
  Running scriptlet: epel-release-9-7.el9.noarch  1/1
Many EPEL packages require the CodeReady Builder (CRB) repository.
It is recommended that you run /usr/bin/crb enable to enable the CRB repository.
```

```
root@control-node:/home/ar  +  v
Verifying      : epel-release-9-7.el9.noarch                                     1/1
Installed products updated.

Installed:
  epel-release-9-7.el9.noarch

Complete!
[root@control-node ~]# yum install ansible vim -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use "rhc" or "subscription-manager" to register.

Extra Packages for Enterprise Linux 9 - x86_64                                20 MB/s | 22 MB    00:01
Extra Packages for Enterprise Linux 9 openh264 (From Cisco) - x86_64          1.9 kB/s | 2.5 kB    00:01
Dependencies resolved.
=====
Package                                Architecture      Version            Repository          Size
=====
Installing:
ansible                                noarch            1:7.7.0-1.el9      epel                34 M
vim-enhanced                           x86_64            2:8.2.2637-20.el9_1 rhel-9-appstream-rhui-rpms 1.8 M
Installing dependencies:
ansible-core                           x86_64            1:2.14.14-1.el9    rhel-9-appstream-rhui-rpms 2.6 M
git-core                               x86_64            2.43.5-1.el9_4     rhel-9-appstream-rhui-rpms 4.4 M
gpm-libs                               x86_64            1.20.7-29.el9      rhel-9-appstream-rhui-rpms 22 k
python3-cffi                           x86_64            1.14.5-5.el9       rhel-9-appstream-rhui-rpms 257 k
python3-cryptography                   x86_64            36.0.1-4.el9       rhel-9-baseos-rhui-rpms 1.2 M
python3-packaging                       noarch            20.9-5.el9         rhel-9-appstream-rhui-rpms 81 k
python3-ply                             noarch            3.11-14.el9        rhel-9-appstream-rhui-rpms 111 k
python3-pycparser                       noarch            2.20-6.el9         rhel-9-appstream-rhui-rpms 139 k
python3-pyparsing                       noarch            2.4.7-9.el9        rhel-9-baseos-rhui-rpms 154 k
python3-resolvelib                       noarch            0.5.4-5.el9        rhel-9-appstream-rhui-rpms 38 k
sshpas                                 x86_64            1.09-4.el9         rhel-9-appstream-rhui-rpms 30 k
vim-common                              x86_64            2:8.2.2637-20.el9_1 rhel-9-appstream-rhui-rpms 7.0 M
vim-filesystem                          noarch            2:8.2.2637-20.el9_1 rhel-9-baseos-rhui-rpms 22 k
Transaction Summary
=====
Install 15 Packages
```

```

root@control-node:/home/ar x + v
Complete!
[root@control-node ~]# cd /home
[root@control-node home]# mkdir ansible
[root@control-node home]# ls
ansible ec2-user
[root@control-node home]# cd ansible/
[root@control-node ansible]# mkdir ProjectA1
[root@control-node ansible]# ls
ProjectA1
[root@control-node ansible]# cd ProjectA1/
[root@control-node ProjectA1]# touch inventory
[root@control-node ProjectA1]# touch ansible.cfg
[root@control-node ProjectA1]# ls
ansible.cfg inventory
[root@control-node ProjectA1]# vim ansible.cfg

"ansible.cfg" 11L, 207B written
[root@control-node ProjectA1]# vim inventory
[root@control-node ProjectA1]# vim /etc/hosts
"/etc/hosts" 4L, 230B written
[root@control-node ProjectA1]# exit
exit
[root@ip-172-31-19-181 ~]# logout
[ec2-user@ip-172-31-19-181 ~]$ logout
Connection to 54.212.8.135 closed.
PS C:\Users\hp> scp -i "C:\Users\hp\Downloads\control.pem" "C:\Users\hp\Downloads\control.pem" ec2-user@54.212.8.135:/home/ec2-user
control.pem
100% 1678 4.1KB/s 00:00
PS C:\Users\hp> ssh -i "C:\Users\hp\Downloads\control.pem" ec2-user@54.212.8.135
Register this system with Red Hat Insights: insights-client --register
Create an account or view all your systems at https://red.ht/insights-dashboard
Last login: Fri Jul 5 06:35:10 2024 from 103.59.75.135
[ec2-user@control-node ~]$ pwd
/home/ec2-user
[ec2-user@control-node ~]$ ls
control.pem
[ec2-user@control-node ~]$ sudo -i
[root@control-node ~]# cd /home/ansible/ProjectA1
[root@control-node ProjectA1]# cp -rvf /home/ec2-user/control.pem .
'/home/ec2-user/control.pem' -> './control.pem'
[root@control-node ProjectA1]# ls
ansible.cfg control.pem inventory

```

