## Install Gitlab-runner and jenkins-agent

```
#! /bin/bash
########## Checking if the user is root
if
  [[ $(id -u) -ne 0 ]]
  then
  echo "Sorry you need to be root"
  exit 1
fi
TYPE=$(cat /etc/*rel* | grep -o ID=Ubuntu | awk -F= '{print $2}')
############## Checking OS type
if
  [[ $TYPE != Ubuntu ]]
  then
  echo "Sorry this script can only work on Ubuntu"
  exit 1
fi
echo "1. Jenkins"
echo "2. Gitlab-runner"
read -p "Please enter the number that correspond to your need: " NUM
if
[[ ${NUM} -eq 1]]
then
clear
echo
echo "Installing Jenkins..... please wait"
apt update -y
apt install tree curl vim wget ansible default-jre default-jdk ansible-
lint maven git unzip openssl sshpass gnupg -y
sudo apt-get update -y
export DEBIAN_FRONTEND=noninteractive
ln -fs /usr/share/zoneinfo/America/New_York /etc/localtime
apt-get install -y tzdata
dpkg-reconfigure --frontend noninteractive tzdata
sudo git clone https://github.com/ahmetb/kubectx /usr/local/kubectx
sudo ln -s /usr/local/kubectx/kubectx /usr/local/bin/kubectx
```

```
sudo ln -s /usr/local/kubectx/kubens /usr/local/bin/kubens
curl -LO "https://dl.k8s.io/release/$(curl -L -s https://dl.k8s.io
/release/stable.txt)/bin/linux/amd64/kubectl"
curl -LO "https://dl.k8s.io/$(curl -L -s https://dl.k8s.io/release
/stable.txt)/bin/linux/amd64/kubectl.sha256"
echo "$(cat kubectl.sha256) kubectl" | sha256sum --check
sudo install -o root -g root -m 0755 kubectl /usr/local/bin/kubectl
chmod +x kubectl
mkdir -p ~/.local/bin
mv ./kubectl ~/.local/bin/kubectl
useradd jenkins -m -d /home/jenkins -s /bin/bash
useradd ansible -m -d /home/ansible -s /bin/bash
echo -e 'jenkins ALL=(ALL) NOPASSWD: ALL' > /etc/sudoers.d/jenkins
echo -e 'ansible ALL=(ALL) NOPASSWD: ALL' > /etc/sudoers.d/ansible
sudo curl -L "https://github.com/docker/compose/releases/download/1.29.2
/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-
compose
sudo chmod +x /usr/local/bin/docker-compose
mkdir -p /usr/local/lib/docker/cli-plugins
curl -SL https://github.com/docker/compose/releases/download/v2.4.1
/docker-compose-linux-x86_64 -o /usr/local/lib/docker/cli-plugins
/docker-compose
sudo chmod +x /usr/local/lib/docker/cli-plugins/docker-compose
sudo apt-get remove docker docker-engine docker.io containerd runc -y
sudo apt-get update
sudo apt-get install \
   ca-certificates \
   curl \
   qnupq \
   lsb-release
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --
dearmor -o /usr/share/keyrings/docker-archive-keyring.gpg
echo \
  "deb [arch=$(dpkg --print-architecture) signed-by=/usr/share/keyrings
/docker-archive-keyring.gpg] https://download.docker.com/linux/ubuntu \
  $(lsb_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.
list > /dev/null
```

```
sudo apt-get update
sudo apt-get install docker-ce docker-ce-cli containerd.io docker-
compose-plugin -y
 sudo apt update
 sudo apt install default-jre -y
 sudo apt install default-jdk -y
   apt install -y apt-transport-https \
      ca-certificates \
      dnsutils \
      htop \
      iftop \
      iotop \
      iperf \
      iputils-ping \
      ja \
      less \
      locales \
      ltrace \
      man-db \
      manpages \
      mosh \
      mtr \
      netcat \
      nethogs \
      nfs-common \
      pass \
      psmisc \
      python3-apt \
      python3-docker \
      rkhunter \
      rsync \
      screen \
      ssl-cert \
      strace \
      tcpdump \
      time \
      traceroute \
      unhide \
      unzip \
      uuid-runtime
sudo chmod 666 /var/run/docker.sock
usermod jenkins -aG docker
usermod ansible -aG docker
usermod ubuntu -aG docker
chmod 666 /var/run/docker.sock
sudo apt-get update && sudo apt-get install -y gnupg software-
```

```
properties-common curl
curl -fsSL https://apt.releases.hashicorp.com/gpg | sudo apt-key add -
sudo apt-add-repository "deb [arch=amd64] https://apt.releases.
