

```
admin@ip-10-0-1-230: ~
foderac@Fode: ~/devops-livecoding
foderac@Fode:~$ cd devops-livecoding
foderac@Fode:~/devops-livecoding$ ssh -i ansible/id_rsa admin@fode.diedhiou.takima.cloud
Linux ip-10-0-1-230 6.1.0-26-cloud-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.112-1 (2024-09-30) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Thu Dec 12 09:11:05 2024 from 209.206.8.34
admin@ip-10-0-1-230:~$
```

```
foderac@Fode:~/devops-livecoding/ansible$ ansible all -i inventories/setup.yml -m ping
fode.diedhiou.takima.cloud | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
foderac@Fode:~/devops-livecoding/ansible$ ansible-playbook -i inventories/setup.yml playbook.yml

PLAY [fode.diedhiou.takima.cloud] *****

TASK [Test connection] *****
ok: [fode.diedhiou.takima.cloud]

PLAY RECAP *****
fode.diedhiou.takima.cloud : ok=1    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

```
admin@ip-10-0-1-230: ~
foderac@Fode: ~/devops-livecoding
foderac@Fode:~/devops-livecoding/ansible$ ansible-playbook -i inventories/setup.yml playbook_docker.yml

PLAY [all] *****

TASK [Gathering Facts] *****
ok: [fode.diedhiou.takima.cloud]

TASK [Install required packages] *****
changed: [fode.diedhiou.takima.cloud]

TASK [Add Docker GPG key] *****
changed: [fode.diedhiou.takima.cloud]

TASK [Add Docker APT repository] *****
changed: [fode.diedhiou.takima.cloud]

TASK [Install Docker] *****
changed: [fode.diedhiou.takima.cloud]

TASK [Install Python3 and pip3] *****
changed: [fode.diedhiou.takima.cloud]

TASK [Create a virtual environment for Docker SDK] *****
changed: [fode.diedhiou.takima.cloud]

TASK [Install Docker SDK for Python in virtual environment] *****
changed: [fode.diedhiou.takima.cloud]

TASK [Make sure Docker is running] *****
ok: [fode.diedhiou.takima.cloud]

PLAY RECAP *****
fode.diedhiou.takima.cloud : ok=9    changed=7    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

```
foderac@Fode:~/devops-livecoding/ansible$ ansible-galaxy init roles/docker
- Role roles/docker was created successfully
```

```
foderac@Fode:~/devops-livecoding/ansible$ cd roles/docker
foderac@Fode:~/devops-livecoding/ansible/roles/docker$ rm -rf defaults files meta templates vars
```

```
foderac@Fode:~/devops-livecoding/ansible/roles/docker$ ansible-galaxy init roles/install_docker
- Role roles/install_docker was created successfully
foderac@Fode:~/devops-livecoding/ansible/roles/docker$ ansible-galaxy init roles/create_network
- Role roles/create_network was created successfully
foderac@Fode:~/devops-livecoding/ansible/roles/docker$ ansible-galaxy init roles/launch_database
- Role roles/launch_database was created successfully
foderac@Fode:~/devops-livecoding/ansible/roles/docker$ ansible-galaxy init roles/launch_app
- Role roles/launch_app was created successfully
foderac@Fode:~/devops-livecoding/ansible/roles/docker$ ansible-galaxy init roles/launch_proxy
- Role roles/launch_proxy was created successfully
```

```
foderac@Fode:~/devops-livecoding/ansible$ ansible-playbook -i inventories/setup.yml playbook_docker.yml

PLAY [all] *****

TASK [Gathering Facts] *****
ok: [fode.diedhiou.takima.cloud]

TASK [roles/docker/roles/install_docker : Install Docker] *****
ok: [fode.diedhiou.takima.cloud]

TASK [roles/docker/roles/install_docker : Ensure Docker service is running] *****
ok: [fode.diedhiou.takima.cloud]

TASK [roles/docker/roles/create_network : Create Docker network] *****
ok: [fode.diedhiou.takima.cloud]

TASK [roles/docker/roles/launch_database : Launch database container] *****
ok: [fode.diedhiou.takima.cloud]

TASK [roles/docker/roles/launch_app : Launch application container] *****
changed: [fode.diedhiou.takima.cloud]

TASK [roles/docker/roles/launch_proxy : Launch proxy container] *****
changed: [fode.diedhiou.takima.cloud]

TASK [Install required packages] *****
ok: [fode.diedhiou.takima.cloud]

TASK [Add Docker GPG key] *****
ok: [fode.diedhiou.takima.cloud]

TASK [Add Docker APT repository] *****
ok: [fode.diedhiou.takima.cloud]
```

```
foderac@Fode:~/devops-livecoding/ansible$ ansible-playbook -i inventories/setup.yml playbook_docker.yml

PLAY [all] *****

TASK [Gathering Facts] *****
ok: [fode.diedhiou.takima.cloud]

TASK [roles/docker/roles/install_docker : Install Docker] *****
ok: [fode.diedhiou.takima.cloud]

TASK [roles/docker/roles/install_docker : Ensure Docker service is running] *****
ok: [fode.diedhiou.takima.cloud]

TASK [roles/docker/roles/create_network : Create Docker network] *****
ok: [fode.diedhiou.takima.cloud]

TASK [roles/docker/roles/launch_database : Launch database container] *****
ok: [fode.diedhiou.takima.cloud]

TASK [roles/docker/roles/launch_app : Launch application container] *****
changed: [fode.diedhiou.takima.cloud]

TASK [roles/docker/roles/launch_proxy : Launch proxy container] *****
changed: [fode.diedhiou.takima.cloud]

TASK [Install required packages] *****
ok: [fode.diedhiou.takima.cloud]

TASK [Add Docker GPG key] *****
ok: [fode.diedhiou.takima.cloud]

TASK [Add Docker APT repository] *****
ok: [fode.diedhiou.takima.cloud]
```

```
admin@ip-10-0-1-230:~$ sudo docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS
4520b1986a81	foderac3/tp-devops-httpd:latest	"httpd-foreground"	59 seconds ago	Up 34 seconds	0.0.0.0:80
->80/tcp	my_proxy				
685a53a1df70	foderac3/tp-devops-simple-api:latest	"/bin/sh -c 'java -j..."	About a minute ago	Up 9 seconds	
my_app					
0c56ab8d38c4	foderac3/tp-devops-database:latest	"docker-entrypoint.s..."	About a minute ago	Up 34 seconds	5432/tcp
my_database					