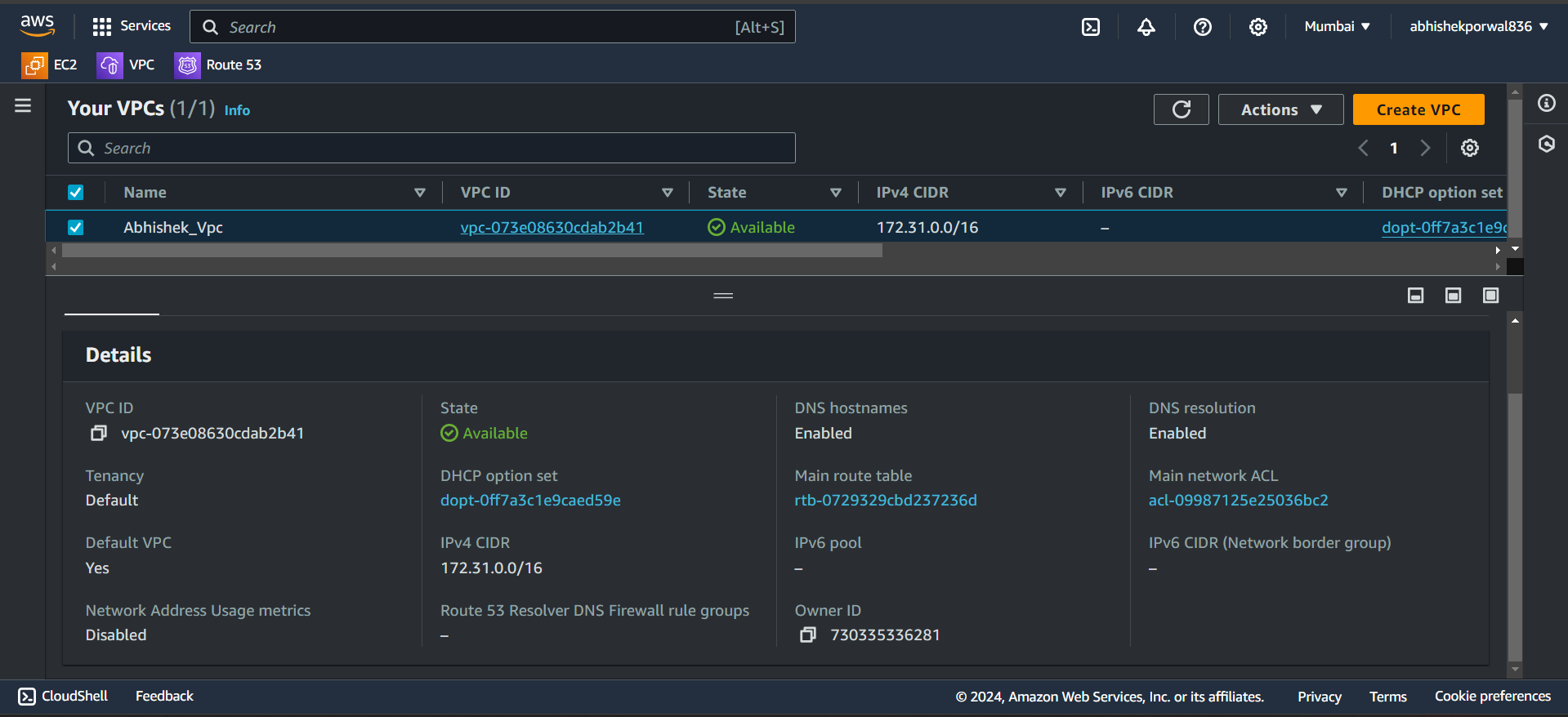
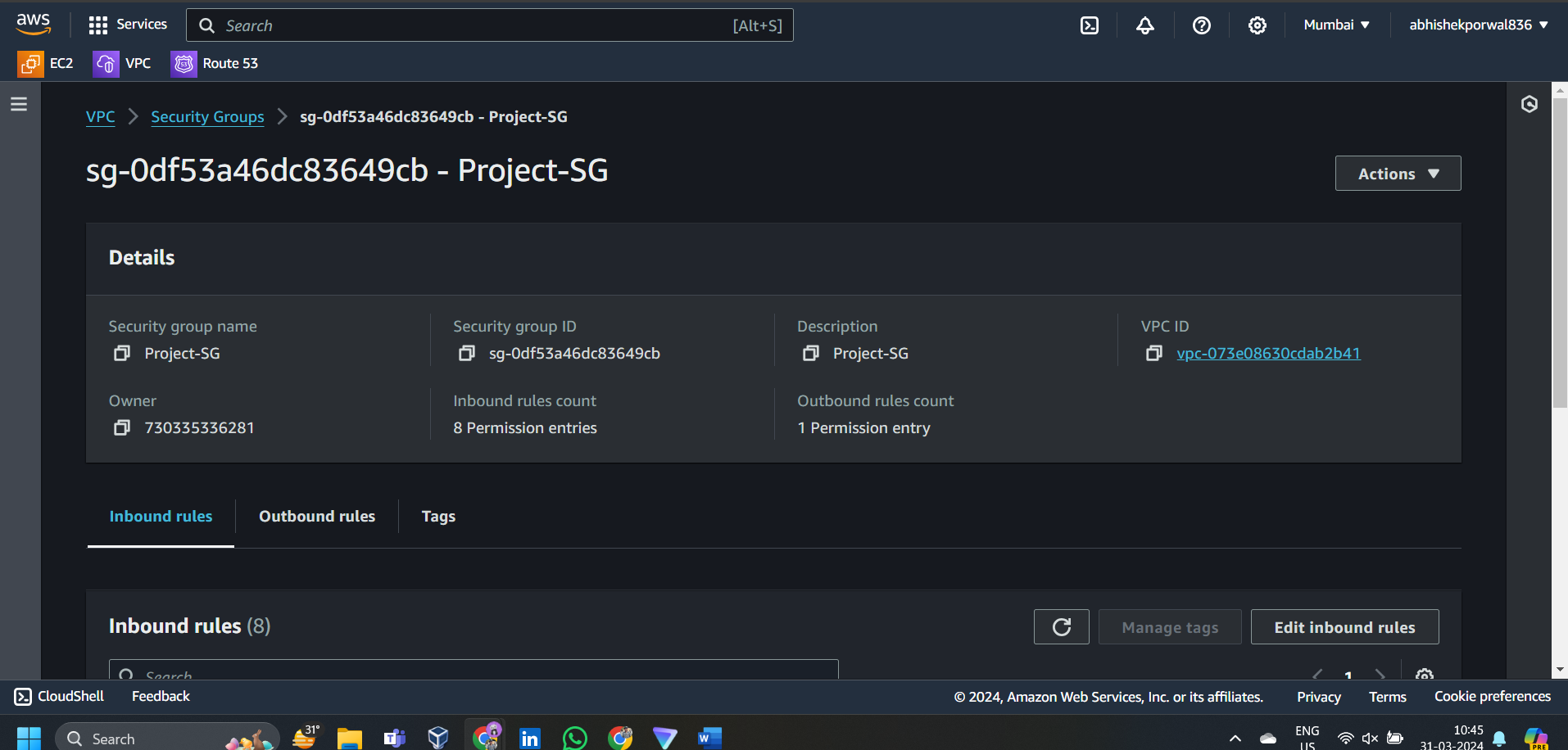
**Board Game Project**

**PHASE-1**

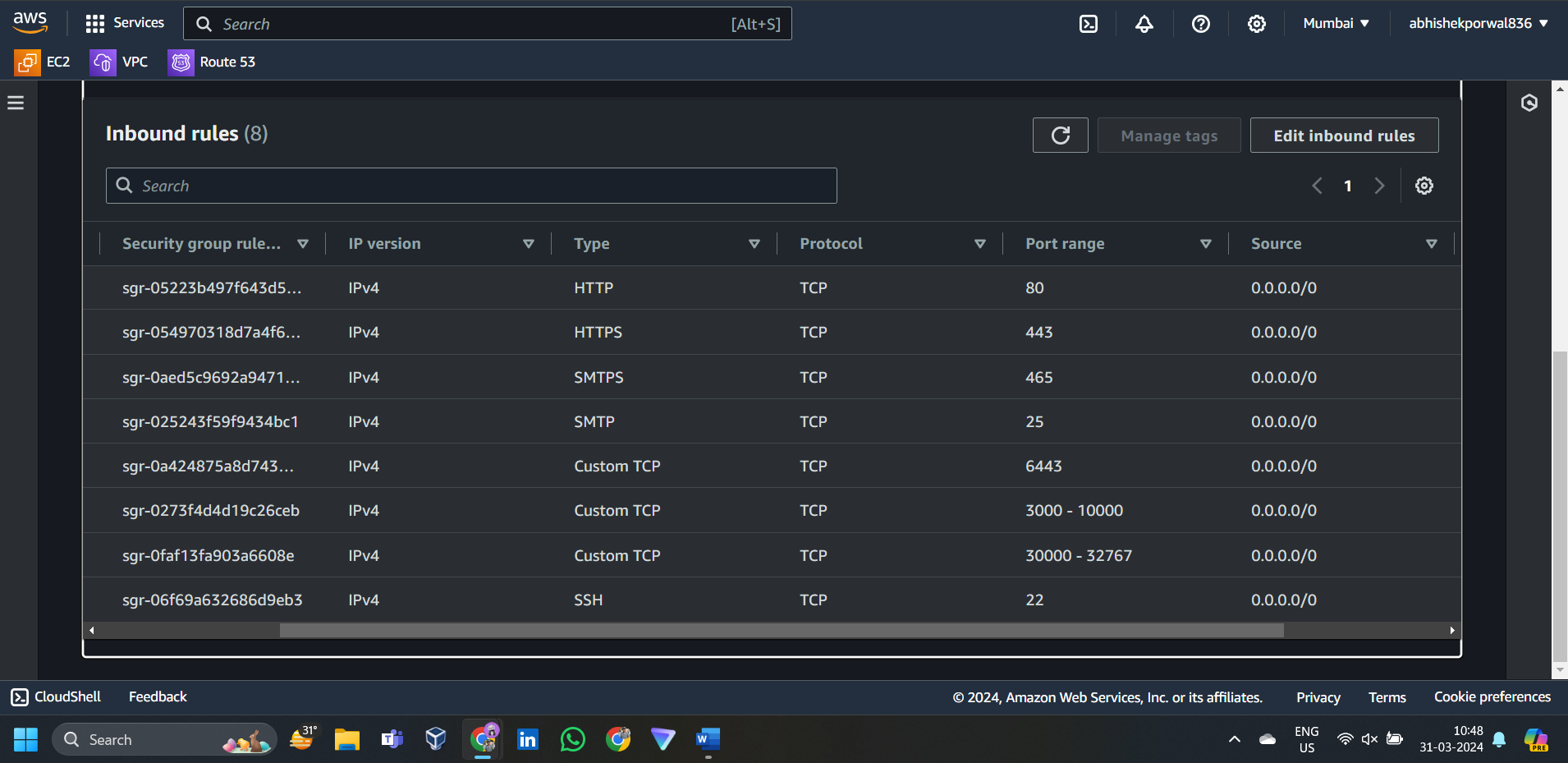
**Private environment through VPC: Using the default one**

