

Template hosted using Manifest file with namespace.

Step 1:- Create an EKS Cluster

Step 2:- Create nodegroup for EKS Cluster

Step 3:- Use Cloudshell

Step 4:- AWS Configure

Access key =

Secret key =

Step 5:- Connect to Cluster

`aws eks --region <region_name> update-kubeconfig --name <cluster_name>`

Step 6:- Check nodes & cluster-info

`kubectl get nodes`

`kubectl cluster-info`

Step 7:- Create Namespace

`kubectl create ns <name>`

```
[cloudshell-user@ip-10-134-93-160 ~]$ kubectl create ns prat
namespace/prat created
[cloudshell-user@ip-10-134-93-160 ~]$ kubectl get ns
NAME                STATUS   AGE
default              Active   40m
kube-node-lease      Active   40m
kube-public          Active   40m
kube-system          Active   40m
prat                 Active   24s
[cloudshell-user@ip-10-134-93-160 ~]$ ls
```

Step 8:- Create manifest file for pod and service

temp.yml

```
apiVersion: v1
kind: Pod
metadata:
  name: temp
  namespace: prat
  labels:
    app: temp
spec:
  containers:
  - name: tempmed
    image: pratikborje/nginx:latest
    ports:
    - containerPort: 80
      protocol: TCP
---
apiVersion: v1
kind: Service
metadata:
  name: mytemperv
  namespace: prat
spec:
  selector:
    app: temp
  type: NodePort
  ports:
  - port: 80
```

```
targetPort: 80
protocol: TCP
nodePort: 30080
name: tempmed
```

Step 9:- Create Pod and Service using manifest file

```
kubectl apply temp.yml
kubectl get -n <namespace_name> pods
kubectl get -n <namespace_name> svc
```

```
[cloudshell-user@ip-10-134-93-160 template]$ kubectl apply -f temp.yml
pod/temp created
service/mytemperv created
[cloudshell-user@ip-10-134-93-160 template]$ kubectl get -n prat pods
NAME      READY   STATUS    RESTARTS   AGE
temp      1/1     Running   0           11s
[cloudshell-user@ip-10-134-93-160 template]$ kubectl get -n prat svc
NAME      TYPE        CLUSTER-IP   EXTERNAL-IP   PORT(S)          AGE
mytemperv NodePort    10.100.5.48   <none>         80:30080/TCP     20s
[cloudshell-user@ip-10-134-93-160 template]$ kubectl get -o wide nodes
NAME                                STATUS    ROLES    AGE   VERSION
ip-172-31-27-31.ap-southeast-1.compute.internal Ready    <none>   89m   v1.29.8-eks-5e0fde
INTERNAL-IP   EXTERNAL-IP   OS-IMAGE         KERNEL-VERSION   CONTAINER-RUNTIME
172.31.27.31  52.221.181.218 Amazon Linux 2    5.10.210-201.852.amzn2.x86_64 containerd://1.7.11
```

Step 10:- Copy ExternalIP with port_number and Paste in browser

