

Module-9: Kubernetes Assignment - 2

You have been asked to:

- Use the previous deployment
- Create a service of type NodePort for nginx deployment
- Check the nodeport service on a browser to verify

Solution:

1) Create the NodePort Service YAML File:

a) Create a file named nginx-service.yml with the following content:

```
apiVersion: v1
kind: Service
metadata:
  name: nginx-service
  labels:
    app: nginx
spec:
  type: NodePort
  selector:
    app: nginx
  ports:
    - port: 80
      targetPort: 80
      nodePort: 30000 # You can choose a different port within the range 30000-32767
-- INSERT --
```

i-02bdb761a108eaf72 (k8-master)

PublicIPs: 43.205.203.129 PrivateIPs: 172.31.37.166

2) Use the kubectl command to apply the service file to your Kubernetes cluster:

kubectl apply -f nginx-service.yml

```
ubuntu@ip-172-31-37-166:~$ sudo vi nginx-service.yml
ubuntu@ip-172-31-37-166:~$ kubectl apply -f nginx-service.yml
service/nginx-service created
ubuntu@ip-172-31-37-166:~$
```

i-02bdb761a108eaf72 (k8-master)

PublicIPs: 43.205.203.129 PrivateIPs: 172.31.37.166

3) Check the nodeport service on a browser to verify:

kubectl get services

```
ubuntu@ip-172-31-37-166:~$ kubectl get services
NAME                TYPE          CLUSTER-IP    EXTERNAL-IP    PORT(S)          AGE
kubernetes          ClusterIP     10.96.0.1     <none>         443/TCP          40m
nginx-service       NodePort      10.111.109.185 <none>         80:30000/TCP     49s
ubuntu@ip-172-31-37-166:~$
```

i-02bdb761a108eaf72 (k8-master)

PublicIPs: 43.205.203.129 PrivateIPs: 172.31.37.166

4) Access the Service:

In your web browser, navigate to the public IP address of any of your Kubernetes nodes and the NodePort you specified:

http://<node-ip>:30000

← → 🔒 Not secure 65.0.80.244:30000

Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.