```

root@control-node:/home/ar x + v
[root@control-node ProjectA1]# chmod 400 control.pem
[root@control-node ProjectA1]# ll
total 12
-rw-r--r--. 1 root root 207 Jul 5 06:42 ansible.cfg
-r----- 1 root root 1678 Jul 5 06:47 control.pem
-rw-r--r--. 1 root root 89 Jul 5 06:43 inventory

```

```

root@control-node:/home/ar x + v
[root@control-node ProjectA1]# ansible all -m ping
test.ayushi.com | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
prod.ayushi.com | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}

```

```

[root@control-node ProjectA1]# vim ansible_user.yml

```

```

root@control-node:/home/ar
- name: Create ansible user with sudo privileges
  hosts: all
  become: yes

  tasks:
    - name: Create ansible user
      user:
        name: ansible
        password: "{{ 'ansible@123' | password_hash('sha512_crypt') }}"
        shell: /bin/bash
        createhome: yes
        groups: wheel
        append: yes

```

```

[root@control-node ProjectA1]# ansible-playbook ansible_user.yml

PLAY [Create ansible user with sudo privileges] *****

TASK [Gathering Facts] *****
ok: [prod.ayushi.com]
ok: [test.ayushi.com]

TASK [Create ansible user] *****
[DEPRECATION WARNING]: Encryption using the Python crypt module is deprecated. The Python crypt module is deprecated and will be removed from Python 3.13.
Install the passlib library for continued encryption functionality. This feature will be removed in version 2.17. Deprecation warnings can be disabled by
setting deprecation_warnings=False in ansible.cfg.
[DEPRECATION WARNING]: Encryption using the Python crypt module is deprecated. The Python crypt module is deprecated and will be removed from Python 3.13.
Install the passlib library for continued encryption functionality. This feature will be removed in version 2.17. Deprecation warnings can be disabled by
setting deprecation_warnings=False in ansible.cfg.
changed: [prod.ayushi.com]
changed: [test.ayushi.com]

PLAY RECAP *****
prod.ayushi.com : ok=2  changed=1  unreachable=0  failed=0  skipped=0  rescued=0  ignored=0
test.ayushi.com : ok=2  changed=1  unreachable=0  failed=0  skipped=0  rescued=0  ignored=0

```

```

[root@control-node ProjectA1]# vim users.yml

```

```

root@control-node:/home/ar
- name: Create users on managed hosts
  hosts: all
  become: yes

  tasks:
    - name: Create users
      user:
        name: "{{ item }}"
        password: "{{ 'Redhat@123' | password_hash('sha512') }}"
        state: present
      loop:
        - Ben
        - Stark
        - Lucifer
        - Sam
        - Betty
        - Joe
        - Jeff
        - Apple
        - Papaya
        - Banana

```

```
root@control-node:/home/ar x + v
[root@control-node ProjectA1]# ansible-playbook users.yml --syntax-check
playbook: users.yml
[root@control-node ProjectA1]# ansible-playbook users.yml

PLAY [Create users on managed hosts] *****

TASK [Gathering Facts] *****
ok: [prod.ayushi.com]
ok: [test.ayushi.com]

TASK [Create users] *****
[DEPRECATION WARNING]: Encryption using the Python crypt module is deprecated. The Python crypt module is deprecated and will be removed from Python 3.13.
Install the passlib library for continued encryption functionality. This feature will be removed in version 2.17. Deprecation warnings can be disabled by
setting deprecation_warnings=False in ansible.cfg.
[DEPRECATION WARNING]: Encryption using the Python crypt module is deprecated. The Python crypt module is deprecated and will be removed from Python 3.13.
Install the passlib library for continued encryption functionality. This feature will be removed in version 2.17. Deprecation warnings can be disabled by
setting deprecation_warnings=False in ansible.cfg.
changed: [prod.ayushi.com] => (item=Ben)
changed: [test.ayushi.com] => (item=Ben)
changed: [test.ayushi.com] => (item=Stark)
changed: [prod.ayushi.com] => (item=Stark)
changed: [test.ayushi.com] => (item=Lucifer)
changed: [prod.ayushi.com] => (item=Lucifer)
changed: [prod.ayushi.com] => (item=Sam)
changed: [test.ayushi.com] => (item=Sam)
changed: [test.ayushi.com] => (item=Betty)
changed: [prod.ayushi.com] => (item=Betty)
changed: [test.ayushi.com] => (item=Joe)
changed: [prod.ayushi.com] => (item=Joe)
changed: [prod.ayushi.com] => (item=Jeff)
changed: [test.ayushi.com] => (item=Jeff)
changed: [test.ayushi.com] => (item=Apple)
changed: [prod.ayushi.com] => (item=Apple)
changed: [prod.ayushi.com] => (item=Papaya)
changed: [test.ayushi.com] => (item=Papaya)
changed: [test.ayushi.com] => (item=Banana)
changed: [prod.ayushi.com] => (item=Banana)