****

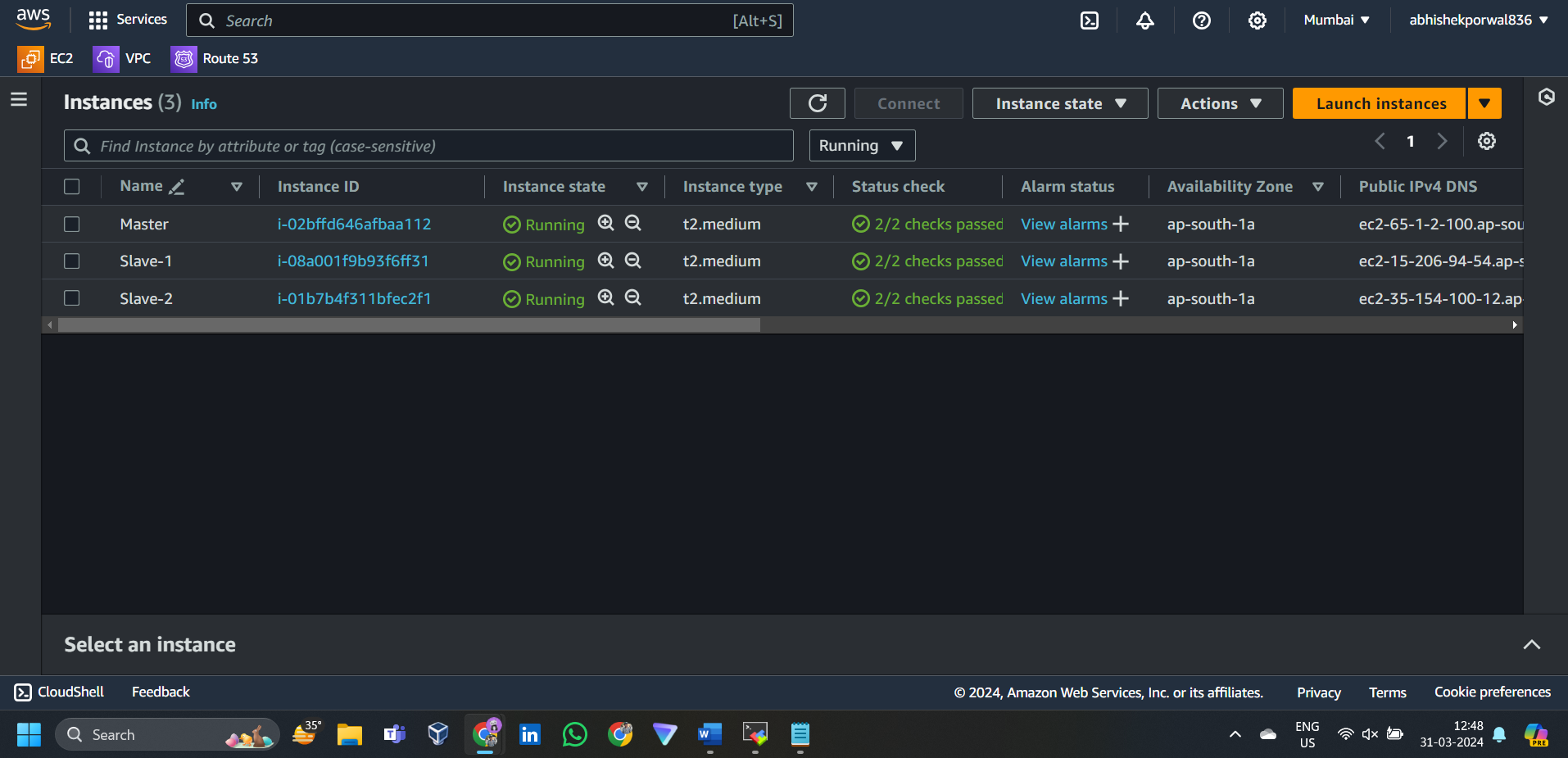
**Security Group:**

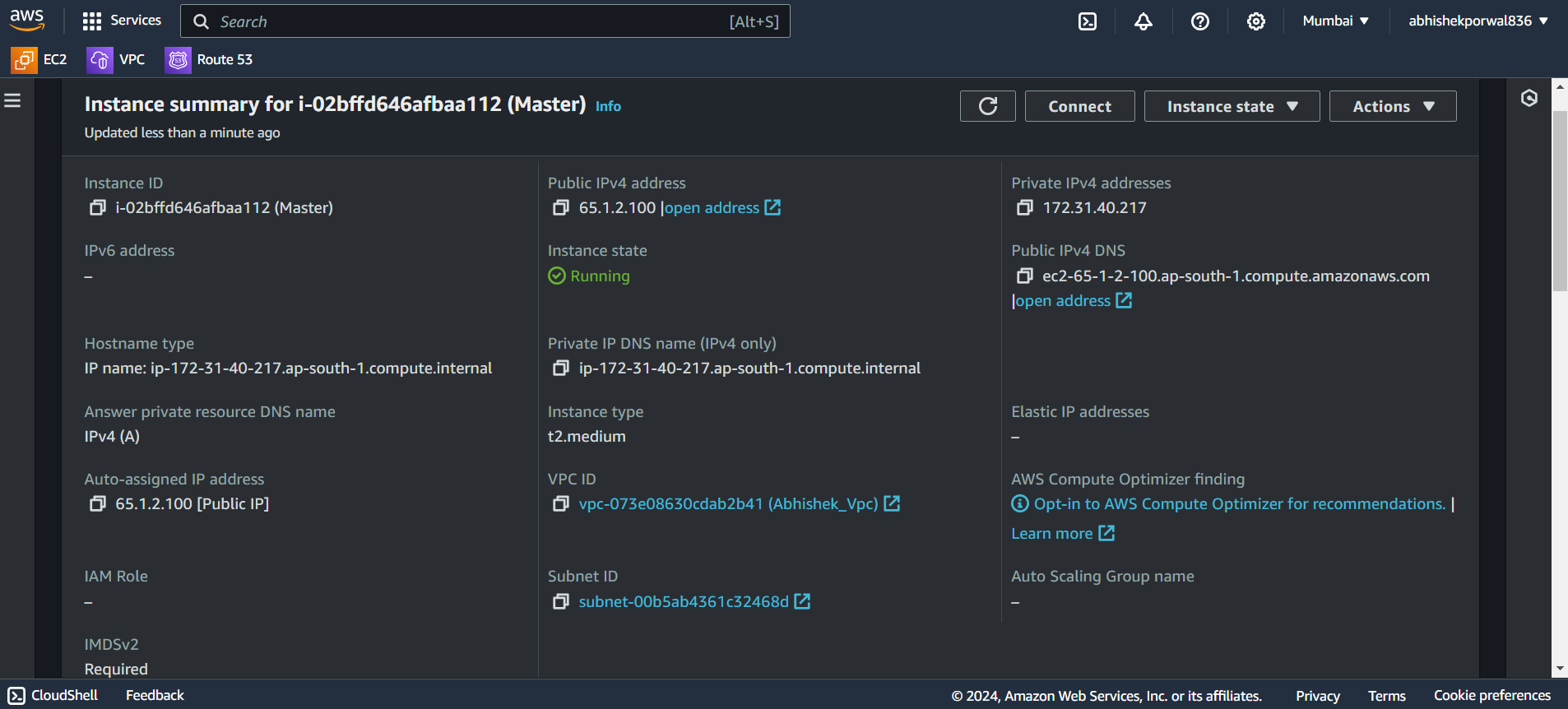
****

**Associate inbound rules**

****

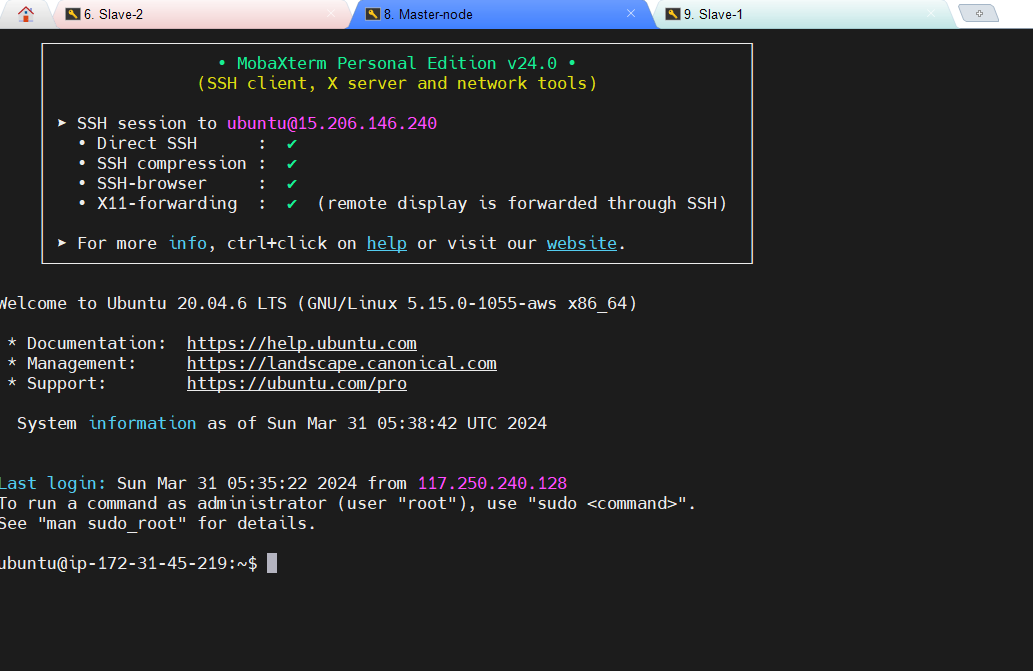
**VMs:3 vms for Kubernetes cluster:**

****

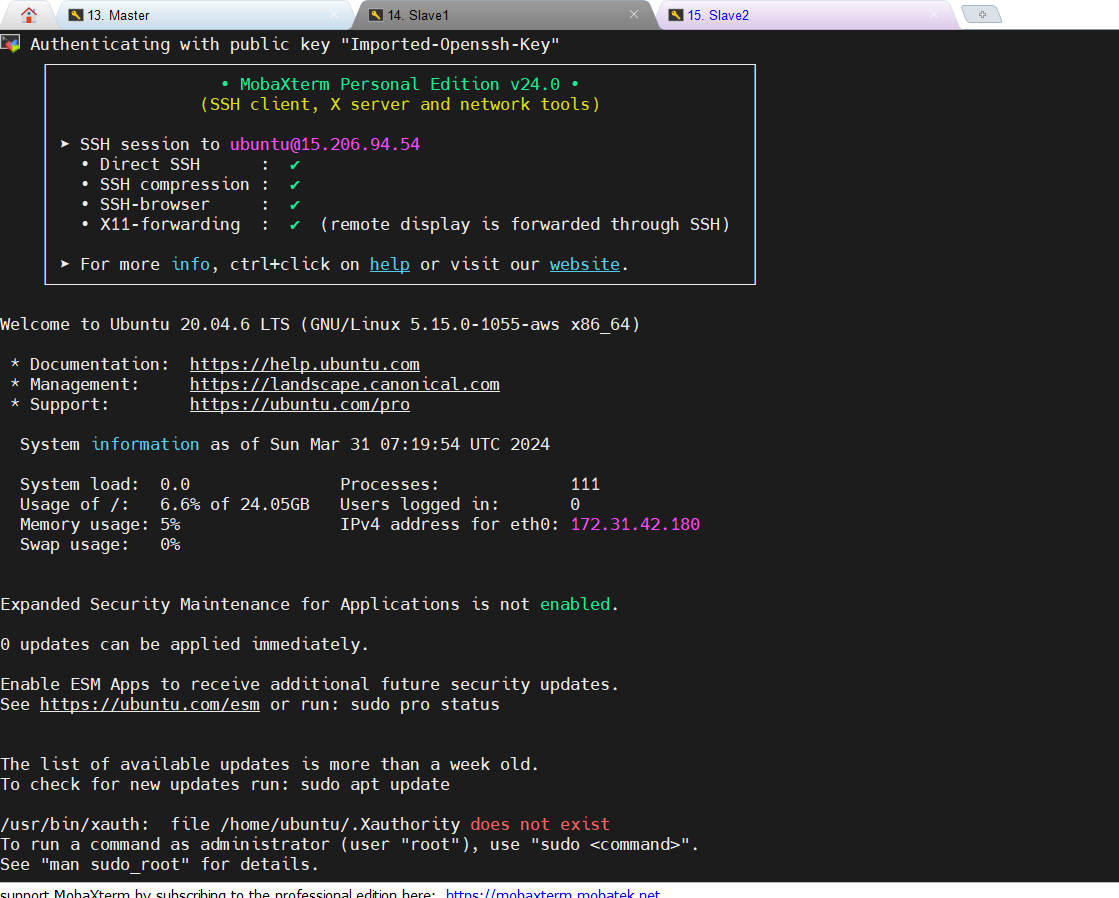
****

**SSH into the VM’s using MobaXterm:**

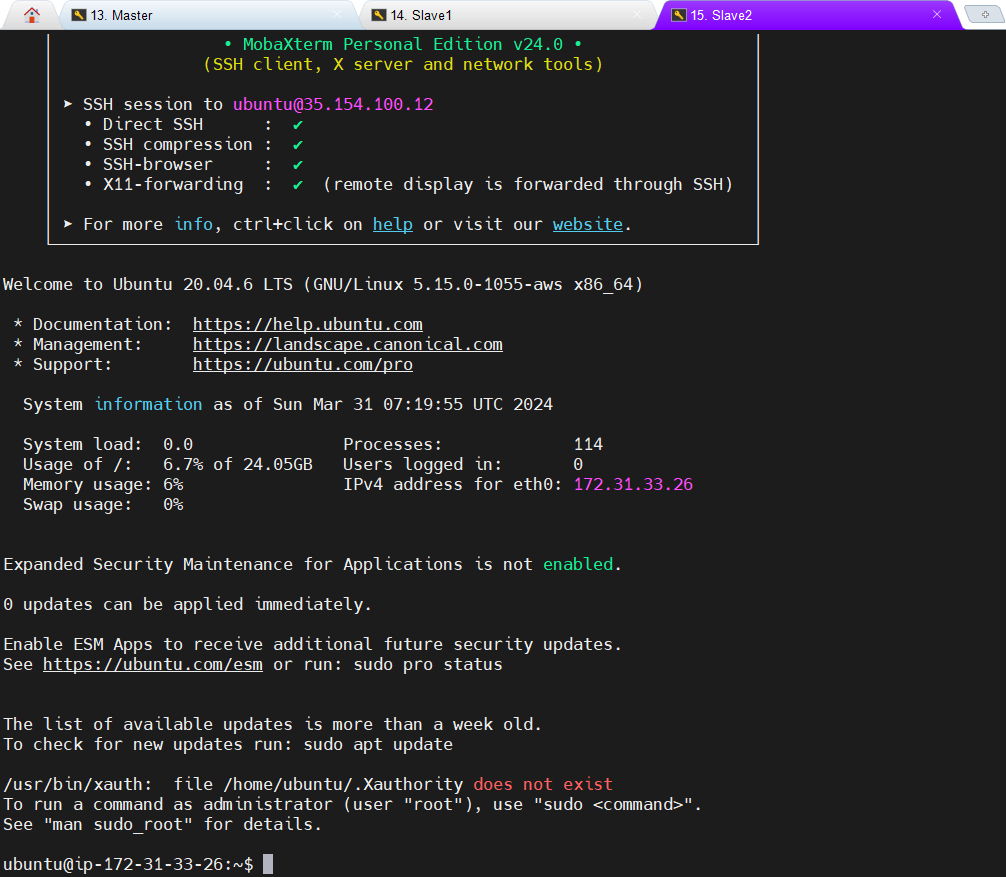
**Master-node:**

****

**Slave-1|:**

****

**Slave-2:**

****

**sudo su: to become root user on each instance**Now we need to run the commands to install Kubernetes cluster:  
by creating shell script:

Vi 1.sh then save using :w nad exit using :wq

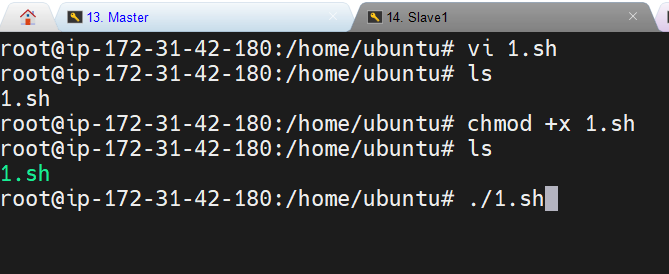
Give the executable permissions to the file using :

Chmod +x 1.sh

Execute the file : ./1.sh

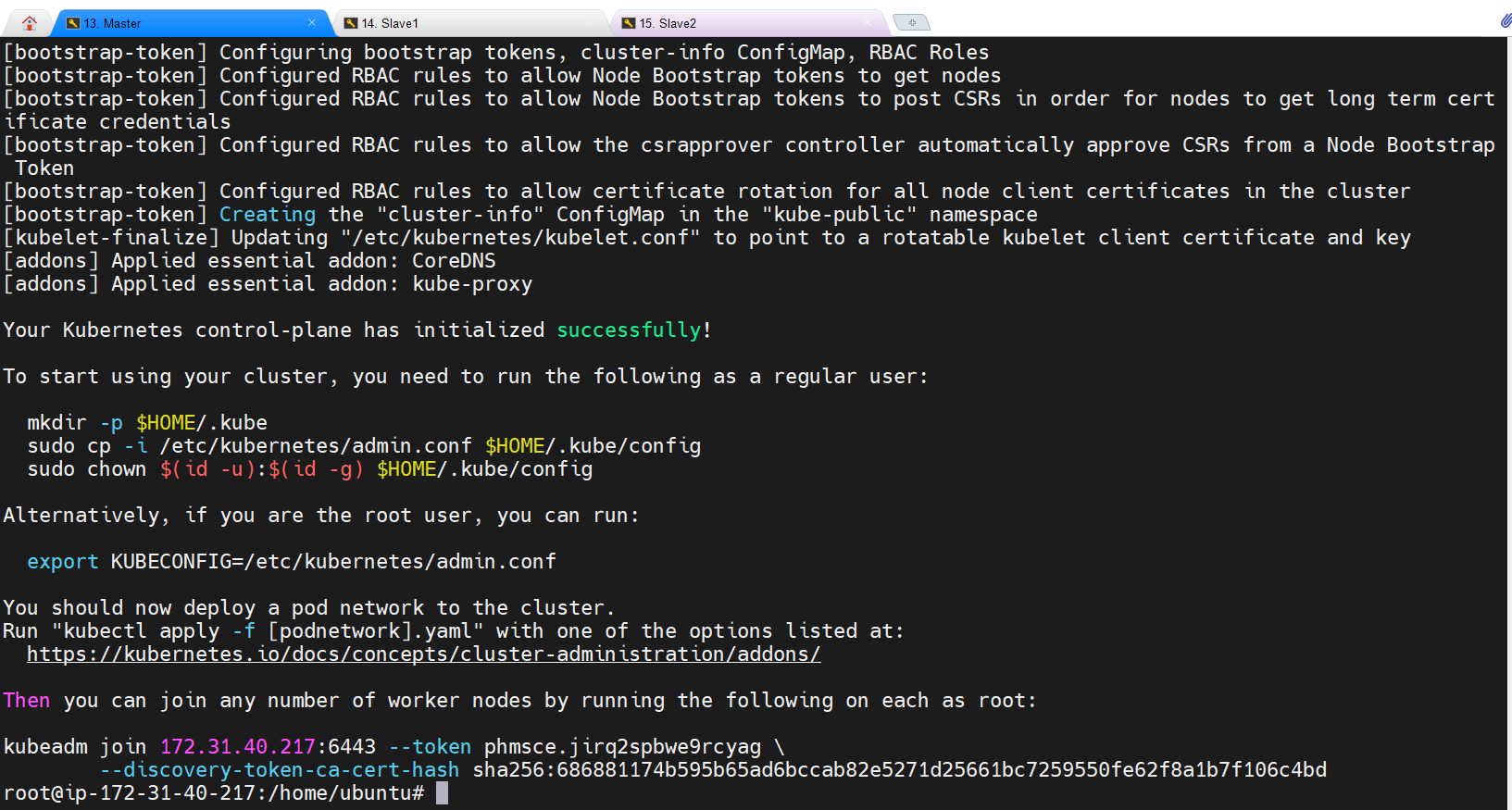
**Setup K8-Cluster using kubeadm : refer that in phase 1**

****

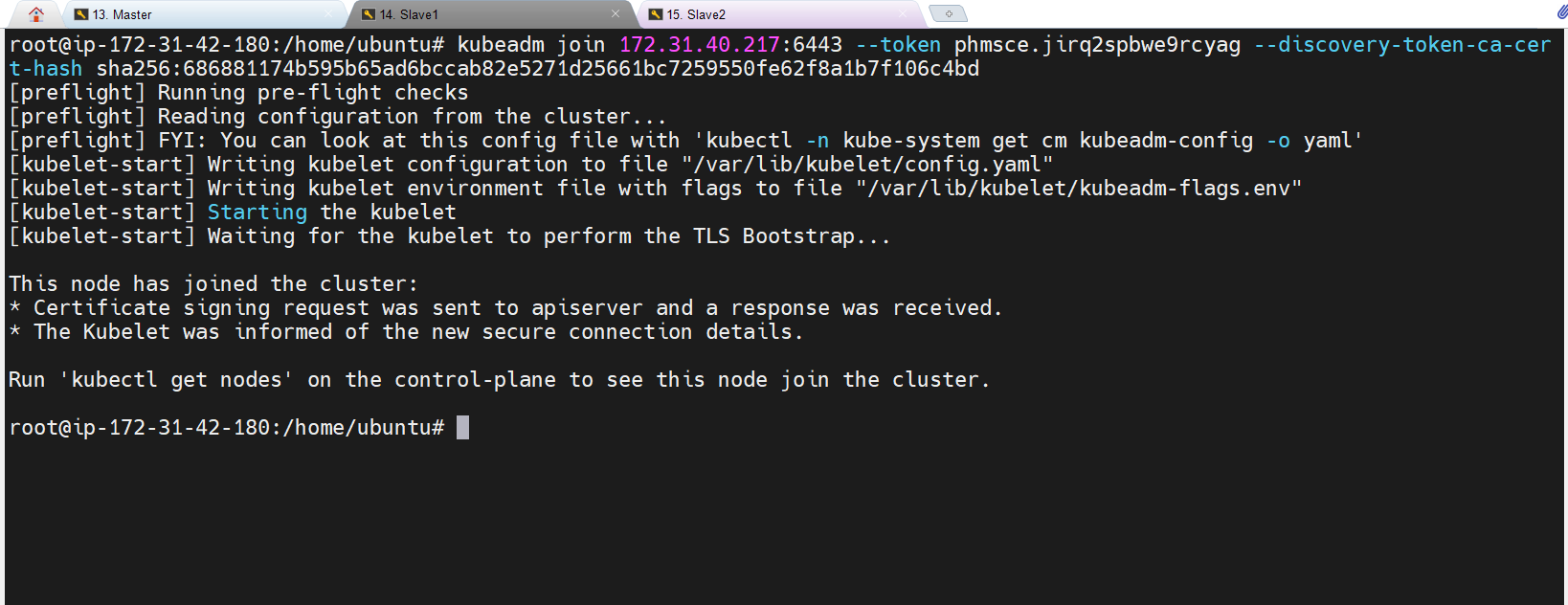
****

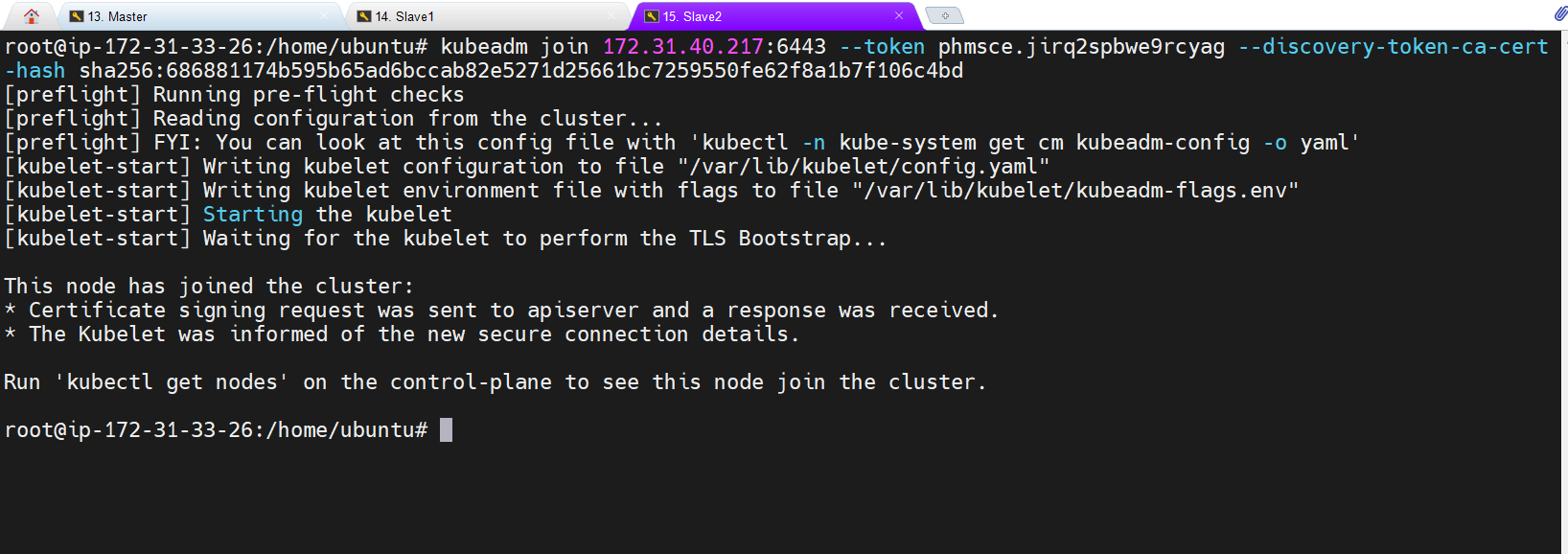
****

**Run the corresponding commands to setup the k8.  
after running sudo kubeadm init --pod-network-cidr=10.244.0.0/16 on master node we get**

