

Create user in k8s

```
root@Nilam:user# openssl genpkey -out nilam.key -algorithm Ed25519
root@Nilam:user# cat nilam.key
-----BEGIN PRIVATE KEY-----
MC4CAQAwBQYDK2VwBCEIPX9tieFtSyo2f0Qv5SmSzqL6GLB2gp9LSb9mwqAy2xz
-----END PRIVATE KEY-----
root@Nilam:user#
```

```
root@Nilam:user# openssl req -new -key nilam.key -out nilam.csr -subj "/CN=nilam,/O=edit"
root@Nilam:user#
root@Nilam:user#
root@Nilam:user# cat nilam.csr | base64 | tr -d "\n"
LS0tLS1CRUdJTiBDRVJUSUZJQ0FURSB5RVFVRVNULS0tLS0KTU1HZk1GTUNBUUF3SURFUE1BMEdBMVVFQXd3R2JtbHNZVzBzTVewd0N3WURWUVFLREFSbFpHbDBNQ293QlFZR
AplMLZ3QXlFQXBKQW83RmoxWGxwN0czMnJjSldjQkY0cmtdBzdPbzJyaDJnek9PVFFySVNnQURBRk1JnTXJawEFEC1FRQVNWQ1lHaUlsSER0a0FRKzNVcmgrQm9hZTFmQnZBcW
JPZGRuZlplZVedTHUxyMGxSRXJqd24vNHlwYXFWNE0KNUh0SFBpeThEWEJESS9aMkJar21RM2tLCi0tLS0tRU5EIENFUlRJRklDQVRFIJFUVVVFU1QtLS0tLQo=root@Nilam:
user# ll
```

```
user# ll
total 0
drwxrwxrwx 1 nilam nilam 512 Feb 29 12:25 ./
drwxrwxrwx 1 nilam nilam 512 Feb 29 11:24 ../
-rwxrwxrwx 1 nilam nilam 290 Feb 29 12:25 nilam.csr*
-rwxrwxrwx 1 nilam nilam 119 Feb 29 12:25 nilam.key*
```

```
root@Nilam:user# cat nilam.csr
-----BEGIN CERTIFICATE REQUEST-----
MIGfMFMCAQAwIDEPMA0GA1UEAwGbm1sYW0sMQ0wCwYDVQQKDARlZGl0MCowBQYD
K2VwAyEApJAo7Fj1XLV7G32rcJWcBF4rkAw7Oo2rh2gz00TQrISgADAFBgMrZXAD
QQASpBYGiILHDTkAQ+3Urh+Boae1fBvAqb0ddnfZYTGS1Lr0lRerjwn/4r0aqV4M
5HtHPiy8DXBDI/Z2BZGmQ3kK
-----END CERTIFICATE REQUEST-----
```

```
root@Nilam:user# cat certificate.yaml
apiVersion: certificates.k8s.io/v1
kind: CertificateSigningRequest
metadata:
  name: nilam
spec:
  request: LS0tLS1CRUdJTiBDRVJUSUZJQ0FURSB5RVFVRVNULS0tLS0KTU1HZk1GTUNBUUF3SURFUE1BMEdBMVVFQXd3R2JtbHNZVzBzTVewd0N3WURWUVFLREFSbFpHbDBNQ293QlFZR
    APlMLZ3QXlFQXBKQW83RmoxWGxwN0czMnJjSldjQkY0cmtdBzdPbzJyaDJnek9PVFFySVNnQURBRk1JnTXJawEFEC1FRQVNWQ1lHaUlsSER0a0FRKzNVcmgrQm9hZTFmQnZBcW
    JPZGRuZlplZVedTHUxyMGxSRXJqd24vNHlwYXFWNE0KNUh0SFBpeThEWEJESS9aMkJar21RM2tLCi0tLS0tRU5EIENFUlRJRklDQVRFIJFUVVVFU1QtLS0tLQo=
  signerName: kubernetes.io/kube-apiserver-client
  expirationSeconds: 86400 # one day
  usages:
    - client auth
root@Nilam:user#
```

```
root@Nilam:user#
root@Nilam:user# kubectl apply -f certificate.yaml
certificatesigningrequest.certificates.k8s.io/nilam configured
root@Nilam:user#
root@Nilam:user#
root@Nilam:user# kubectl certificate approve nilam
certificatesigningrequest.certificates.k8s.io/nilam approved
root@Nilam:user#
```

```
root@Nilam:user#
root@Nilam:user# kubectl describe csr/nilam
Name: nilam
Labels: <none>
Annotations: kubectl.kubernetes.io/last-applied-configuration={"apiVersion":"certificates.k8s.io/v1","kind":"CertificateSigningRequest","metadata":{"annotations":{"name":"nilam"},"spec":{"expirationSeconds":86400,"request":"LS0tLS1CRUdJTiBDRVJUSUZJQ0FURSB5RVFVRVNULS0tLS0KTU1HZk1GTUNBUUF3SURFUE1BMEdBMVVFQXd3R2JtbHNZVzBzTVewd0N3WURWUVFLREFSbFpHbDBNQ293QlFZR
    APlMLZ3QXlFQXBKQW83RmoxWGxwN0czMnJjSldjQkY0cmtdBzdPbzJyaDJnek9PVFFySVNnQURBRk1JnTXJawEFEC1FRQVNWQ1lHaUlsSER0a0FRKzNVcmgrQm9hZTFmQnZBcWJPZGRuZlplZVedTHUxyMGxSRXJqd24vNHlwYXFWNE0KNUh0SFBpeThEWEJESS9aMkJar21RM2tLCi0tLS0tRU5EIENFUlRJRklDQVRFIJFUVVVFU1QtLS0tLQo=","signerName":"kubernetes.io/kube-apiserver-client"},"usages":["client auth"]}}
