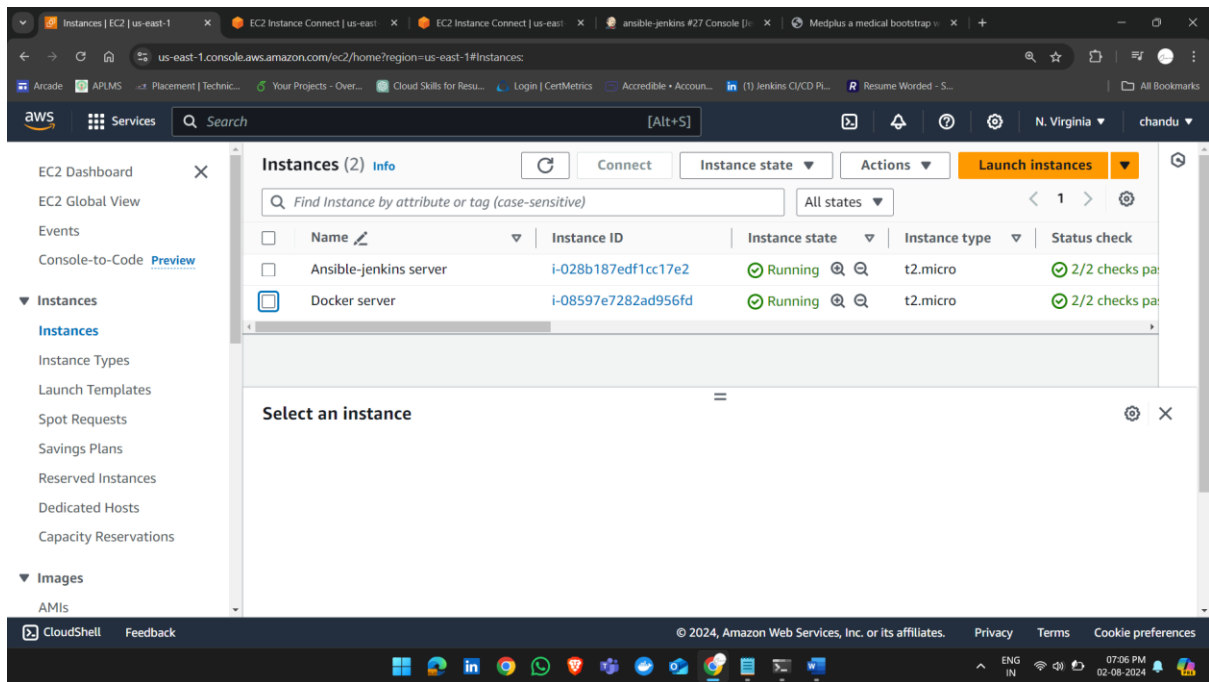
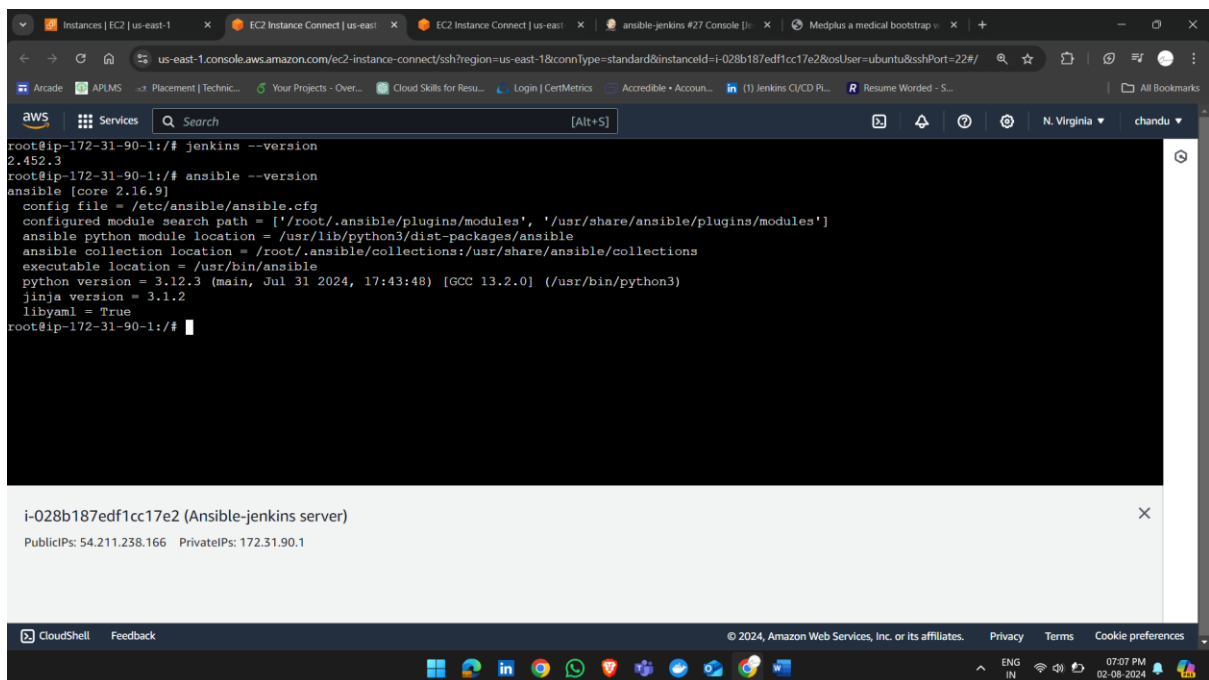