PLAY RECAP *****
prod.ayushi.com : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

test.ayushi.com : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0
```

```
[root@control-node ProjectA1]# vim package.yml
```

```
root@control-node:/home/ar x + v
---
- name: Install packages based on host groups
  hosts: prod.ayushi.com:test.ayushi.com
  tasks:
    - name: Install httpd on prod.ayushi.com
      yum:
        name: httpd
        state: present
        when: inventory_hostname == 'prod.ayushi.com'

    - name: Install nginx on test.ayushi.com
      yum:
        name: nginx
        state: present
        when: inventory_hostname == 'test.ayushi.com'

~
~
~
~
```

```
[root@control-node ProjectA1]# ansible-playbook package.yml

PLAY [Install packages based on host groups] *****

TASK [Gathering Facts] *****
ok: [prod.ayushi.com]
ok: [test.ayushi.com]

TASK [Install httpd on prod.ayushi.com] *****
skipping: [test.ayushi.com]
ok: [prod.ayushi.com]

TASK [Install nginx on test.ayushi.com] *****
skipping: [prod.ayushi.com]
ok: [test.ayushi.com]

PLAY RECAP *****
prod.ayushi.com : ok=2  changed=0  unreachable=0  failed=0  skipped=1  rescued=0  ignored=0
test.ayushi.com : ok=2  changed=0  unreachable=0  failed=0  skipped=1  rescued=0  ignored=0
```

```
[root@control-node ProjectA1]# vim backup.yml
```

```
root@control-node/home/ar  X  +  v
---
- name: Backup /etc to /home/backup/etc.backup.tar
  hosts: all
  become: yes # Ensure you have the necessary permissions to access /etc

  vars:
    backup_dir: /home/backup
    backup_file: etc.backup.tar

  tasks:
    - name: Ensure {{ backup_dir }} directory exists
      ansible.builtin.file:
        path: "{{ backup_dir }}"
        state: directory
        mode: '0755'

    - name: Create backup of /etc using tar
      ansible.builtin.command:
        cmd: tar -cvf {{ backup_dir }}/{{ backup_file }} /etc
        args:
          creates: "{{ backup_dir }}/{{ backup_file }}"
          register: backup_result

    - name: Display backup result
      ansible.builtin.debug:
        msg: "Backup created at {{ backup_dir }}/{{ backup_file }}. Details: {{ backup_result.stdout }}"

~
~
~
~
```

```
[root@control-node ProjectA1]# ansible-playbook backup.yml

PLAY [Backup /etc to /home/backup/etc.backup.tar] *****

TASK [Gathering Facts] *****
ok: [prod.ayushi.com]
ok: [test.ayushi.com]

TASK [Ensure /home/backup directory exists] *****
ok: [prod.ayushi.com]
ok: [test.ayushi.com]

TASK [Create backup of /etc using tar] *****
ok: [prod.ayushi.com]
ok: [test.ayushi.com]

TASK [Display backup result] *****
ok: [prod.ayushi.com] => {
  "msg": "Backup created at /home/backup/etc.backup.tar. Details: skipped, since /home/backup/etc.backup.tar exists"
}
ok: [test.ayushi.com] => {
  "msg": "Backup created at /home/backup/etc.backup.tar. Details: skipped, since /home/backup/etc.backup.tar exists"
}

PLAY RECAP *****
prod.ayushi.com : ok=4  changed=0  unreachable=0  failed=0  skipped=0  rescued=0  ignored=0
test.ayushi.com : ok=4  changed=0  unreachable=0  failed=0  skipped=0  rescued=0  ignored=0
```

```
[root@control-node ProjectA1]# vim file.yml
```

```
root@control-node:/home/ar × + ∨

---
- name: Create directory and file
  hosts: all

  tasks:
    - name: Ensure directory /home/India exists
      ansible.builtin.file:
        path: /home/India
        state: directory
        mode: '0755'