CreationTimestamp: Thu, 29 Feb 2024 12:01:47 +0530
Requesting User: kubernetes-admin
Signer: kubernetes.io/kube-apiserver-client
Requested Duration: 24h
Status: Approved,Issued
Subject:
  Common Name: nilam,
  Serial Number:
  Organization: edit
Events: <none>
root@Nilam:user#
```

```
root@Nilam:user# kubectl get csr nilam -o 'jsonpath={.status.certificate}' | base64 -d > nilam.crt
root@Nilam:user#
root@Nilam:user#
root@Nilam:user#
```

```
root@Nilam:user# cp /mnt/c/Users/manis/Music/k8s_user/k8sCluster_kubeadm_terraform/meet-flounder.conf nilam-kube-config
root@Nilam:user#
root@Nilam:user# kubectl config get-clusters
NAME
kubernetes
root@Nilam:user#
```

```
root@Nilam:user# kubectl --kubeconfig nilam-kube-config config set-credentials nilam --client-key nilam.key --client-certificate nilam.crt --embed-certs=true
User "nilam" set.
root@Nilam:user#
```

```
root@Nilam:user# ll
total 16
drwxrwxrwx 1 nilam nilam 512 Feb 29 12:32 ./
drwxrwxrwx 1 nilam nilam 512 Feb 29 11:24 ../
-rwxrwxrwx 1 nilam nilam 611 Feb 29 12:27 certificate.yaml*
-rwxrwxrwx 1 nilam nilam 6265 Feb 29 12:32 nilam-kube-config*
-rwxrwxrwx 1 nilam nilam 769 Feb 29 12:29 nilam.crt*
-rwxrwxrwx 1 nilam nilam 290 Feb 29 12:25 nilam.csr*
-rwxrwxrwx 1 nilam nilam 119 Feb 29 12:25 nilam.key*
```

```
root@Nilam:user#
root@Nilam:user# kubectl --kubeconfig=nilam-kube-config config set-context nilam --cluster=kubernetes --user=nilam
Context "nilam" created.
root@Nilam:user#
```

```
root@Nilam:user#
root@Nilam:user# kubectl create role pod-manager-01 --verb=create,list,get --resource=pods --namespace=default
role.rbac.authorization.k8s.io/pod-manager-01 created
root@Nilam:user#
```

```
root@Nilam:user#
root@Nilam:user# kubectl create clusterrolebinding nilam-pod-manager-01 --clusterrole=pod-manager-01 --user=nilam
clusterrolebinding.rbac.authorization.k8s.io/nilam-pod-manager-01 created
```

```
root@Nilam:user# realpath nilam-kube-config
/mnt/c/Users/manis/Music/k8s_user/k8sCluster_kubeadm_terraform/user/nilam-kube-config
root@Nilam:user#
root@Nilam:user# export KUBECONFIG=/mnt/c/Users/manis/Music/k8s_user/k8sCluster_kubeadm_terraform/user/nilam-kube-config
root@Nilam:user#
root@Nilam:user# kgn'
> ^C
root@Nilam:user# kgn
NAME      STATUS    ROLES    AGE   VERSION
master    Ready     control-plane  91m   v1.28.2
worker-0   Ready     <none>      91m   v1.28.2
worker-1   Ready     <none>      91m   v1.28.2
root@Nilam:user#
```

Other user config

```
root@Nilam:user# realpath saniya-kube-config
/mnt/c/Users/manis/Music/k8s_user/k8sCluster_kubeadm_terraform/user/saniya-kube-config
root@Nilam:user# export KUBECONFIG=/mnt/c/Users/manis/Music/k8s_user/k8sCluster_kubeadm_terraform/user/saniya-kube-config
root@Nilam:user# kgn
NAME      STATUS    ROLES    AGE   VERSION
master    Ready     control-plane  64m   v1.28.2
worker-0   Ready     <none>      64m   v1.28.2
worker-1   Ready     <none>      64m   v1.28.2
root@Nilam:user#
```