Creating two instances

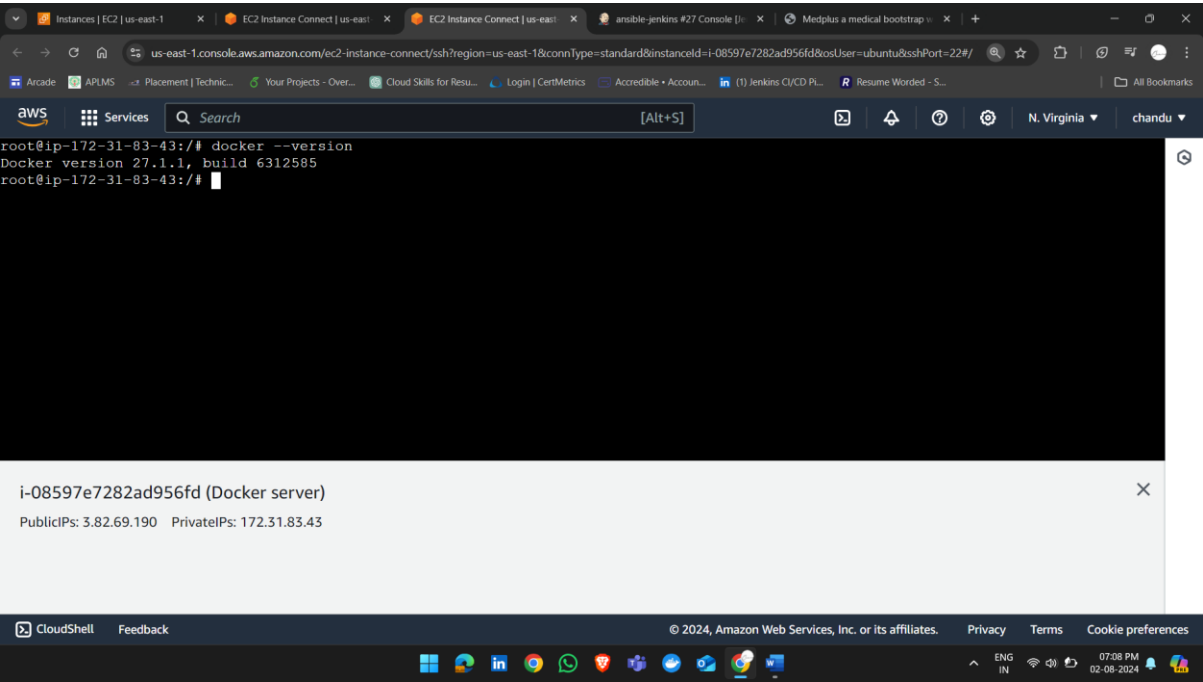
One is for Jenkins and ansible and second server is for Docker