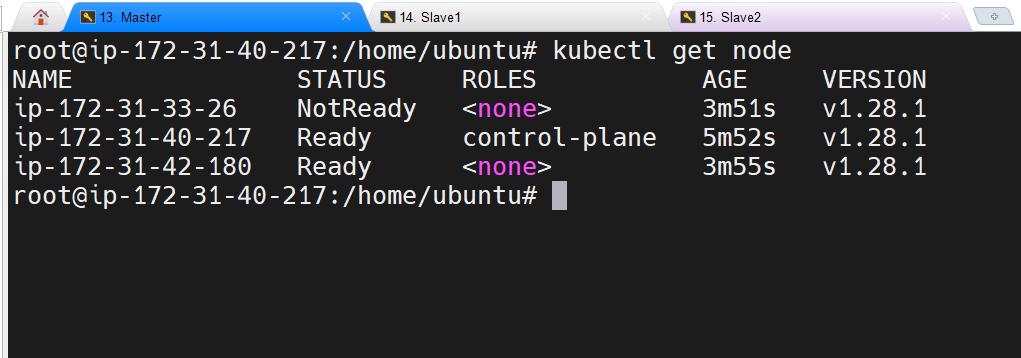
****

**On slave rode after running the command:**

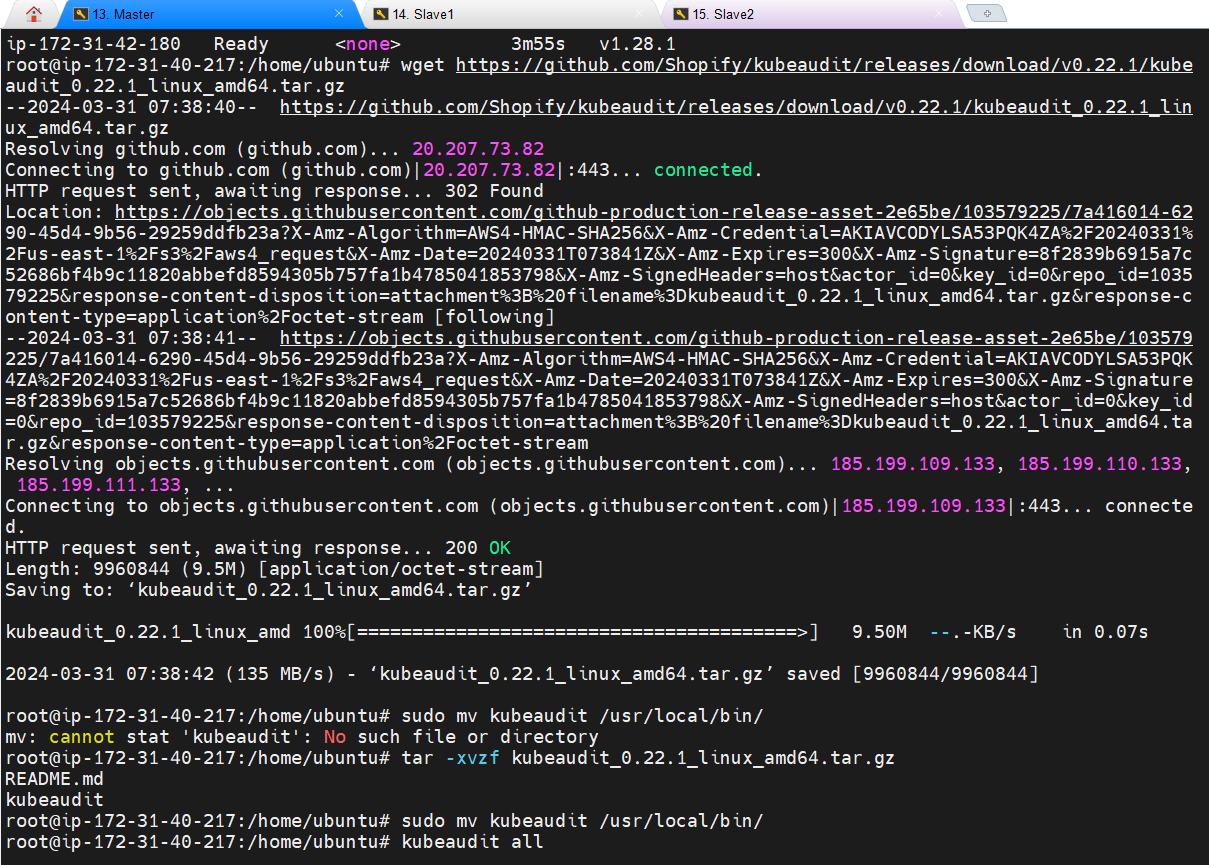
****

****

Getting the node

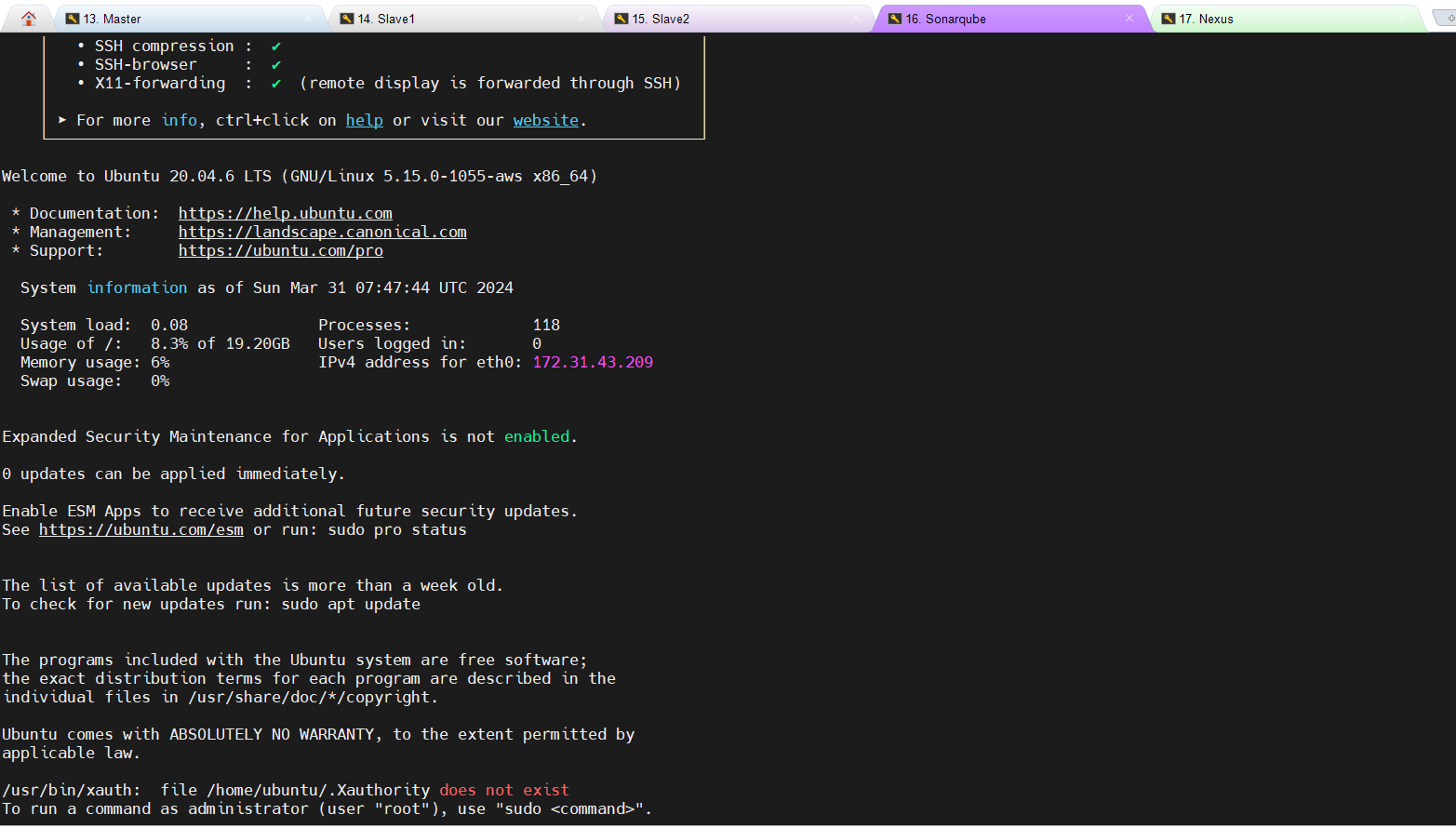
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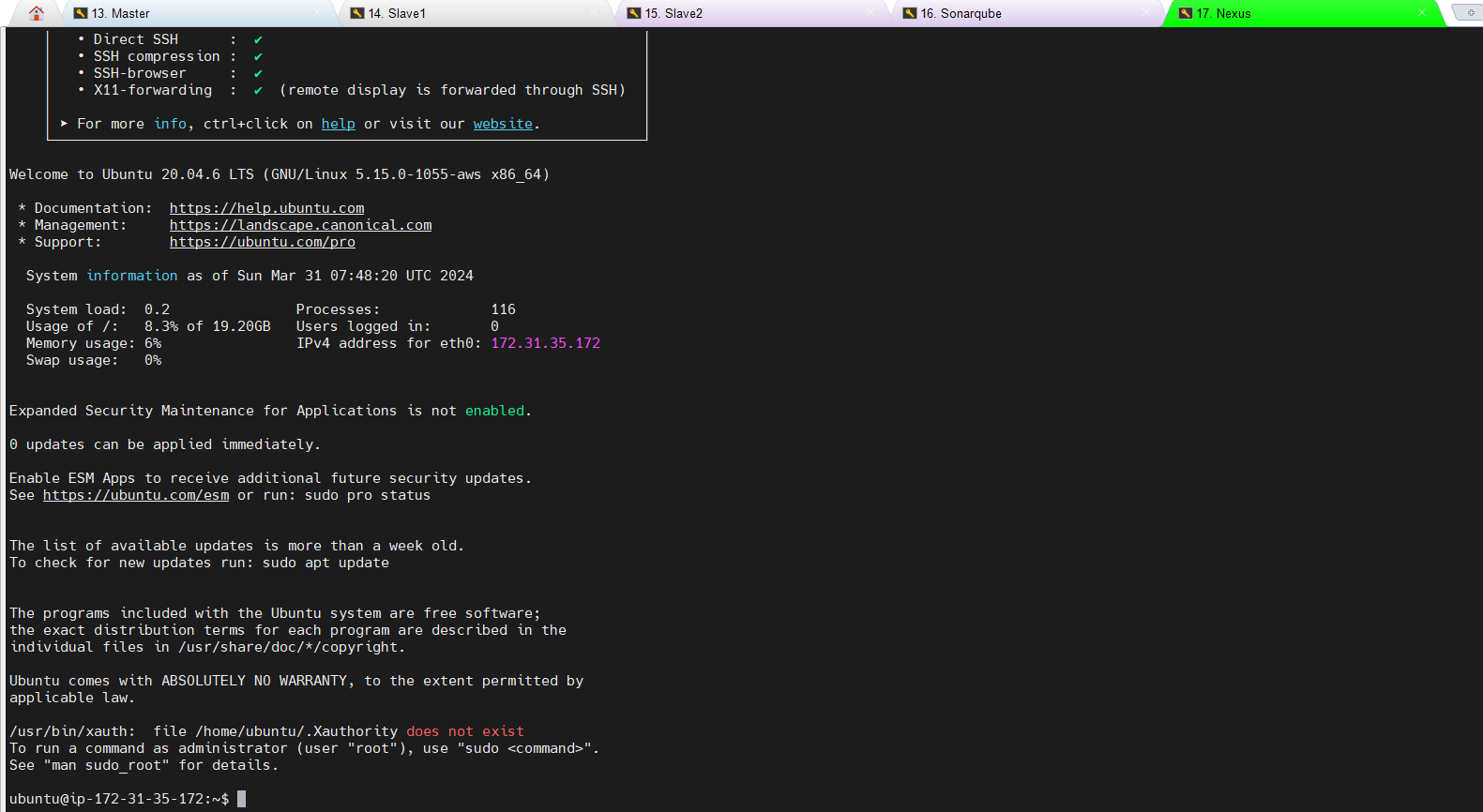
**KUBEAUDIT:**

****

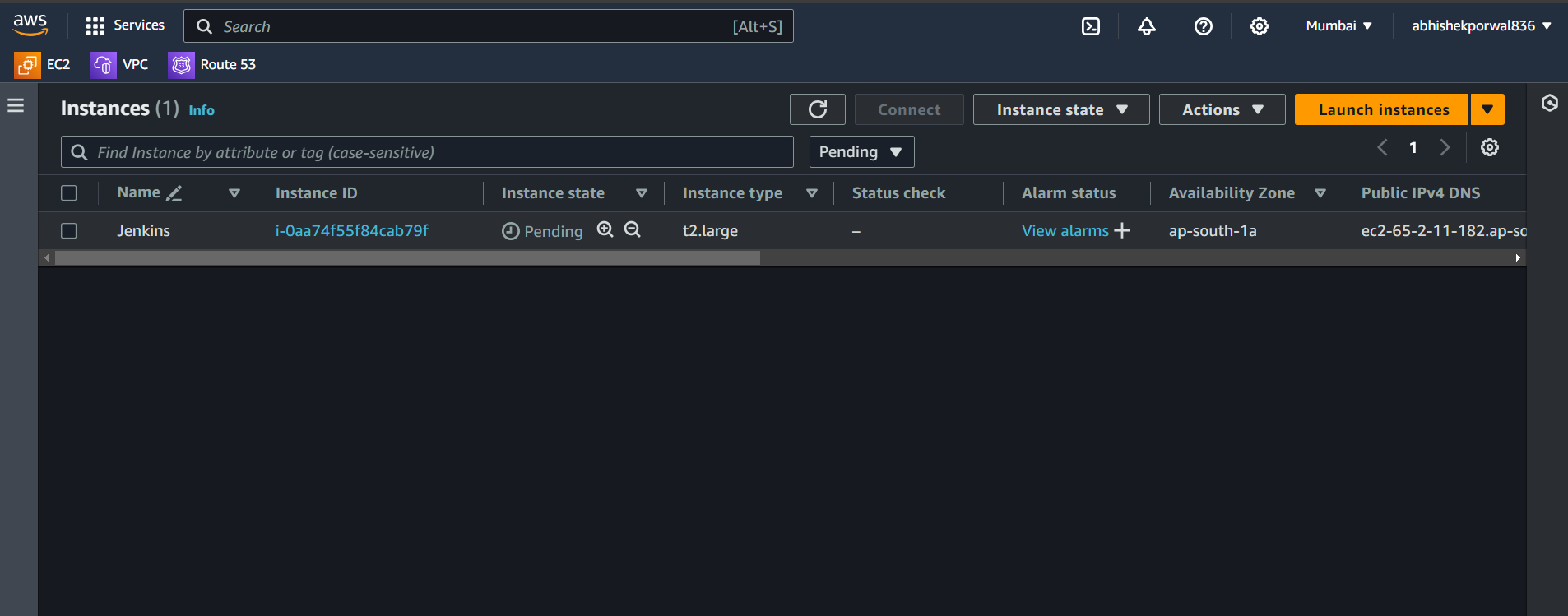
**Create sonarkube and nexus server and connect to them through MobaXterm:**

