

## Ansible Playbook

1. In this lab you are going to learn some playbook commands.
2. But first you need to create a new file in your directory and the process is same copy the contents of the previous file into the new one.

```
ubuntu@ip-172-31-12-170:~/ | + | ~
ubuntu@ip-172-31-12-170:~/demodirectory$ cd demodirectory
ubuntu@ip-172-31-12-170:~/demodirectory$ ls
exc1 exc2 exc3
ubuntu@ip-172-31-12-170:~/demodirectory$ cp -r exc3/ exc4/
ubuntu@ip-172-31-12-170:~/demodirectory$ ls
exc1 exc2 exc3 exc4
ubuntu@ip-172-31-12-170:~/demodirectory$ cd exc4/
ubuntu@ip-172-31-12-170:~/demodirectory/exc4$ |
```

3. Now if you do a listing of this new file, you will see your old files here. Now you need to remove the index.html file because we don't need it.

```
rm -rf index.html
```

```
demousrkey.pem index.html inventory
ubuntu@ip-172-31-12-170:~/demodirectory/exc4$ rm -rf index.html
ubuntu@ip-172-31-12-170:~/demodirectory/exc4$ |
```

4. Now you need to create a new directory where you are going to store your YAML code.

```
vim demoplaybook.yaml
```

5. After that paste this code write. Then just save and quit.

```
---
- name: demoplaybook setup
  hosts: webservers
  become: yes
  tasks:
    - name: Install httpd
      ansible.builtin.yum:
        name: httpd
        state: present
```

```
- name: Start service
ansible.builtin.service:
  name: httpd
  state: started
  enabled: yes

- name: DBserver setup
hosts: dbservers
become: yes
tasks:
- name: Install mariadb-server
ansible.builtin.yum:
  name: mariadb-server
  state: present

- name: Start mariadb service
ansible.builtin.service:
  name: mariadb
  state: started
  enabled: yes
```

```
ubuntu@ip-172-31-12-170: ~/i  + | ▾

-----
- name: demoplaybook setup
  hosts: webservers
  become: yes
  tasks:
    - name: Install httpd
      ansible.builtin.yum:
        name: httpd
        state: present

    - name: Start service
      ansible.builtin.service:
        name: httpd
        state: started
        enabled: yes

- name: DBserver setup
  hosts: dbservers
  become: yes
  tasks:
    - name: Install mariadb-server
      ansible.builtin.yum:
        name: mariadb-server
        state: present

    - name: Start mariadb service
      ansible.builtin.service:
        name: mariadb
        state: started
        enabled: yes
```

6. Now before you use playbook you need to remove the packages which you installed using ad hoc commands.

```
ansible webservers -m yum -a "name=httpd state=absent" -i inventory --become
```

```

ubuntu@ip-172-31-12-170:~/demodirectory/exc4$ ansible webservers -m yum -a "name=httpd state=absent" -i inventory --become
demoweb01 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": true,
    "msg": "",
    "rc": 0,
    "results": [
        "Removed: httpd-2.4.57-6.el9.x86_64",
        "Removed: mod_http2-1.15.19-5.el9.x86_64"
    ]
}
demoweb02 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": true,
    "msg": "",
    "rc": 0,
    "results": [
        "Removed: httpd-2.4.57-6.el9.x86_64",
        "Removed: mod_http2-1.15.19-5.el9.x86_64"
    ]
}
ubuntu@ip-172-31-12-170:~/demodirectory/exc4$ |

```

7. Once it is removed now you are good to go and start using playbook commands.

**ansible-playbook -i inventory demoplaybook.yaml**

8. Here you can see the output.

```

ubuntu@ip-172-31-12-170:~/demodirectory/exc4$ ansible-playbook -i inventory demoplaybook.yaml
PLAY [demoplaybook setup] *****
TASK [Gathering Facts] *****
ok: [demoweb01]
ok: [demoweb02]

TASK [Install httpd] *****
changed: [demoweb01]
changed: [demoweb02]

TASK [Start service] *****
changed: [demoweb01]
changed: [demoweb02]

PLAY [DBserver setup] *****
TASK [Gathering Facts] *****
ok: [demodb01]

TASK [Install mariadb-server] *****
changed: [demodb01]

TASK [Start mariadb service] *****
changed: [demodb01]

PLAY RECAP *****
demodb01      : ok=3    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
demoweb01     : ok=3    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
demoweb02     : ok=3    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

ubuntu@ip-172-31-12-170:~/demodirectory/exc4$ |

```

9. Now if you run the same command and add '**-v**' at the end then it will start to debug the YAML code for you.

**ansible-playbook -i inventory demoplaybook.yaml -v**

10. It will give you a lot of information about the task that it is performing.

```

[output truncated]

```

11. You can also add hyphen v two times even three and four times.