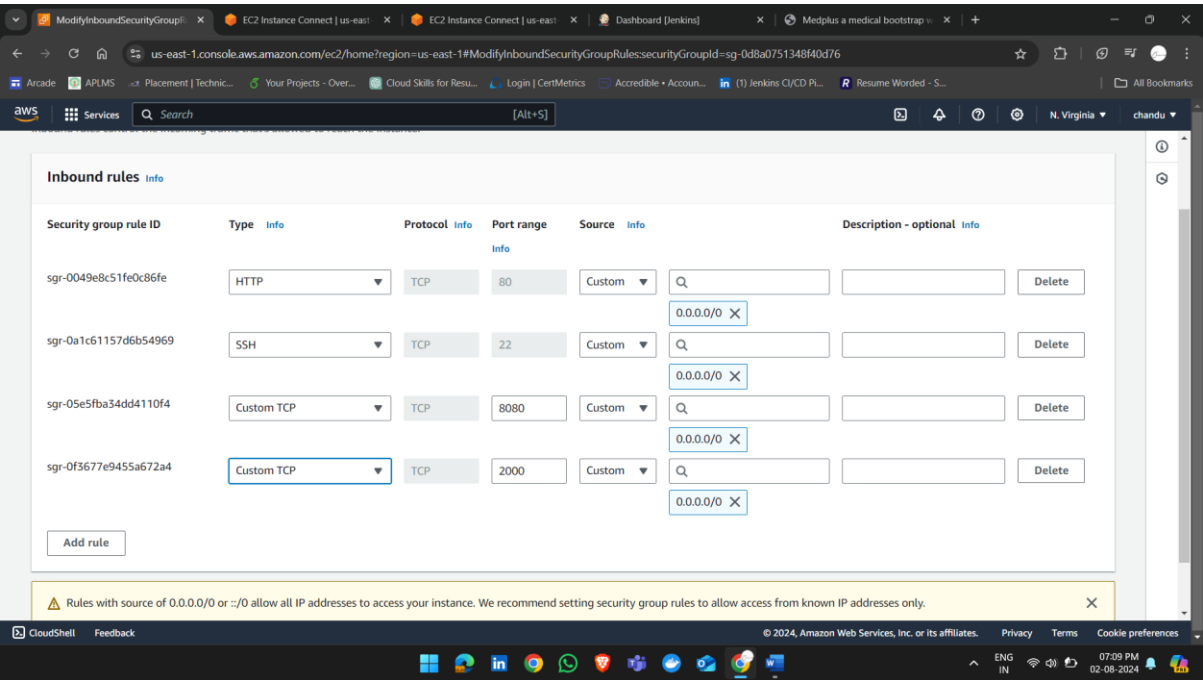
Jenkins and Ansible installing done



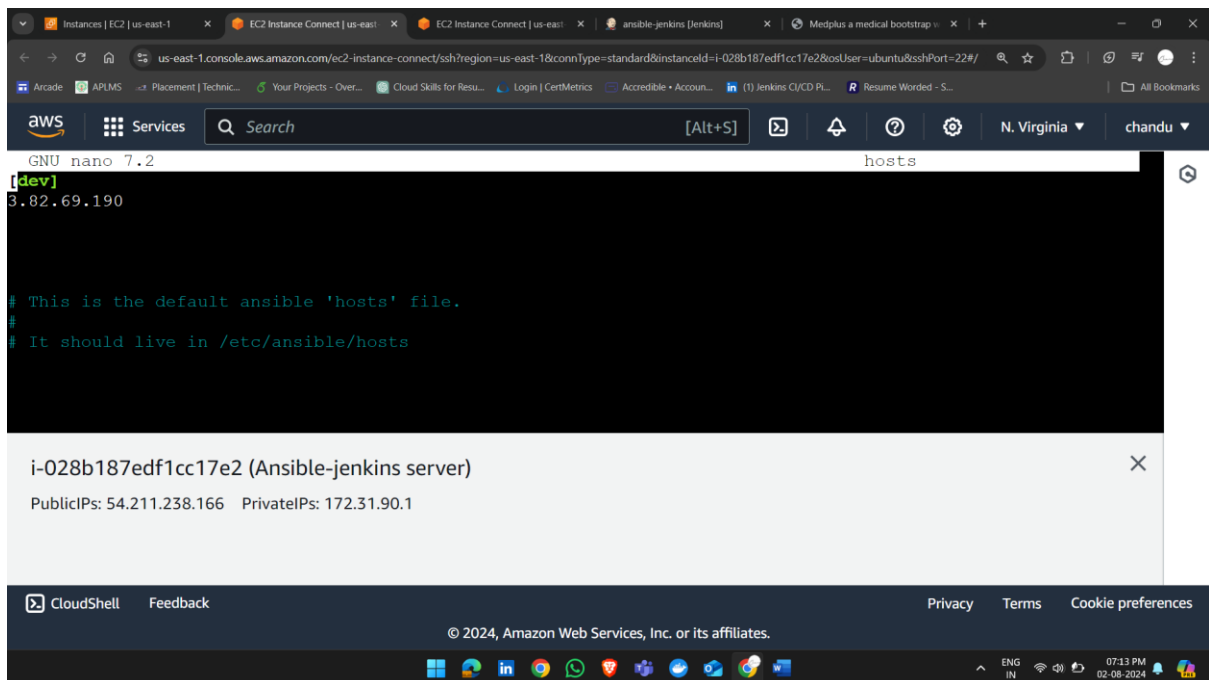
Docker installed in Docker server



We should enabel this ports as required



Adding the Docker Server host to ansible hosts file

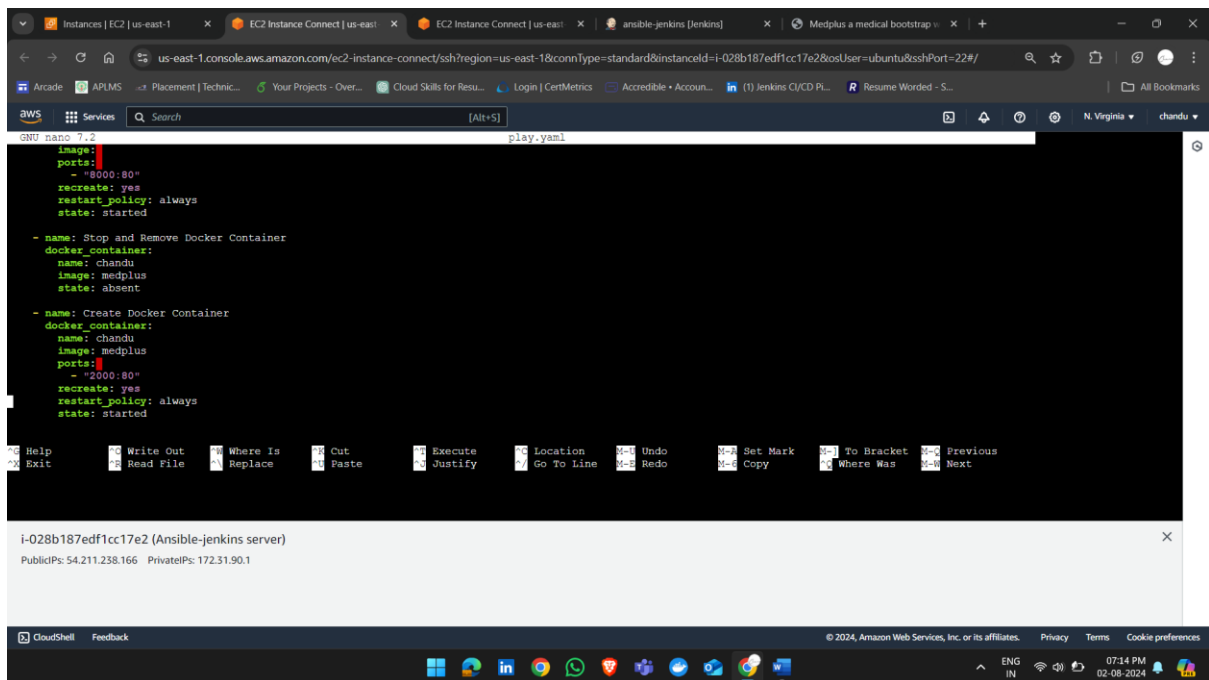


The screenshot shows a terminal window in AWS CloudShell. The terminal title is "GNU nano 7.2 hosts". The content of the file is as follows:

```
[dev]  
3.82.69.190  
  
# This is the default ansible 'hosts' file.  
#  
# It should live in /etc/ansible/hosts
```

Below the terminal window, there is a metadata box for the instance "i-028b187edf1cc17e2 (Ansible-jenkins server)" with Public IPs: 54.211.238.166 and Private IPs: 172.31.90.1.

