# **Establish SSH login on Fedora virtual machine**

### In guest machine:

```
Update system packages:
```

```
sudo dnf -y update
```

Create a new user:

```
adduser <USERNAME>
```

Give super user privileges to the new user:

```
sudo usermod -aG wheel <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 Fedora virtual machine**

```
Update system
      sudo dnf -y update
Add Docker CE repository to system
      sudo dnf -y install dnf-plugins-core
      sudo tee /etc/yum.repos.d/docker-ce.repo<<EOF</pre>
      [docker-ce-stable]
      name=Docker CE Stable - \$basearch
      baseurl=https://download.docker.com/linux/fedora/35/\$basearc
      h/stable
      enabled=1
      gpgcheck=1
      gpgkey=https://download.docker.com/linux/fedora/gpg
      EOF
Install Docker CE
      sudo dnf makecache
      sudo dnf install docker-ce docker-ce-cli containerd.io
Start Docker service
      sudo systemctl enable --now docker
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>
      newgrp docker
```

docker version

## **Installing Jenkins on a Docker container**

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

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

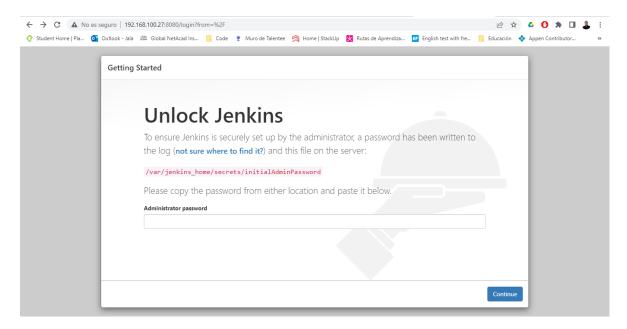
This may also be found at: /var/jenkins home/secrets/initialAdminPassword

Wait for this message to be shown in logs:

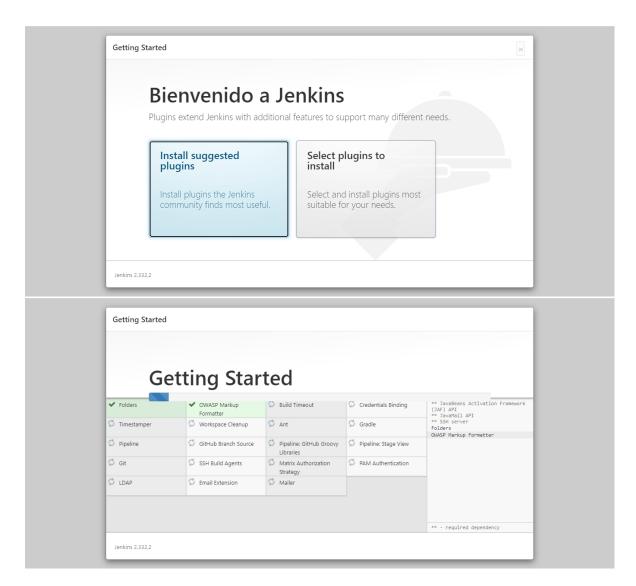
Jenkins is fully up and running

Then go to the browser, open a new tab and go to

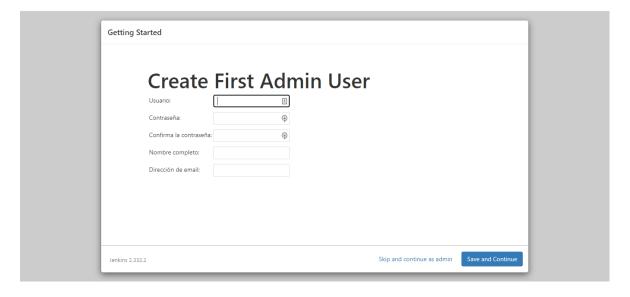
http://<LOCAL\_HOST\_IP\_ADDRESS>: 8080. Add the initial administrator password and click on Continue.



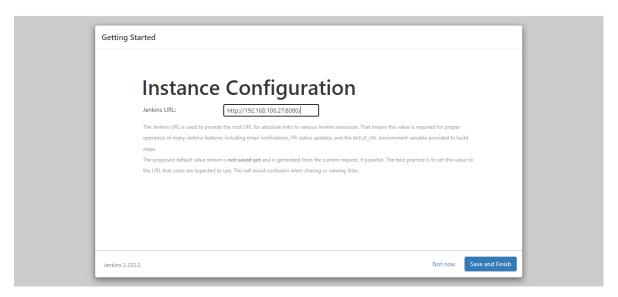
Choose "Install suggested plugins" and wait until the installation is finished.



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



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



Jenkins has been installed and is ready to use.

