1. Deploy 3 t2.medium nodes

#!/bin/bash

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

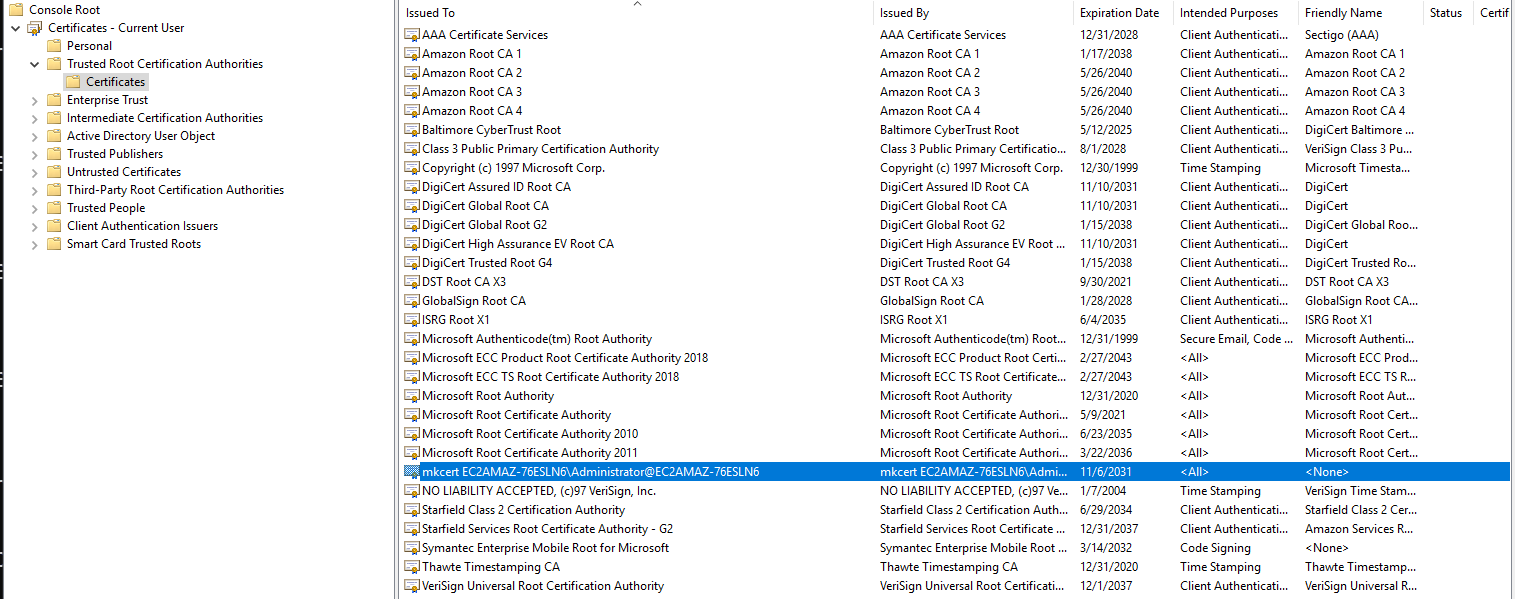
usermod -a -G root ubuntu

usermod -a -G docker ubuntu

sudo systemctl daemon-reload

sudo systemctl restart docker

1. Create C:\Tools in your laptop and download rke,kubectl,helm,mkcert to it. Add env path.
2. Update rke-cluster.yml file with the IP Addresses of the nodes and the pem file.
3. Perform RKE up to up the cluster.
4. mkcert -install and it will install a private certificate authority.



You can export the certificate as base64 and can import in to the machine where you are working so that you can have the https. The cert authority should be imported to Local Computer-> Trusted Root Cert Auth -> Certificates.

1. mkcert "\*.example.it"
2. Create file cacerts.pem Copy contents of \_wildcard.example.it.pem to cacerts.pem
3. Create tls.crt and tls.key and copy contents from \_wildcard.example.it.pem & \_wildcard.example.it-key.pem
4. kubectl create ns cattle-system
5. kubectl -n cattle-system create secret tls tls-rancher-ingress --cert=tls.crt --key=tls.key
6. kubectl -n cattle-system create secret generic tls-ca --from-file=cacerts.pem
7. helm repo add rancher-latest https://releases.rancher.com/server-charts/latest
8. helm repo ls
9. helm repo update
10. helm install rancher rancher-latest/rancher \

--namespace cattle-system \

--set hostname=rancher.<domainname> \

--set bootstrapPassword=admin@123456 \

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

--set privateCA=true

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"