Creating a playbook in the Jenkins and Ansible server with .yaml extension

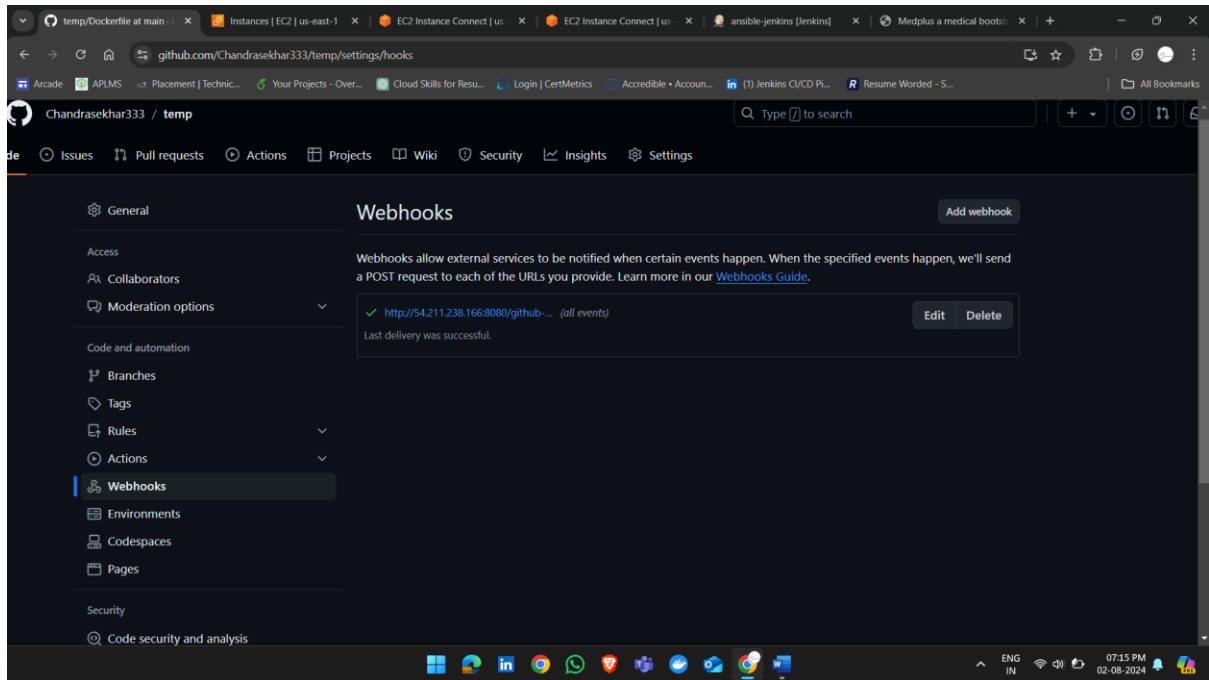


The screenshot shows a terminal window in AWS CloudShell. The terminal title is "GNU nano 7.2 play.yaml". The content of the file is as follows:

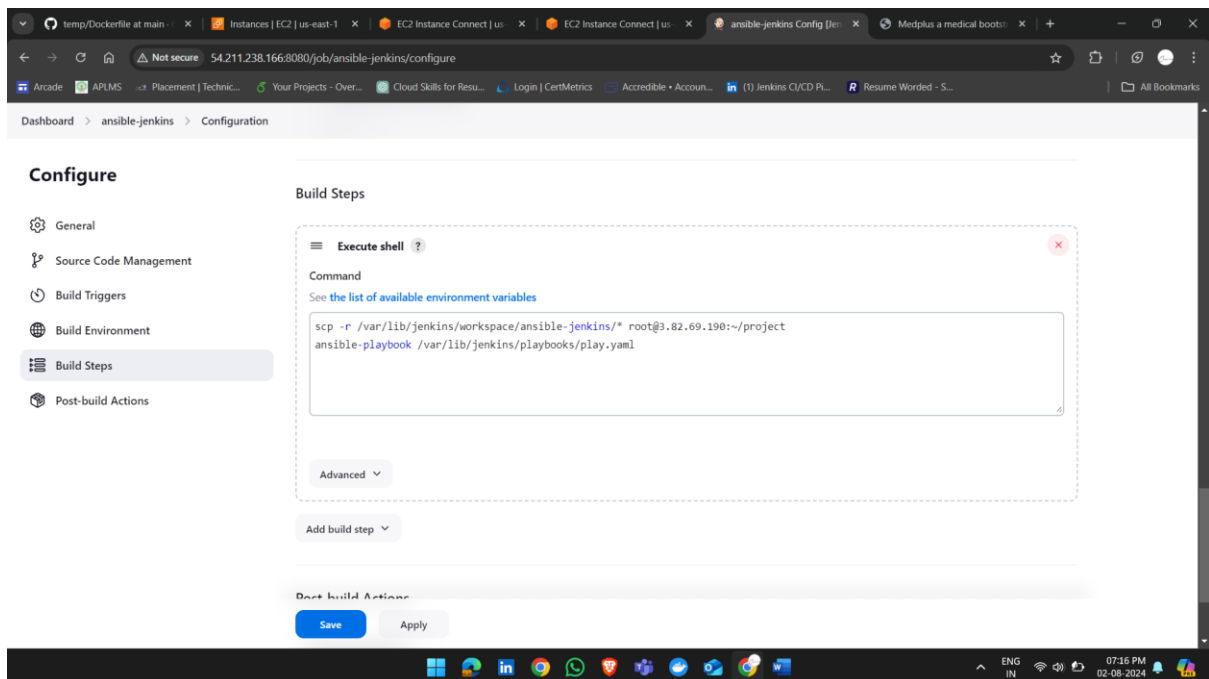
```
image:  
ports:  
  - "8000:80"  
recreate: yes  
restart_policy: always  
state: started  
  
- name: Stop and Remove Docker Container  
  docker_container:  
    name: chandu  
    image: medplus  
    state: absent  
  
- name: Create Docker Container  
  docker_container:  
    name: chandu  
    image: medplus  
    ports:  
      - "2000:80"  
    recreate: yes  
    restart_policy: always  
    state: started
```

Below the terminal window, there is a metadata box for the instance "i-028b187edf1cc17e2 (Ansible-jenkins server)" with Public IPs: 54.211.238.166 and Private IPs: 172.31.90.1.