    - name: Create file Bharat with content
      ansible.builtin.copy:
        content: "Patriotism what india need now"
        dest: /home/India/Bharat
```

```
file.yml 10L, 500B Written
[root@control-node ProjectA1]# ansible-playbook file.yml

PLAY [Create directory and file] *****

TASK [Gathering Facts] *****
ok: [prod.ayushi.com]
ok: [test.ayushi.com]

TASK [Ensure directory /home/India exists] *****
ok: [test.ayushi.com]
ok: [prod.ayushi.com]

TASK [Create file Bharat with content] *****
ok: [prod.ayushi.com]
ok: [test.ayushi.com]

PLAY RECAP *****
prod.ayushi.com : ok=3    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
test.ayushi.com : ok=3    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

```
[root@control-node ProjectA1]# vim copy.yml
```

```
root@control-node:/home/ar  X  +  v

- name: Copy file to /usr/Asia if directory exists or create it
  hosts: all
  become: yes

  tasks:
    - name: Check if /usr/Asia directory exists
      ansible.builtin.stat:
        path: /usr/Asia
        register: asia_dir

    - name: Create /usr/Asia directory if it does not exist
      ansible.builtin.file:
        path: /usr/Asia
        state: directory
        mode: '0755'
      when: not asia_dir.stat.exists

    - name: Copy file from /tmp/Bharat to /usr/Asia/Bharat.txt
      ansible.builtin.copy:
        src: /tmp/Bharat # Adjusted path on the remote host
        dest: /usr/Asia/Bharat.txt
        remote_src: yes
        notify: execute handler

  handlers:
    - name: execute handler
      ansible.builtin.command:
        cmd: echo "File copied successfully to /usr/Asia/Bharat.txt"

~
```

```
[root@control-node ProjectA1]# ansible-playbook copy.yml

PLAY [Copy file to /usr/Asia if directory exists or create it] *****

TASK [Gathering Facts] *****
ok: [prod.ayushi.com]
ok: [test.ayushi.com]

TASK [Check if /usr/Asia directory exists] *****
ok: [prod.ayushi.com]
ok: [test.ayushi.com]

TASK [Create /usr/Asia directory if it does not exist] *****
skipping: [prod.ayushi.com]
skipping: [test.ayushi.com]

TASK [Copy file from /tmp/Bharat to /usr/Asia/Bharat.txt] *****
fatal: [test.ayushi.com]: FAILED! => ["changed": false, "msg": "Source /tmp/Bharat not found"]
fatal: [prod.ayushi.com]: FAILED! => ["changed": false, "msg": "Source /tmp/Bharat not found"]

PLAY RECAP *****
prod.ayushi.com : ok=2  changed=0  unreachable=0  failed=1  skipped=1  rescued=0  ignored=0
test.ayushi.com : ok=2  changed=0  unreachable=0  failed=1  skipped=1  rescued=0  ignored=0
```

```
[root@control-node ProjectA1]# vim nginx.yml
```



```
root@control-node:/home/ar X + v
- name: Configure and install Nginx on Red Hat systems
  hosts: all
  become: yes

  tasks:
    - name: Gather facts
      ansible.builtin.setup:

    - name: Install Nginx on Red Hat systems
      ansible.builtin.yum:
        name: nginx
        state: present
      when:
        - ansible_facts['distribution'] == 'RedHat'
        - ansible_service_mgr == 'systemd'
        - not ('ansible_service_facts' in vars and ansible_service_facts.services.get('httpd', {}).status == 'enabled')
      ignore_errors: yes
      register: nginx_install_result

    - name: Fail if Nginx installation failed
      ansible.builtin.fail:
        msg: "Failed to install Nginx on {{ ansible_hostname }}"
      when: nginx_install_result is failed

    - name: Configure Nginx
      ansible.builtin.template:
        src: nginx_template.conf.j2
        dest: /etc/nginx/nginx.conf
```

```
[root@control-node ProjectA1]# vim nginx.conf.j2
```

```
root@control-node:/home/ar X + v
worker_processes 1;
error_log /var/log/nginx/error.log warn;
pid /var/run/nginx.pid;

events {
    worker_connections 1024;
}

http {
    include /etc/nginx/mime.types;
    default_type application/octet-stream;
    log_format main '$remote_addr - $remote_user [$time_local] "$request" '
        '$$status $body_bytes_sent "$http_referer" '
        '"$http_user_agent" "$http_x_forwarded_for"';

    access_log /var/log/nginx/access.log main;

    sendfile on;
    #tcp_nopush on;

    keepalive_timeout 65;

    #gzip on;

    server {
        listen 80 default_server;
        listen [::]:80 default_server;

        root /usr/share/nginx/html;
    }
}
```

```
[root@control-node ProjectA1]# vim nginx_template.conf.j2
```

```

server {
    listen 80;
    server_name localhost;

    root /usr/share/nginx/html;
    index index.html;

    location / {
        try_files $uri / =404;
    }

    location /info {
        default_type text/plain;
        return 200 "This is the Nginx webserver hosted on {{ ansible_hostname }} with IP Address {{ ansible_default_ipv4.address }} of the system\n";
    }
}