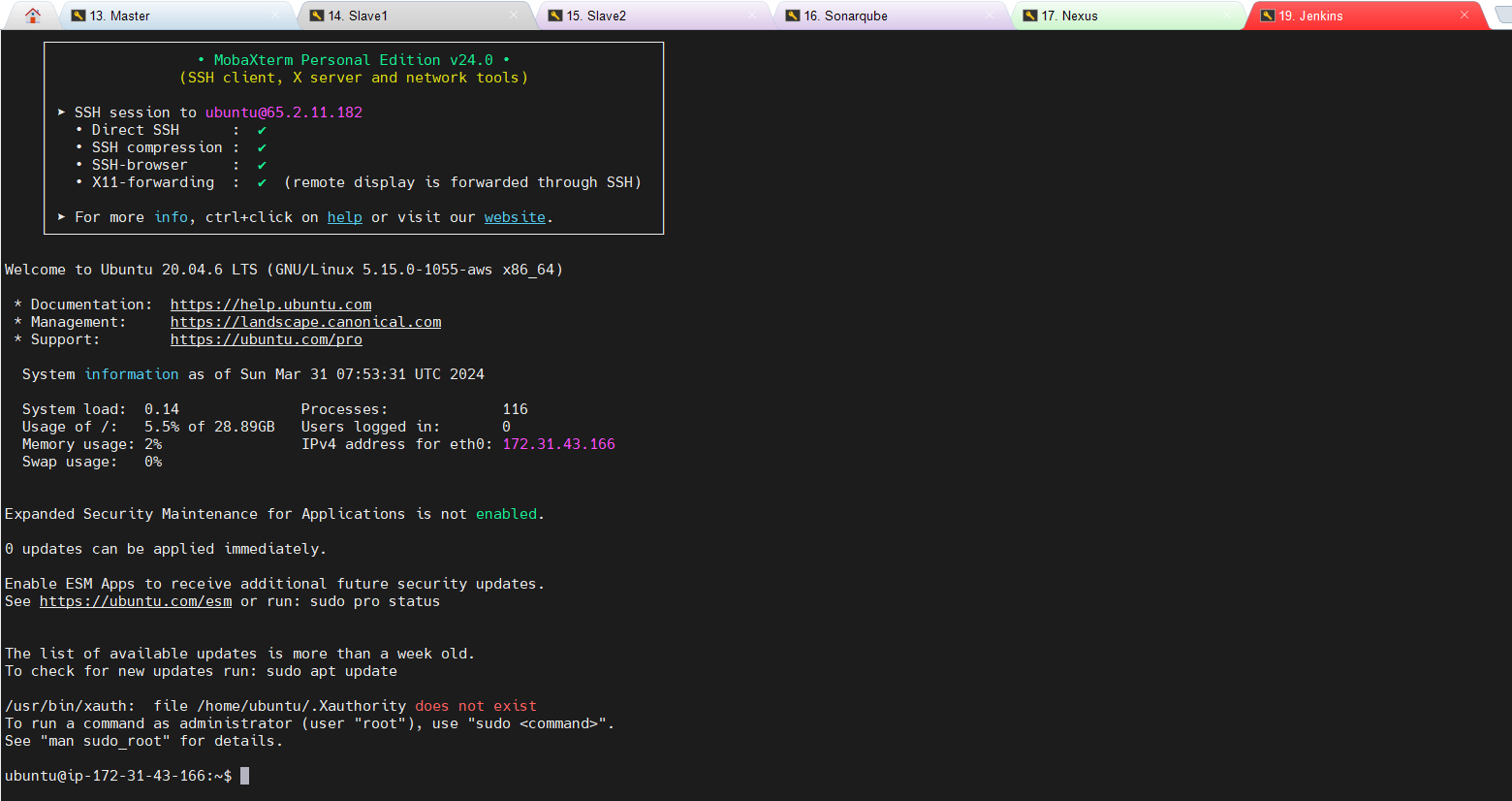
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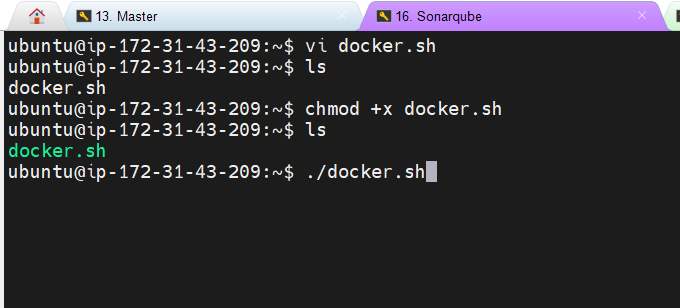


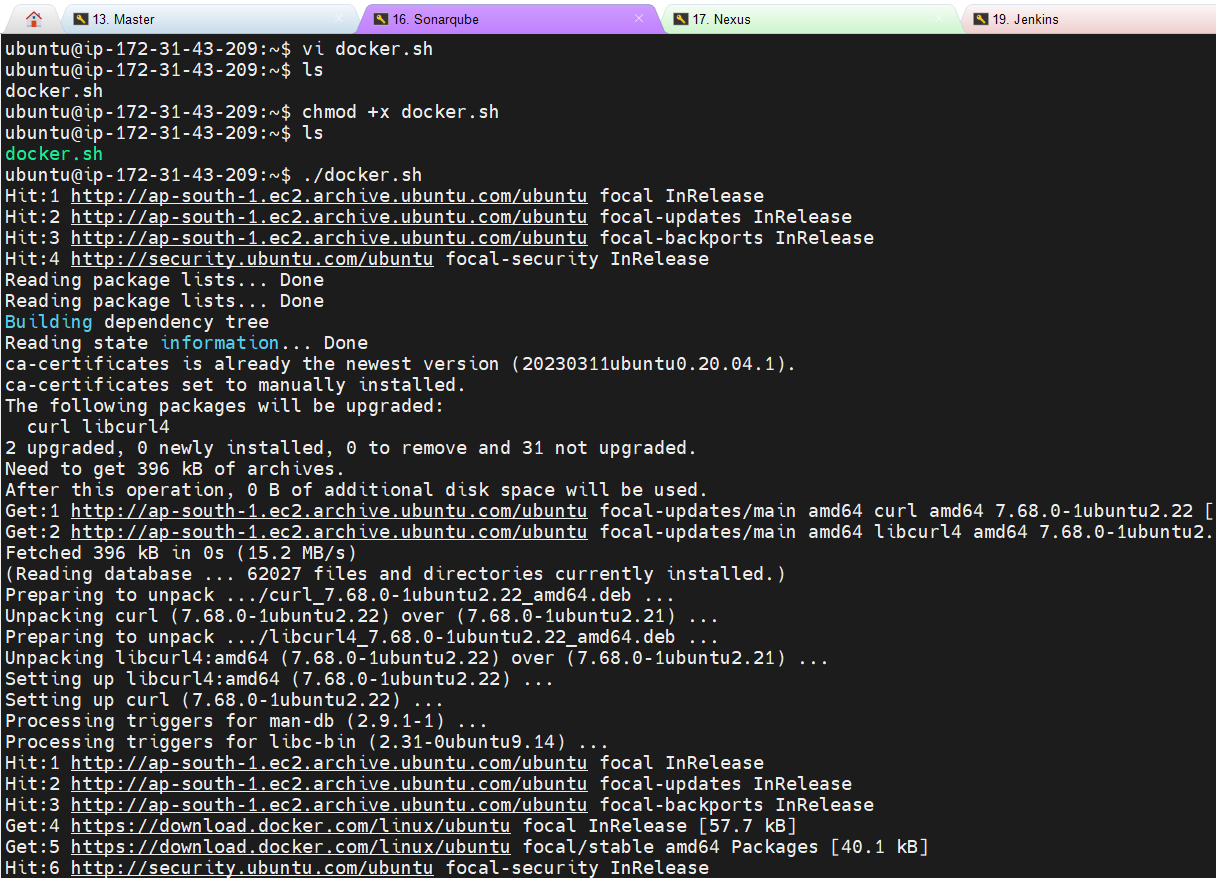
**Create Jenkins server and ssh into it through MobaXterm:**