hashicorp.com $(lsb_release -cs) main"
sudo apt-get update && sudo apt-get install terraform
usermod jenkins -aG docker
usermod ansible -aG docker
elif
  [[ ${NUM} -eq 2]]
then
clear
echo
echo "Installing Gitlab-runner ...... please wait"
apt update -y
apt install tree curl vim wget ansible default-jre default-jdk ansible-
lint maven git unzip openssl sshpass gnupg -y
sudo apt-get update -y
export DEBIAN_FRONTEND=noninteractive
ln -fs /usr/share/zoneinfo/America/New_York /etc/localtime
apt-get install -y tzdata
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sudo git clone https://github.com/ahmetb/kubectx /usr/local/kubectx
sudo ln -s /usr/local/kubectx/kubectx /usr/local/bin/kubectx
sudo ln -s /usr/local/kubectx/kubens /usr/local/bin/kubens
curl -LO "https://dl.k8s.io/release/$(curl -L -s https://dl.k8s.io
/release/stable.txt)/bin/linux/amd64/kubectl"
curl -LO "https://dl.k8s.io/$(curl -L -s https://dl.k8s.io/release
/stable.txt)/bin/linux/amd64/kubectl.sha256"
echo "$(cat kubectl.sha256) kubectl" | sha256sum --check
sudo install -o root -g root -m 0755 kubectl /usr/local/bin/kubectl
chmod +x kubectl
mkdir -p ~/.local/bin
mv ./kubectl ~/.local/bin/kubectl
useradd ansible -m -d /home/ansible -s /bin/bash
echo -e 'ansible ALL=(ALL) NOPASSWD: ALL' > /etc/sudoers.d/ansible
sudo curl -L "https://github.com/docker/compose/releases/download/1.29.2
```

```
/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-
compose
sudo chmod +x /usr/local/bin/docker-compose
mkdir -p /usr/local/lib/docker/cli-plugins
curl -SL https://github.com/docker/compose/releases/download/v2.4.1
/docker-compose-linux-x86_64 -o /usr/local/lib/docker/cli-plugins
/docker-compose
sudo chmod +x /usr/local/lib/docker/cli-plugins/docker-compose
sudo apt-get remove docker docker-engine docker.io containerd runc -y
sudo apt-get update
sudo apt-get install \
   ca-certificates \
   curl \
   gnupg \
   lsb-release
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --
dearmor -o /usr/share/keyrings/docker-archive-keyring.gpg
echo \
  "deb [arch=$(dpkg --print-architecture) signed-by=/usr/share/keyrings
/docker-archive-keyring.gpg] https://download.docker.com/linux/ubuntu \
  $(lsb_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.
list > /dev/null
sudo apt-get update
sudo apt-get install docker-ce docker-ce-cli containerd.io docker-
compose-plugin -y
sudo apt update
sudo apt install default-jre -y
sudo apt install default-jdk -y
   apt install -y apt-transport-https \
      ca-certificates \
      dnsutils \
     htop \
      iftop \
      iotop \
      iperf \
      iputils-ping \
      jq \
      less \
      locales \
      ltrace \
      man-db \
      manpages \
      mosh \
      mtr \
```

```
netcat \
      nethogs \
      nfs-common \
      pass \
      psmisc \
      python3-apt \
      python3-docker \
      rkhunter \
      rsync \
      screen \
      ssl-cert \
      strace \
      tcpdump \
      time \
      traceroute \
      unhide \
      unzip \
      uuid-runtime
sudo chmod 666 /var/run/docker.sock
usermod ansible -aG docker
usermod ubuntu -aG docker
chmod 666 /var/run/docker.sock
sudo apt-get update && sudo apt-get install -y gnupg software-
properties-common curl
curl -fsSL https://apt.releases.hashicorp.com/gpg | sudo apt-key add -
sudo apt-add-repository "deb [arch=amd64] https://apt.releases.
hashicorp.com $(lsb_release -cs) main"
sudo apt-get update && sudo apt-get install terraform
usermod ansible -aG docker
curl -L "https://packages.gitlab.com/install/repositories/runner/gitlab-
runner/script.deb.sh" | sudo bash
sudo apt-get install gitlab-runner
apt-cache madison gitlab-runner
sudo apt-get install gitlab-runner
sudo gitlab-runner -version
sudo gitlab-runner status
sudo gitlab-runner start
sudo gitlab-runner stop
sudo gitlab-runner restart
echo -e 'gitlab-runner ALL=(ALL) NOPASSWD: ALL' > /etc/sudoers.d
/gitlab-runner
usermod gitlab-runner -aG docker
else
echo "please select either 1 or 2"
fi
```

Follow the following documentation from Step#4