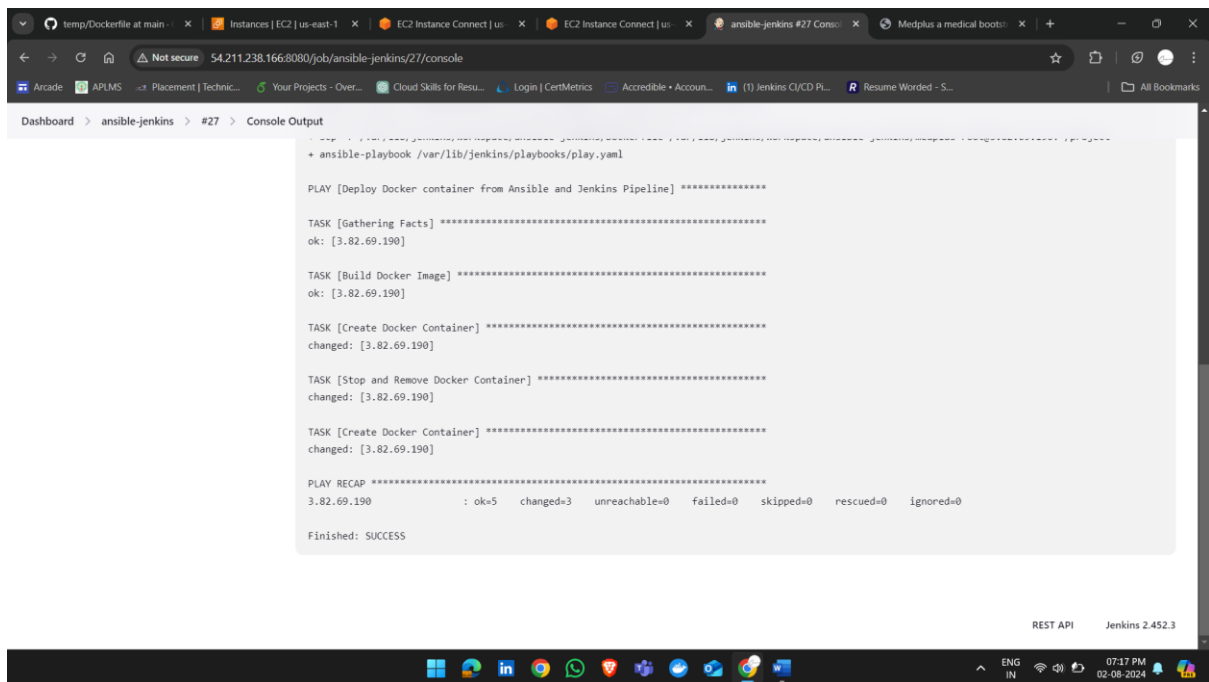
Adding Jenkins:8080 URL to the GitHub repo webhooks



