1. Deploy 3 t2.medium nodes and give root volume as 15GB

#!/bin/bash

curl https://get.docker.com/ | bash

usermod -a -G root ubuntu

usermod -a -G docker ubuntu

sudo systemctl daemon-reload

sudo systemctl restart docker

1. Use certbot to create LetsEncrypt SSL Certs.

<https://docs.google.com/document/d/1pfeW9FJ8B650wD9tE2U2YoxKh8a4WwYr/edit>

1. kubectl create ns cattle-system
2. Copy fullchain.pem from CertBot to tls.crt file and create a secret.

kubectl -n cattle-system create secret tls tls-rancher-ingress --cert=tls.crt --key=tls.key

1. kubectl -n cattle-system create secret generic tls-ca --from-file=cacerts.pem - This step is only needed if we are using Private CA.
2. Create a multi value DNS record with all the master nodes in the DNS before deploying the rancher UI using helm chart.
3. helm repo add rancher-latest https://releases.rancher.com/server-charts/latest
4. helm repo ls
5. helm repo update
6. helm install rancher rancher-latest/rancher \

--namespace cattle-system \

--set hostname=rancher.<domainname> \

--set bootstrapPassword=admin@123456 \

--set ingress.tls.source=tls-rancher-ingress

1. Kubectl apply -f rancher-ingress.yml

kubectl -n cattle-system exec $(kubectl -n cattle-system get pods -l app=rancher | grep '1/1' | head -1 | awk '{ print $1 }') -- reset-password

1. Create a multi-answer record in dns and update the 3 servers Public IP (or)

Create SSL Certificate in AWS ACM and deploy ALB with HTTPS using the cert you have created in the AWS ACM and Add to the RANCHER Target Group which is created with HTTPS/443. But this will cause the issue when you merge the config files and you will get error as unknown certificate authority. Its better to use the mkcert with the load balancer as well.

1. Access <https://rancher.domainame> to access the homepage.
2. Build 3 new t2.medium nodes with docker installed.
3. We are going to create a new RKE cluster using Rancher GUI and 3 new nodes.

K3S:

curl -sfL https://get.k3s.io | sh

cat /var/lib/rancher/k3s/server/node-token

TOKEN='K1047f98fffc186bbffb28547d825c3a7950f11506709f3d907f163346bae08427c::server:eec62b90aa88b055d607749ee2eb5454'

curl -sfL https://get.k3s.io | K3S\_URL=https://10.40.2.31:6443 K3S\_TOKEN=$TOKEN sh -

$Env:KUBECONFIG=("C:\Rancher\config;C:\Rancher\prod;C:\Rancher\k3s"); kubectl config view --merge --flatten | Out-File "C:\Rancher\configmerged"