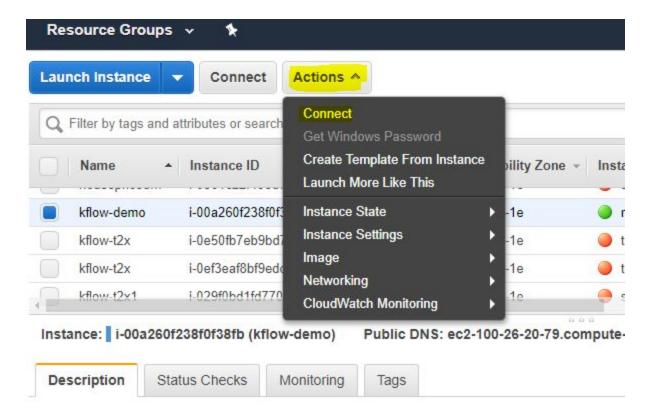
1. You need to select the following Ubuntu instance.



- 2. Select the **t2.xlarge** general purpose instance type.
- 3. In the storage section, you can add 60GB, which will be fine.
- 4. In the security group, you can select the default security group.
- 5. Once, you have created an Ubuntu instance, you need to go to the 'connect' button as shown below:



6. You will be directed to the following page:

- A standalone SSH client (i)
- O Session Manager (i)
- O EC2 Instance Connect (browser-based SSH connection) (i)

To access your instance:

- 1. Open an SSH client. (find out how to connect using PuTTY)
- Locate your private key file (kubeflow.pem). The wizard automatically detects the key you used to launch the instance.
- 3. Your key must not be publicly viewable for SSH to work. Use this command if needed:

```
chmod 400 kubeflow.pem
```

4. Connect to your instance using its Public DNS:

```
ec2-100-26-20-79.compute-1.amazonaws.com
```

Example:

```
ssh -i "kubeflow.pem" ubuntu@ec2-100-26-20-79.compute-1.amazonaws.com
```

Please note that in most cases the username above will be correct, however please ensure that you read your AMI usage instructions to ensure that the AMI owner has not changed the default AMI username.

If you need any assistance connecting to your instance, please see our connection documentation.

You need to copy the highlighted command and paste it into your cmd. Please note that you have to be in the same folder in which you have placed your **pem** file. Once you run the above command, you will be able to login into your ubuntu instance.

7. Let's install Docker, but you have to be in the root user before installing Docker.

sudo -i

8. Install Docker CE:

```
apt-get update
apt-get install -y apt-transport-https ca-certificates curl software-properties-common

curl -fsSL https://download.docker.com/linux/ubuntu/gpg | apt-key add -
add-apt-repository \
    "deb [arch=amd64] https://download.docker.com/linux/ubuntu \
    $(lsb_release -cs) \
    stable"

apt-get update
apt-get install docker-ce docker-ce-cli containerd.io
```

9. Verify the Docker installation:

docker run hello-world

10. Install kubectl

curl
-LO
https://storage.googleapis.com/kubernetes-release/release/v1.15.0/bin/linux/amd64/kubec
tl
chmod +x ./kubectl
mv ./kubectl /usr/local/bin/kubectl

11. Install Minikube:

curl -Lo minikube https://storage.googleapis.com/minikube/releases/v1.2.0/minikube-linux-amd64

12. Move Minikube to /usr/local/bin

chmod +x minikube cp minikube /usr/local/bin/ rm minikube

13. Start the Minikube:

minikube start --vm-driver=none --cpus 4 --memory 20000 --disk-size=60g --extra-config=apiserver.authorization-mode=RBAC --extra-config=kubelet.resolv-conf=/run/systemd/resolve/resolv.conf --extra-config kubeadm.ignore-preflight-errors=SystemVerification

- 14. Installation of Kubeflow:
- First, you need to create a folder for Kubeflow installation using the following command.

mkdir -p /root/kubeflow/v1.0 cd /root/kubeflow/v1.0

Download kfctl:

waet

https://github.com/kubeflow/kfctl/releases/download/v1.1.0/kfctl_v1.1.0-0-g9a3621e_linux.tar.gz

- In the next step, you unpack the tar file that you have downloaded from the above commands.

tar xvf kfctl_v1.1.0-0-g9a3621e_linux.tar.gz

- Installation of Kubeflow after exporting the required directory and name.

export PATH=\$PATH:/root/kubeflow/v1.0 export KF_NAME=my-kubeflow export BASE_DIR=/root/kubeflow/v1.0 export KF_DIR=\${BASE_DIR}/\${KF_NAME}

- In the next part you need to set the URI of the configuration file to use when deploying Kubeflow and create the Kubeflow configurations.

export

CONFIG_URI="https://raw.githubusercontent.com/kubeflow/manifests/v1.0-branch/kfdef/kfctl_k8s_istio.v1.0.2.yaml"

Create a directory where you want to store deployment.

mkdir -p \${KF_DIR}
cd \${KF_DIR}
kfctl apply -V -f \${CONFIG_URI}

Kubeflow running status

kubectl get pod -n kubeflow

15. Launch of Kubeflow central dashboard:

export INGRESS_HOST=\$(minikube ip)
export INGRESS_PORT=\$(kubectl -n istio-system get service istio-ingressgateway -o
jsonpath='{.spec.ports[?(@.name=="http2")].nodePort}')

You can get the Ingress Host and Port using the following command:

echo \$INGRESS_HOST echo \$INGRESS_PORT

Then you can access the Kubeflow dashboard in a web browser:

http://<INGRESS_HOST>:<INGRESS_PORT>