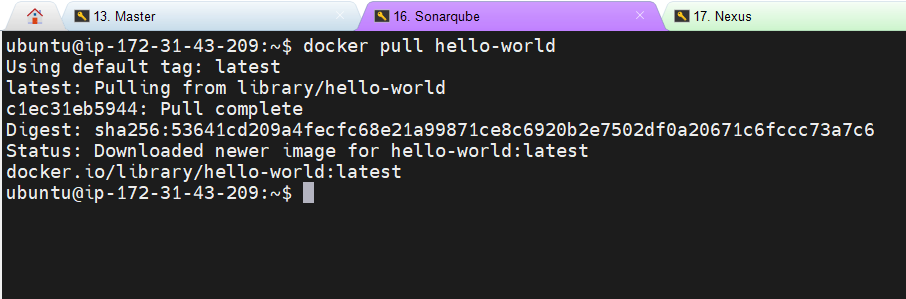


**Setting up Sonarkube :**

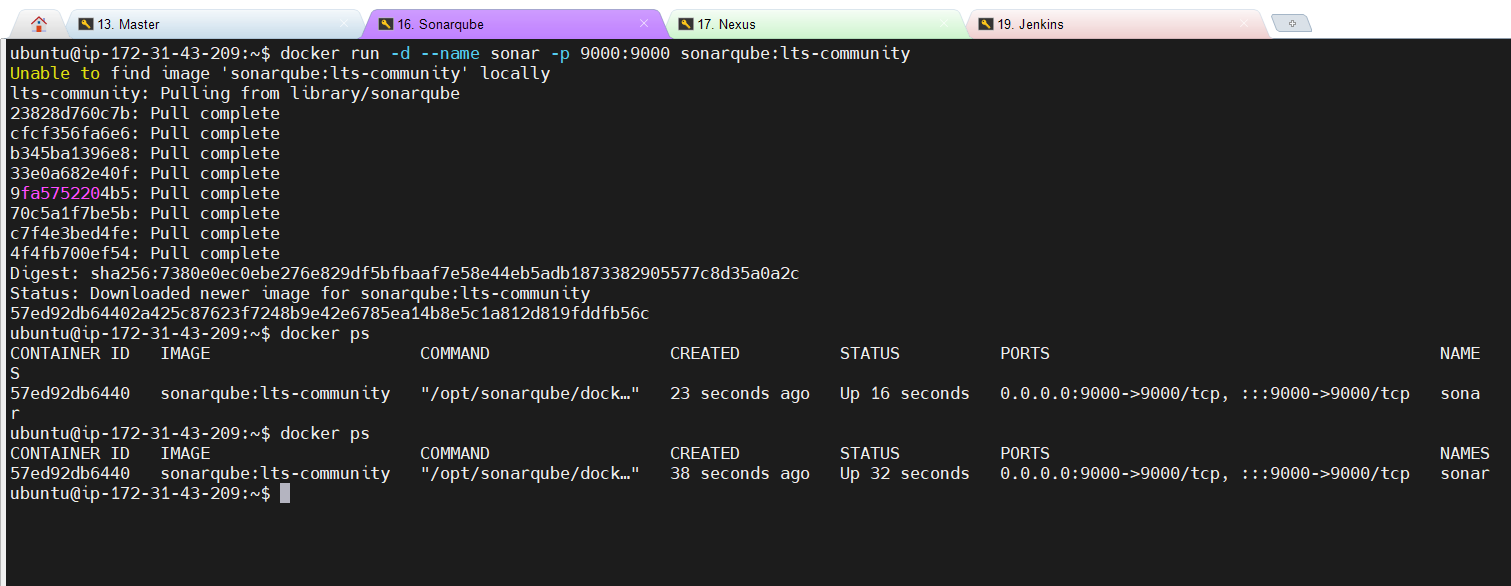


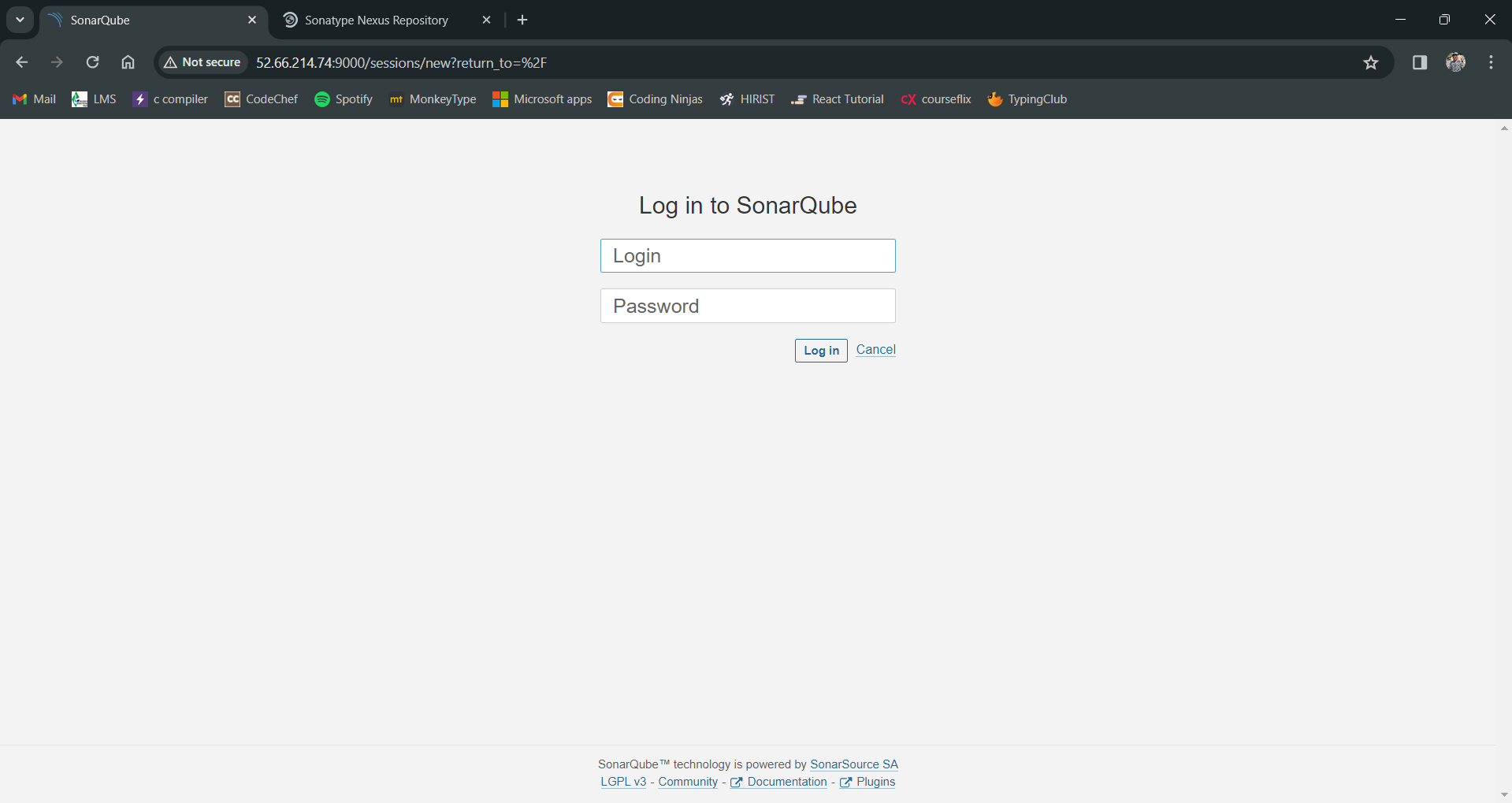
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**Verifying docker is installed**

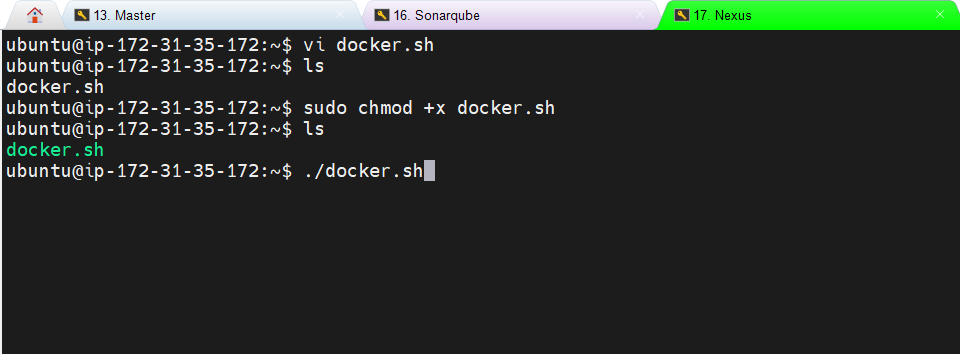
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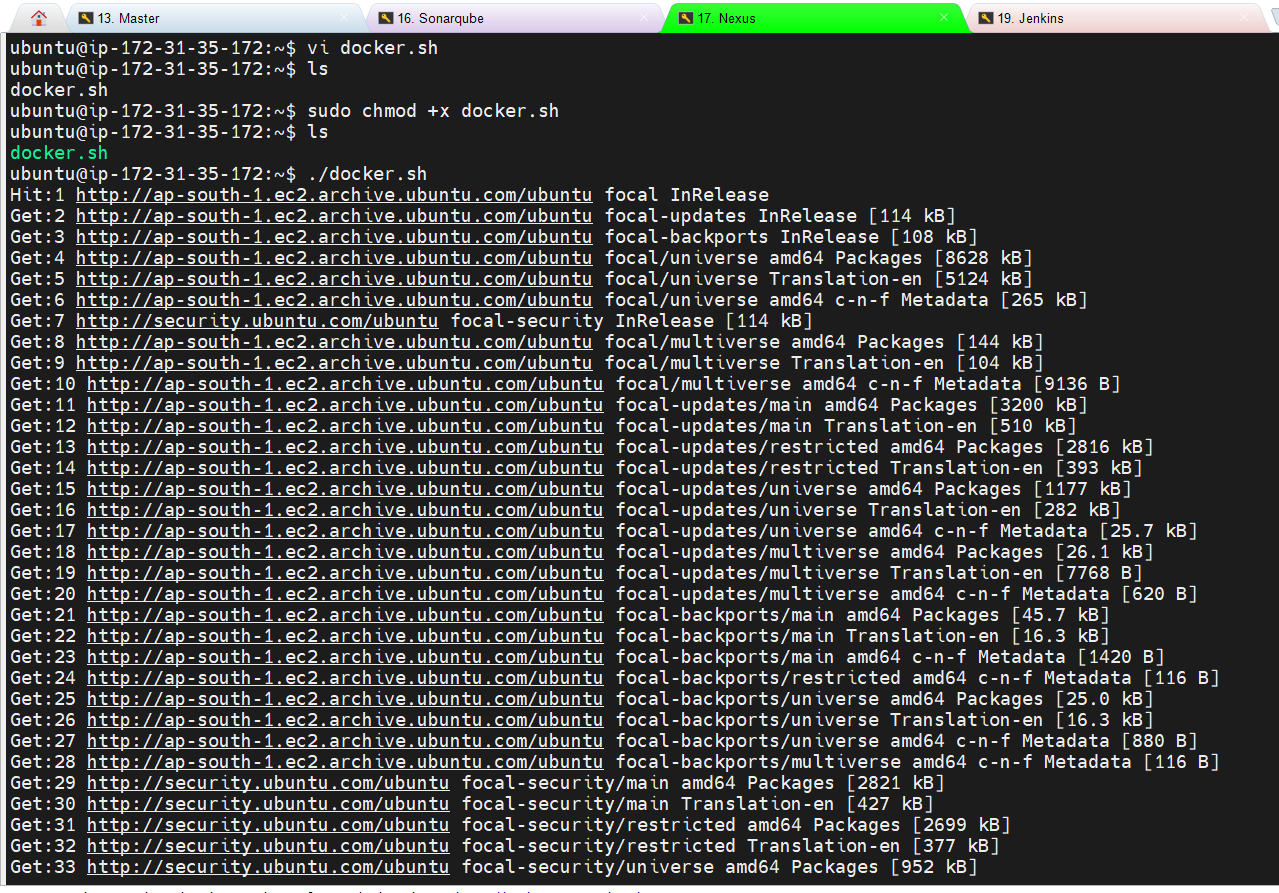
**Running docker container of sonarqube**

****

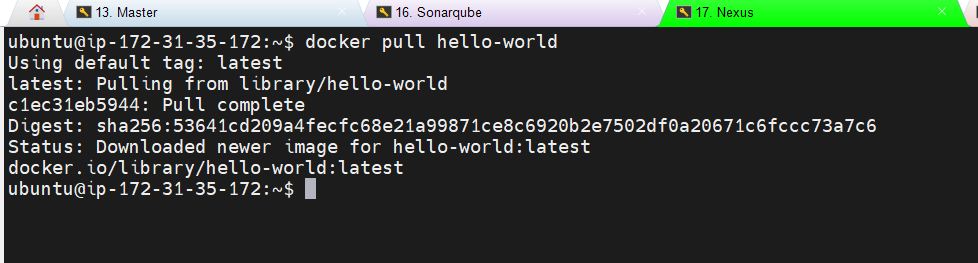
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**Setting up Nexus:**

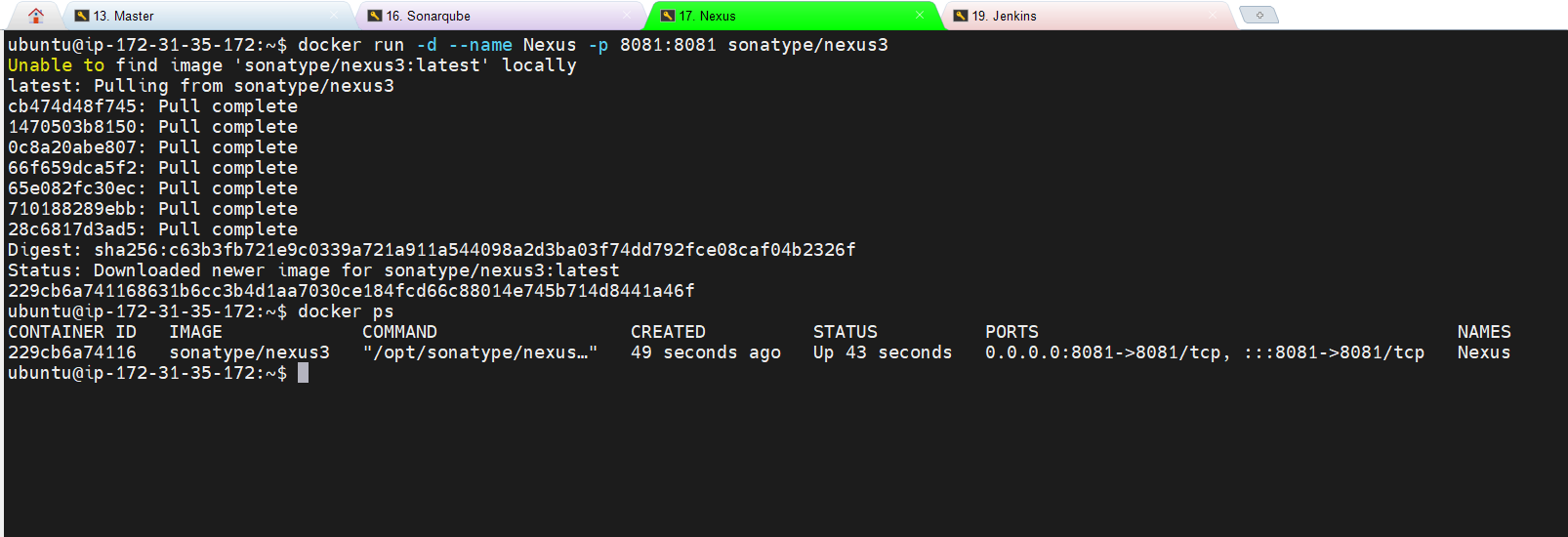
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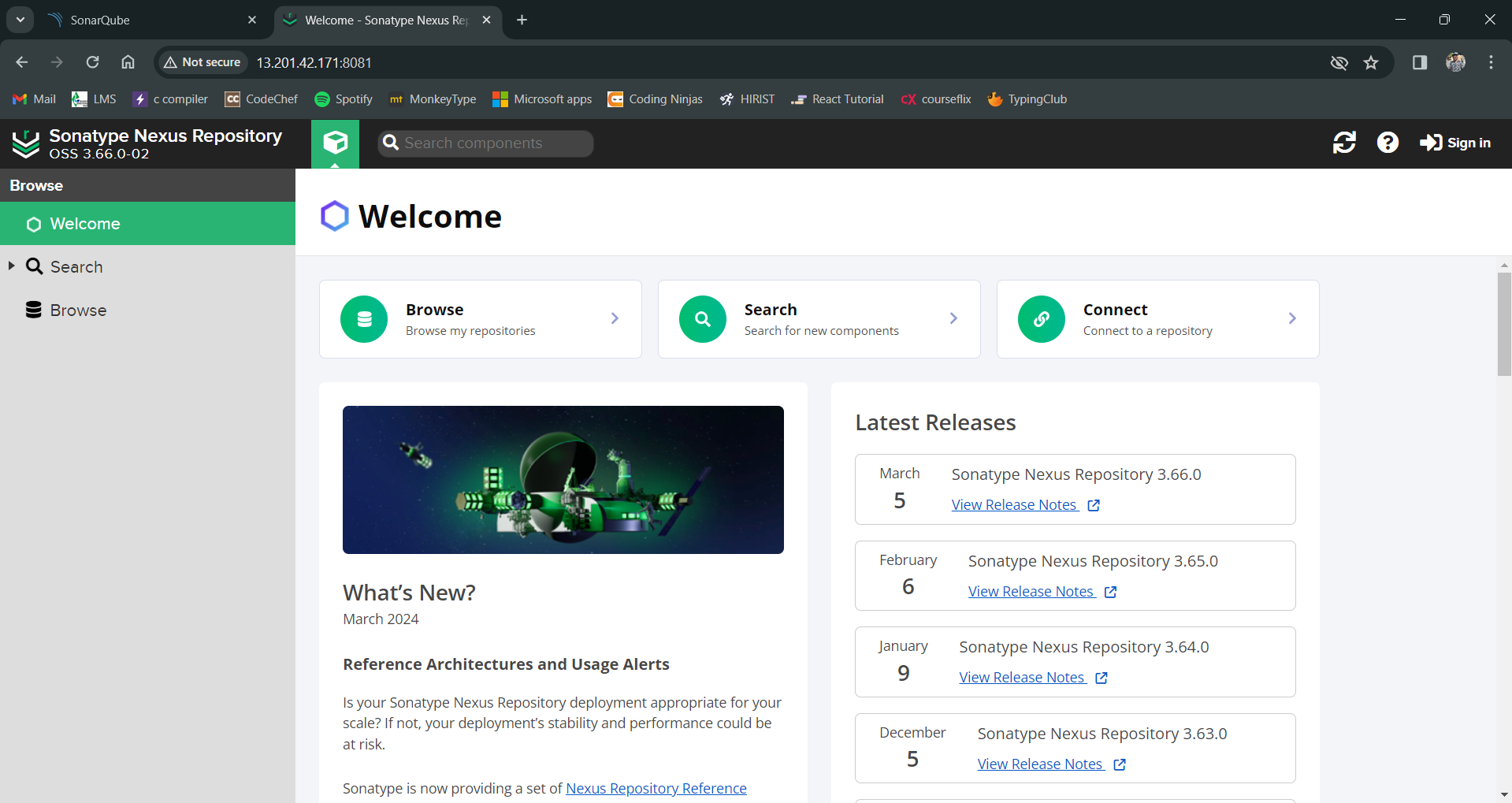
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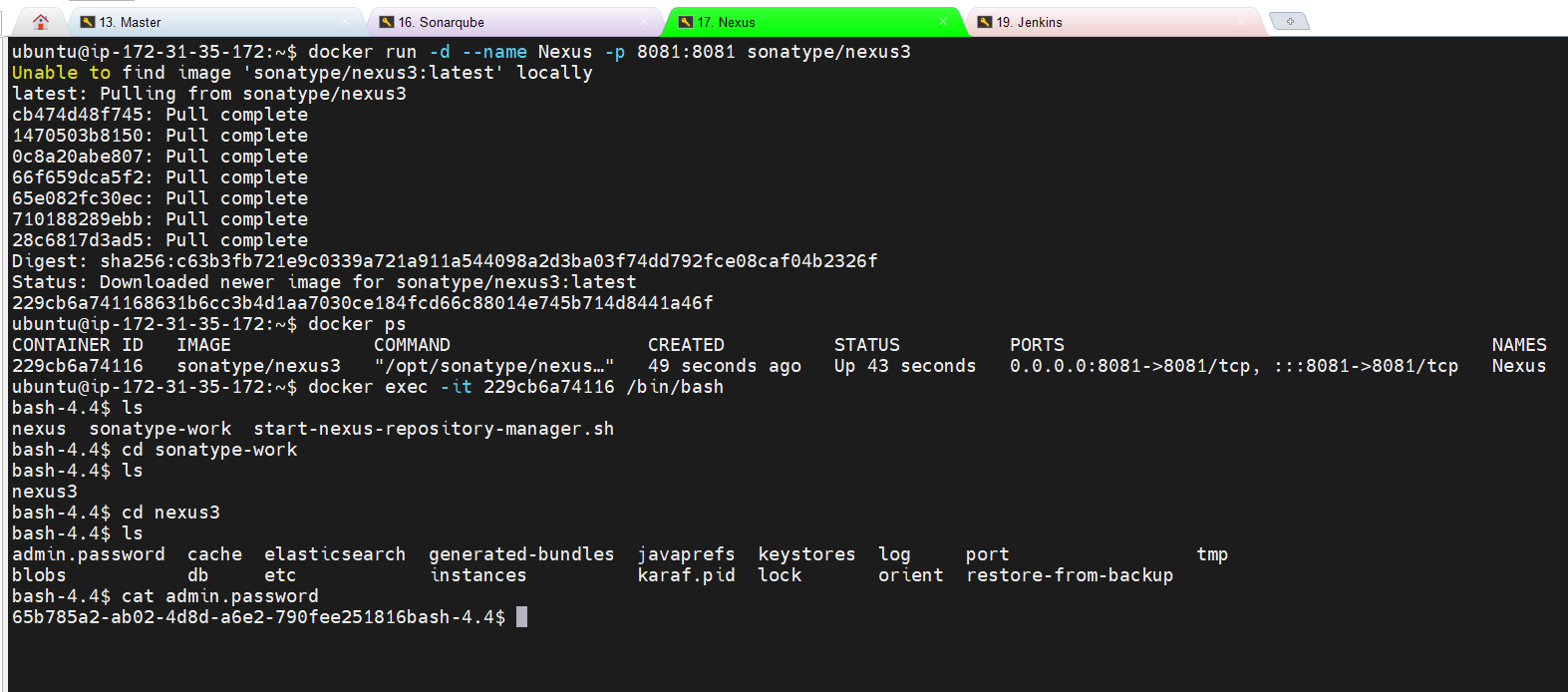
**Verifying docker is installed**

