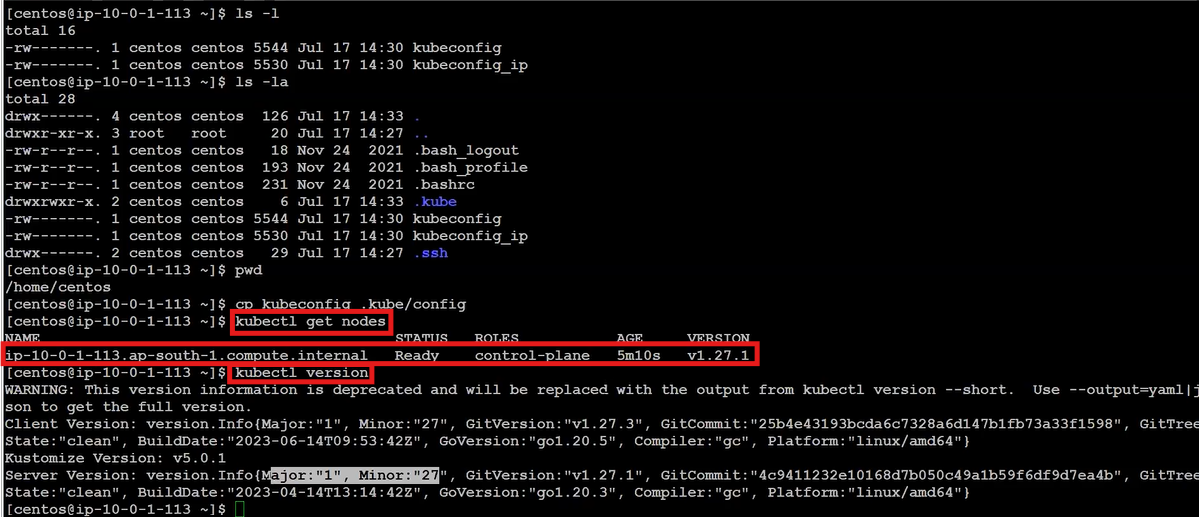
**MINIKUBE KUBERNETES CLUSTER: -**

* Create a hosted zone in AWS
* Single node cluster 🡪 Master and the node components are in single server
* For minikube kubernetes we need to create a **VPC and Hosted DNS zone configured in Route53**

[**scholzj/terraform-aws-minikube: Terraform module for single node Kubernetes instance bootstrapped using kubeadm (github.com)**](https://github.com/scholzj/terraform-aws-minikube?tab=readme-ov-file) **🡪 For reference**

* Minikube uses centos7 and the username is centos
* Authentication config file = kubeconfig
* Default kubeconfig is in ~/.kube/config folder **(cp kubeconfig .kube/config)**

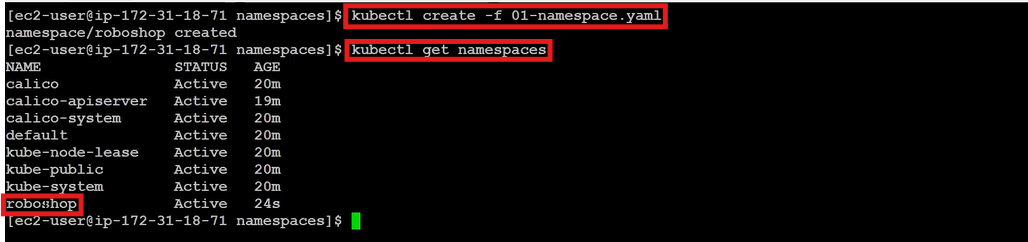
****

* Kubectl is a command line for Kubernetes cluster
* For giving the executive permissions and **connect using docker** run the following commands

1. Download and install **kubectl in workstation** using command from internet
2. Chmod +x ./kubectl
3. Sudo mv kubectl /usr/local/bin
4. Kubectl
5. Cat kubeconfig 🡪 **Copy the configuration file from minikube cluster (k8 ec2)**
6. mkdir .kube
7. cd .kube/
8. vim config 🡪 **paste the copied configuration file in workstation (docker ec2)**
9. kubectl get nodes 🡪 **we need to get the nodes present inside the cluster**

**Kubernetes Resources: -**

1. Namespace **(kubectl get namespaces)**

****

* **Kubectl create -f <file-name.yaml> 🡪** To create the resources
* **Kubectl apply -f <file-name.yaml> 🡪** if it’s not created, it will create. If created before no error
* **Kubectl delete -f <file-name.yaml> 🡪** To delete the resources

1. **Pod (kubectl get pods): -** It is the smallest deployable unit in Kubernetes.

* Pod can run multiple containers
* Containers inside the pod share the same network and storage

**Kubectl exec -it multipod -c almalinux –bash🡪go into the container**