Writing Build steps in Jenkins job



Jenkins Build is Successful



The screenshot shows the Jenkins console output for a job named 'ansible-jenkins #27'. The output displays the execution of an Ansible playbook 'ansible-playbook /var/lib/jenkins/playbooks/play.yaml'. The playbook tasks include 'Gathering Facts', 'Build Docker Image', 'Create Docker Container', and 'Stop and Remove Docker Container'. The final status is 'Finished: SUCCESS'.

```
PLAY [Deploy Docker container from Ansible and Jenkins Pipeline] *****

TASK [Gathering Facts] *****
ok: [3.82.69.190]

TASK [Build Docker Image] *****
ok: [3.82.69.190]

TASK [Create Docker Container] *****
changed: [3.82.69.190]

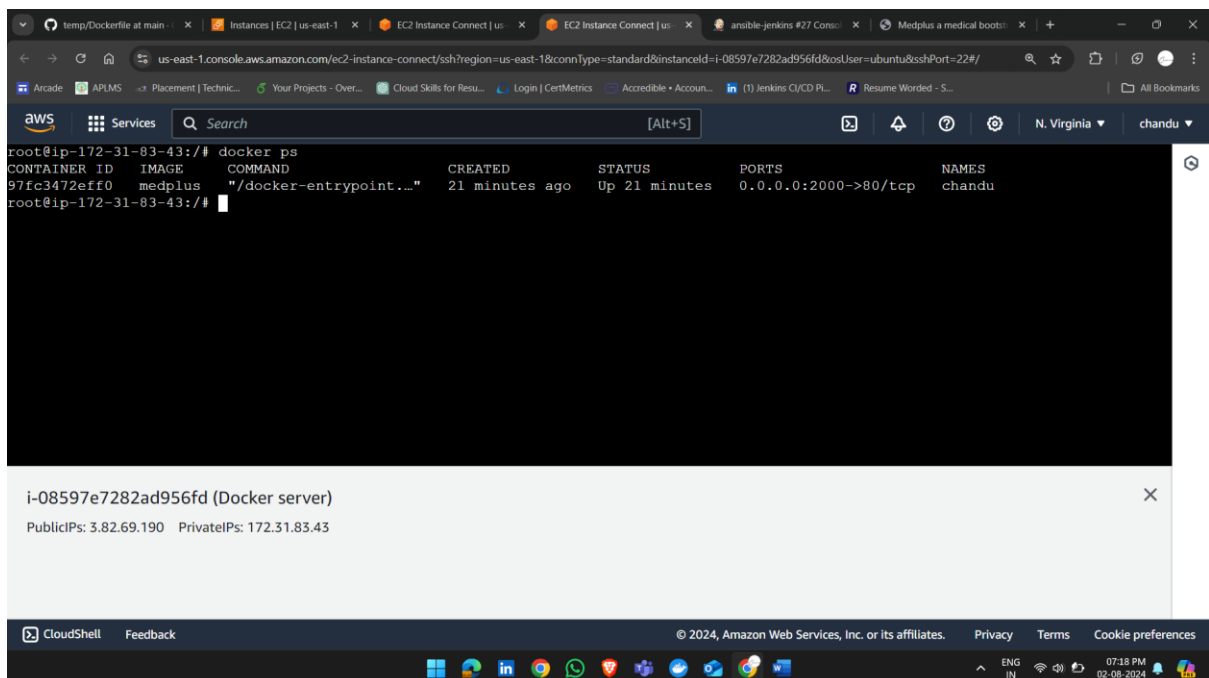
TASK [Stop and Remove Docker Container] *****
changed: [3.82.69.190]

TASK [Create Docker Container] *****
changed: [3.82.69.190]

PLAY RECAP *****
3.82.69.190      : ok=5   changed=3   unreachable=0   failed=0   skipped=0   rescued=0   ignored=0

Finished: SUCCESS
```

Docker container created successfully



The screenshot shows the AWS CloudShell terminal output for a Docker container. The command 'docker ps' is executed, showing a single container named 'chandu' with image 'medplus' and command '"/docker-entrypoint...". The container is created 21 minutes ago and is up 21 minutes. The ports are 0.0.0.0:2000->80/tcp. The container ID is 97fc3472eff0.

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
97fc3472eff0	medplus	"/docker-entrypoint..."	21 minutes ago	Up 21 minutes	0.0.0.0:2000->80/tcp	chandu

Below the terminal output, a summary box for the container 'i-08597e7282ad956fd (Docker server)' is shown, displaying PublicIPs: 3.82.69.190 and PrivateIPs: 172.31.83.43.

This webpage is running on port 2000 which is mapped to port 80