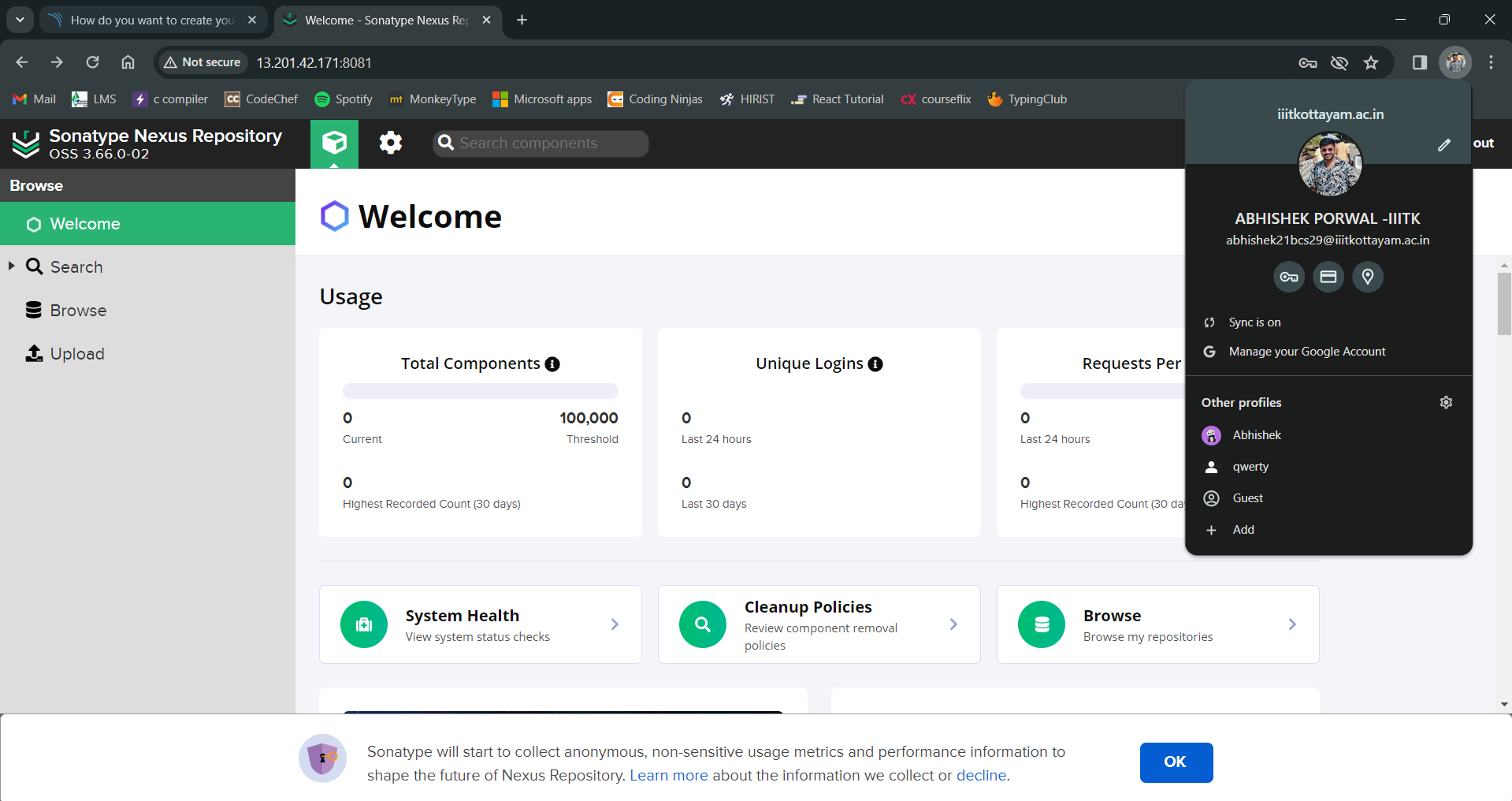


Run docker container of nexus:

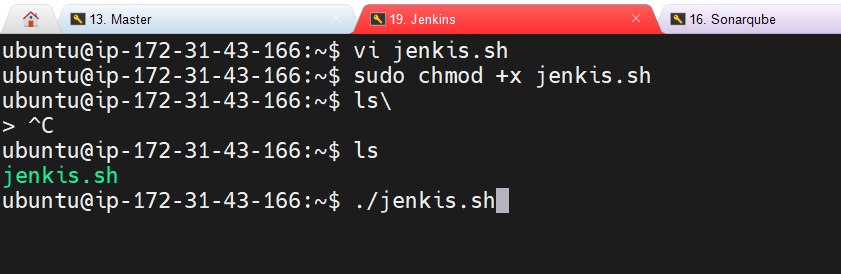




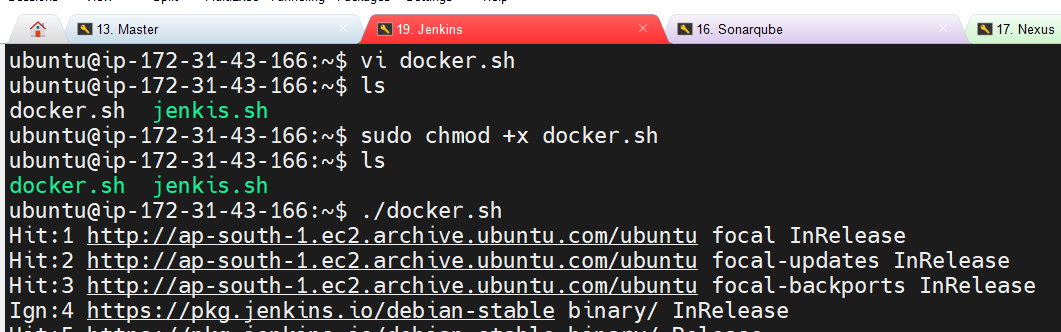
Docker exec -it(interactive terminal)) <container id> /bin/bash for password:  




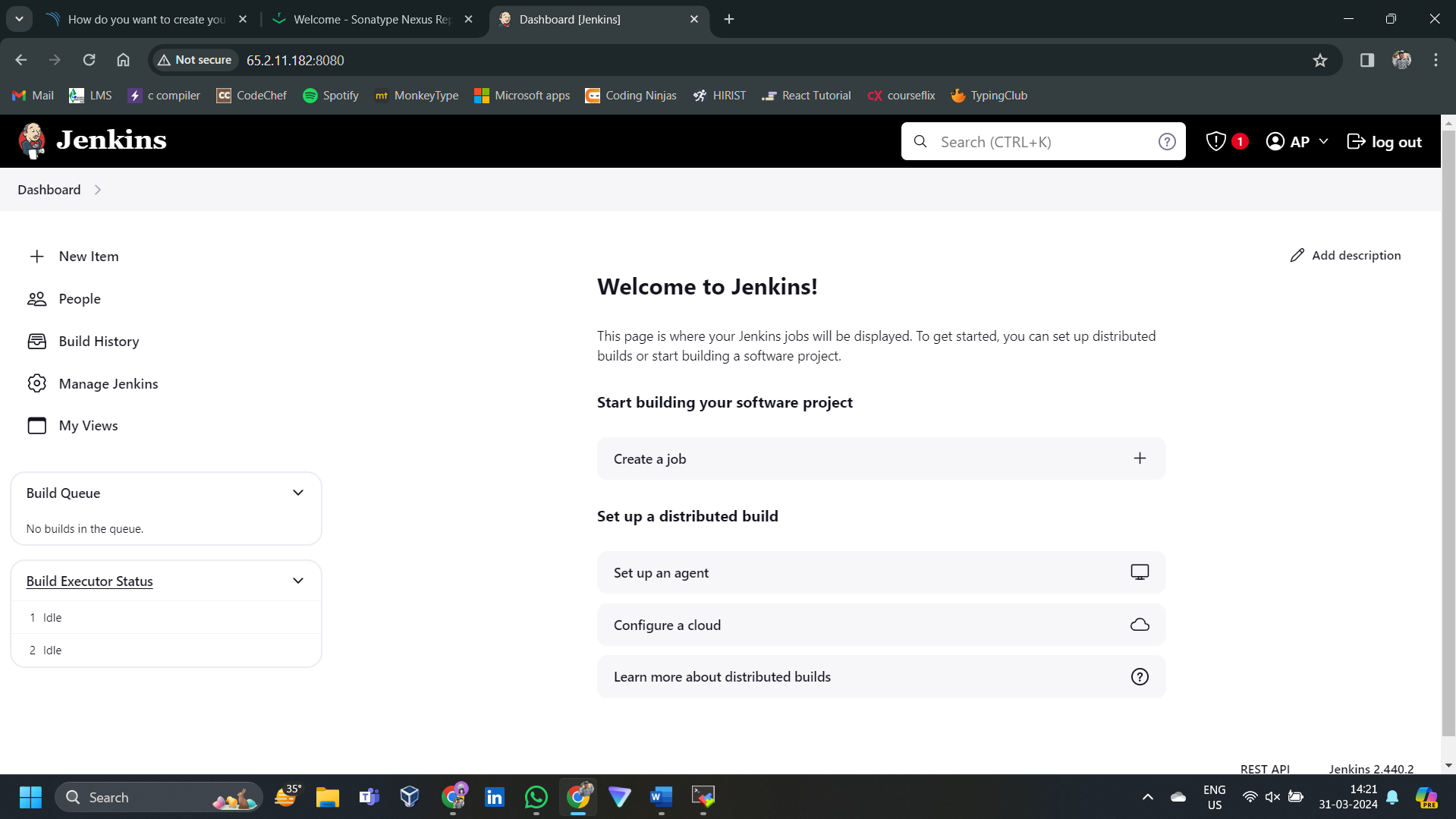
Set up Jenkins:



Install docker on Jenkins server



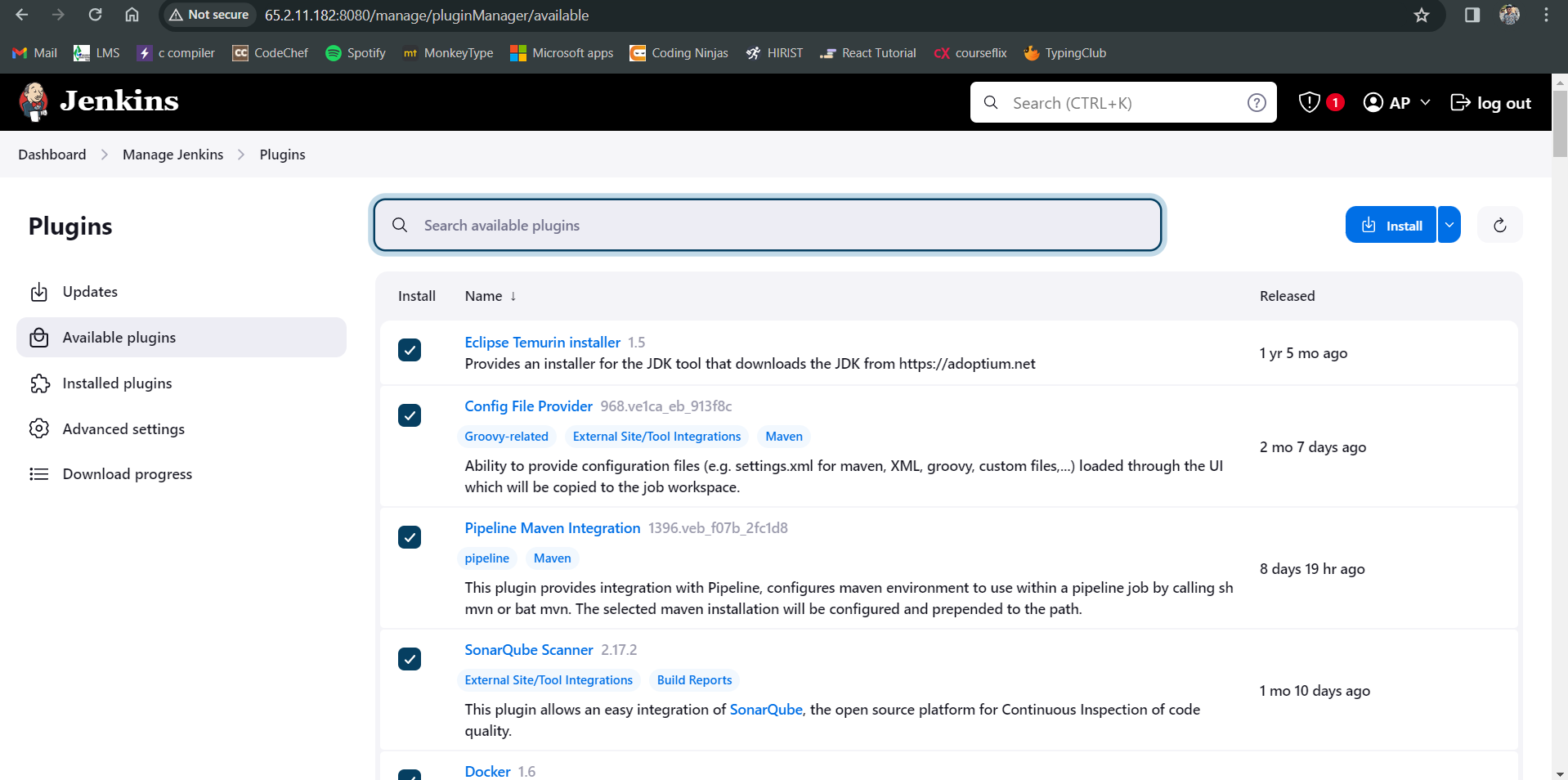
Accesss Jenkins after retrieving password:

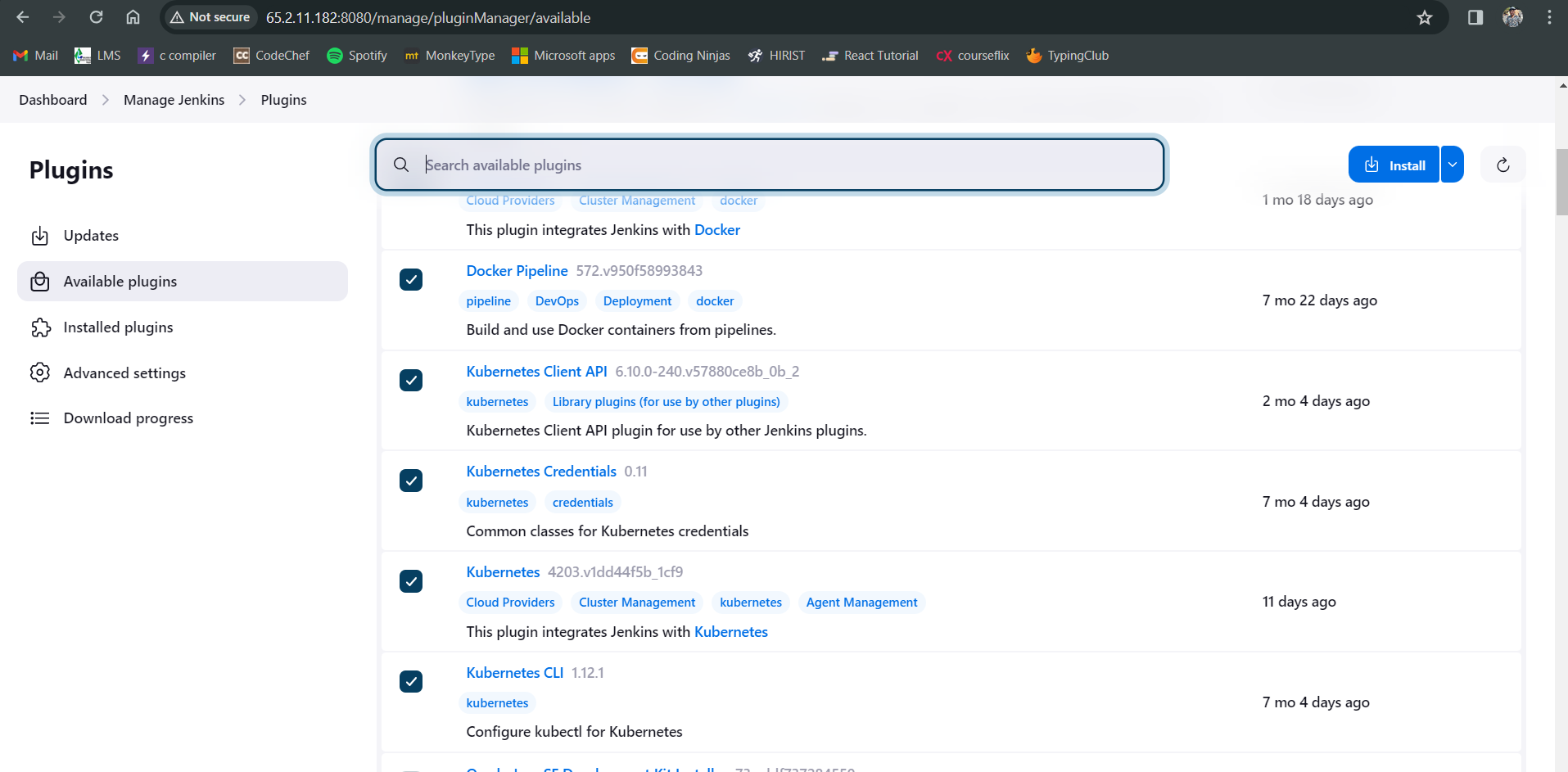


**PHASE 2 : Git repo setup**

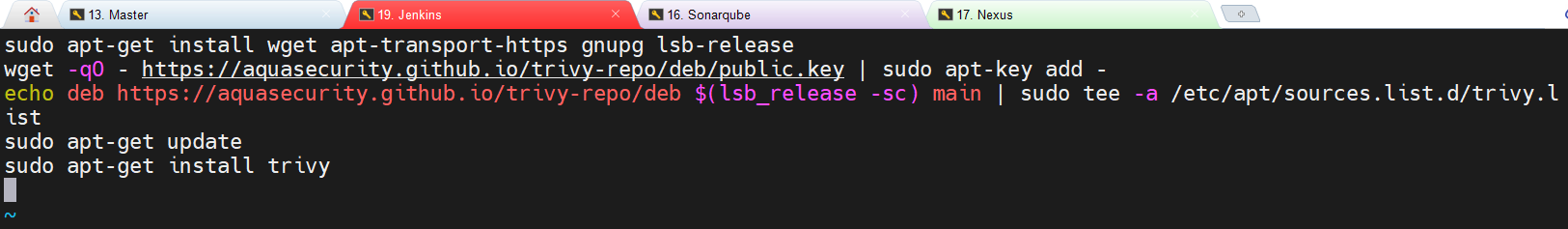
**PHASE 3: cicd**

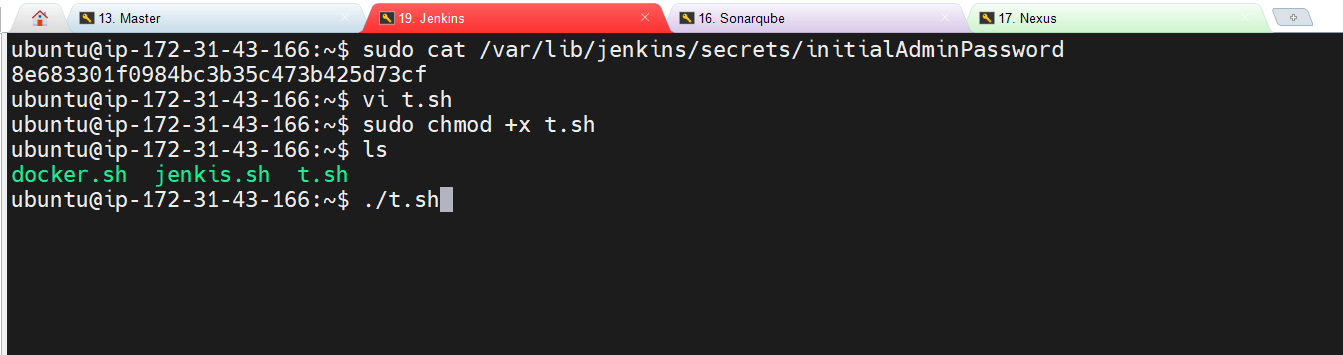
**Install Jenkins plugins:**

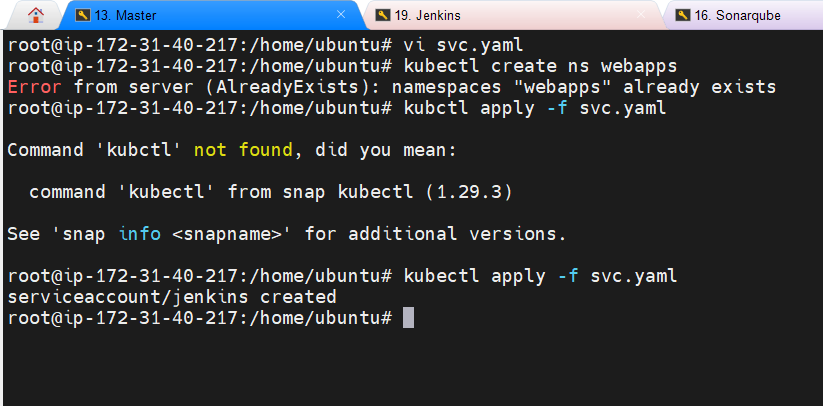
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**Installing trivy on Jenkins server as the plugin is not there**

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