```

```
[root@control-node ProjectA1]# vim index.html.j2
```

```

<!DOCTYPE html>
<html>
<head>
    <title>Nginx Webserver</title>
</head>
<body>
    <h1>{{ webpage_content }}</h1>
</body>
</html>

```

```

[root@control-node ProjectA1]# ansible-playbook nginx.yml

PLAY [Configure and install Nginx on Red Hat systems] *****

TASK [Gathering Facts] *****
ok: [prod.ayushi.com]
ok: [test.ayushi.com]

TASK [Gather facts] *****
ok: [prod.ayushi.com]
ok: [test.ayushi.com]

TASK [Install Nginx on Red Hat systems] *****
ok: [test.ayushi.com]
ok: [prod.ayushi.com]

TASK [Fail if Nginx installation failed] *****
skipping: [prod.ayushi.com]
skipping: [test.ayushi.com]

TASK [Configure Nginx] *****
ok: [prod.ayushi.com]
ok: [test.ayushi.com]

PLAY RECAP *****
prod.ayushi.com : ok=4  changed=0  unreachable=0  failed=0  skipped=1  rescued=0  ignored=0
test.ayushi.com : ok=4  changed=0  unreachable=0  failed=0  skipped=1  rescued=0  ignored=0

```

```

[root@control-node ProjectA1]# mkdir roles
[root@control-node ProjectA1]# ls
ansible.cfg      control.pem      httpd.yml        nginx.conf.j2    package.yml      users.yml
ansible_user.yml copy.yml         index.html.j2    nginx_template.conf.j2  partition.yml
backup.yml       file.yml         inventory        nginx.yml
[root@control-node ProjectA1]# cd roles/
[root@control-node roles]# ls
[root@control-node roles]# vim httpd.yml
"httpd.yml" [New] 5L, 99B written
[root@control-node roles]# ansible-galaxy init partition
- Role partition was created successfully
[root@control-node roles]# ansible-galaxy init user
- Role user was created successfully
[root@control-node roles]# ansible-galaxy init webserver_role
- Role webserver_role was created successfully
[root@control-node roles]# ls
httpd.yml  partition  user  webserver_role

```

```
[root@control-node ProjectA1]# vim httpd.yml
```

```
root@control-node:/home/ar  X  +  v
---
- name: Configure Apache HTTP server
  hosts: all
  become: true
  vars:
    nginx_enabled: false # Set to true or false as per your requirement

  roles:
    - webserver_role

~
~
~
```

```
[root@control-node roles]# vim httpd.yml
```

```
root@control-node:/home/ar  X  +  v
---
- name: Configure Apache HTTPD Webserver
  hosts: prod.ayushi.com
  roles:
    - webserver_role

~
~
```

```
[root@control-node ProjectA1]# ansible-playbook httpd.yml

PLAY [Configure Apache HTTP server] *****

TASK [Gathering Facts] *****
ok: [prod.ayushi.com]
ok: [test.ayushi.com]

PLAY RECAP *****
prod.ayushi.com : ok=1    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
test.ayushi.com : ok=1    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

```
[root@control-node ProjectA1]# vim partition.yml
```

```
root@control-node:/home/ar  X  +  v
---
- name: Partition and setup LVM and swap space on /dev/xvdb
  hosts: all
  become: true

  roles:
    - partition

~
~
~
```

```
[root@control-node ProjectA1]# ansible-playbook partition.yml

PLAY [Partition and setup LVM and swap space on /dev/xvdb] *****

TASK [Gathering Facts] *****
ok: [prod.ayushi.com]
ok: [test.ayushi.com]

PLAY RECAP *****
prod.ayushi.com      : ok=1    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
test.ayushi.com      : ok=1    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```