**Establish SSH login on Ubuntu virtual machine**

In guest machine:

Login as a super user on the machine

sudo su

Update system packages:

apt update

Create a new user:

adduser <USERNAME>

Give super user privileges to the new user:

sudo usermod -aG sudo <USERNAME>

Create .ssh folder and authorized\_files folder in home:

sudo mkdir ~/.ssh

sudo chmod 700 ~/.ssh

sudo touch ~/.ssh/authorized\_keys

sudo chmod 600

~/.ssh/authorized\_keys

sudo chown -R <USERNAME>:<USERNAME> ~/.ssh

In host machine:

Generate SSH key pair:

ssh-keygen

In Windows, copy the public key to clipboard:

type C:\Users\<USER>\.shh\<KEY\_NAME>.pub | CLIP

In guest machine:

Copy the public key to authorized\_keys file:

sudo echo “<PUBLIC\_KEY>” >> ~/.ssh/authorized\_keys

In host machine:

Login to the guest machine using ssh:

ssh <USERNAME>@<GUEST\_IP\_ADDRESS>

**Installing Docker on Ubuntu virtual machine**

Update system

sudo apt update

Install prerequisites for apt

sudo apt install apt-transport-https ca-certificates curl software-properties-common

Add GPG key for Docker repository

curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add –

Update system

sudo apt update

Add Docker CE repository to system

sudo add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu focal stable"

Make sure to install from Docker repository

apt-cache policy docker-ce

Install Docker CE

sudo apt install docker-ce

Check Docker service status (should be active)

systemctl status docker

Add user to docker group (to avoid using sudo for Docker commands)

sudo usermod -aG docker <USERNAME>

su - <USERNAME>

Check version

docker version

**Installing Jenkins on a Docker container**

Pull most recent Jenkins LTS version (can be checked in <https://hub.docker.com/r/jenkins/jenkins>):

docker pull jenkins/jenkins:lts-jdk11

Create a new container to run Jenkins using Docker:

docker run -p 8080:8080 -p 50000:50000 -v jenkins\_home:/var/jenkins\_home jenkins/jenkins:lts-jdk11

Make sure to have initial administrator password at hand (automatically generated and shown in logs):

Jenkins initial setup is required. An admin user has been created and a password generated.

Please use the following password to proceed to installation:

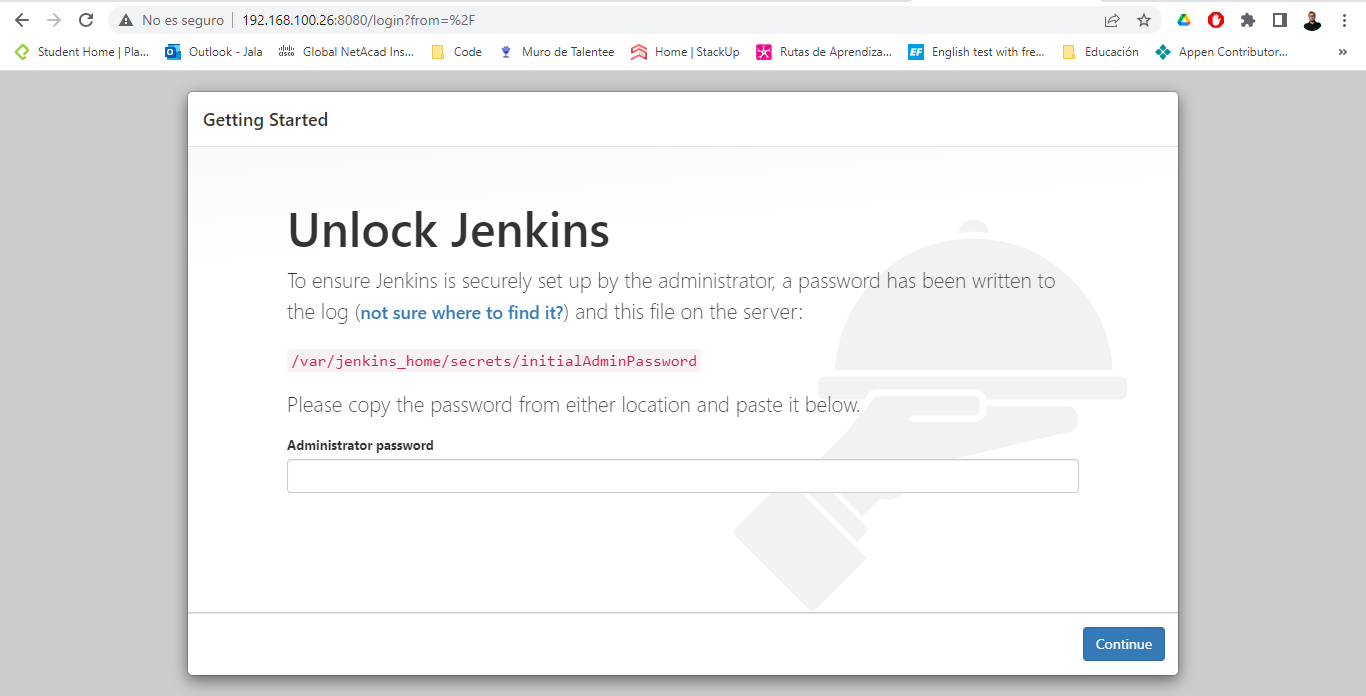
1883c809f01b4ed585fb5c3e0156543a

This may also be found at: /var/jenkins\_home/secrets/initialAdminPassword

Wait for this message to be shown in logs:

Jenkins is fully up and running

Then go to the browser, open a new tab and go to http://<LOCAL\_HOST\_IP\_ADDRESS>:8080. Add the initial administrator password and click on Continue.



Choose “Install suggested plugins” and wait until the installation is finished.

Interfaz de usuario gráfica

Descripción generada automáticamente con confianza mediaInterfaz de usuario gráfica, Aplicación, Tabla, Word

Descripción generada automáticamente

Create the first admin user. Fill all the fields and click Save and Continue.

Interfaz de usuario gráfica, Aplicación, Tabla

Descripción generada automáticamente

Choose the Jenkins URL to access Jenkins. Leaving the one that is default is recommended.

Interfaz de usuario gráfica, Aplicación, Word

Descripción generada automáticamente

Jenkins has been installed and is ready to use.

Interfaz de usuario gráfica, Aplicación, Teams

Descripción generada automáticamente