MiniKube

Перевіримо статус Minikube

```
dmytro@ubuntuserver:~$ minikube status
minikube
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
kubeconfig: Configured
```

Створимо pod із Nginx

```
dmytro@ubuntuserver:~$ kubectl run nginx-pod --image=nginx --port=80
pod/nginx-pod created
dmytro@ubuntuserver:~$
```

Перевіримо чи pod створено

```
dmytro@ubuntuserver:~$ kubectl get pods
NAME         READY    STATUS             RESTARTS    AGE
nginx-pod    0/1      ContainerCreating  0           28s
dmytro@ubuntuserver:~$
```

Створимо сервіс для доступу до Nginx

```
dmytro@ubuntuserver:~$ kubectl expose pod nginx-pod --type=NodePort --name=nginx-service
service/nginx-service exposed
dmytro@ubuntuserver:~$
```

Перетворимо створений сервіс

```
dmytro@ubuntuserver:~$ kubectl get services
NAME            TYPE        CLUSTER-IP      EXTERNAL-IP   PORT(S)         AGE
kubernetes      ClusterIP   10.96.0.1       <none>        443/TCP         11d
nginx-service   NodePort    10.103.113.7    <none>        80:31548/TCP    75s
dmytro@ubuntuserver:~$
```

Взнаємо IP адресу Minikube

```
dmytro@ubuntuserver:~$ minikube ip
192.168.49.2
dmytro@ubuntuserver:~$
```

Перевіримо доступність до Nginx

```
dmytro@ubuntuserver:~$ curl http://192.168.49.2:31548
<!DOCTYPE html>
<html>
<head>
<title>Welcome to nginx!</title>
<style>
html { color-scheme: light dark; }
body { width: 35em; margin: 0 auto;
font-family: Tahoma, Verdana, Arial, sans-serif; }
</style>
</head>
<body>
<h1>Welcome to nginx!</h1>
<p>If you see this page, the nginx web server is successfully installed and
working. Further configuration is required.</p>

<p>For online documentation and support please refer to
<a href="http://nginx.org/">nginx.org</a>.<br/>
Commercial support is available at
<a href="http://nginx.com/">nginx.com</a>.</p>

<p><em>Thank you for using nginx.</em></p>
</body>
</html>
```

Внесемо зміни до сервісу Minikube, щоб сервіс nginx-service був створений із IP адоеси віртуальної машини

```
dmytro@ubuntu22:~$ kubectl edit service nginx-service
service/nginx-service edited
```

Замінимо NodePort на LoadBalancer

```
apiVersion: v1
kind: Service
metadata:
  creationTimestamp: "2024-12-25T13:49:01Z"
  labels:
    run: nginx-pod
  name: nginx-service
  namespace: default
  resourceVersion: "1034"
  uid: 23092af7-e40c-486f-815f-604ad08e9a45
spec:
  allocateLoadBalancerNodePorts: true
  clusterIP: 10.110.153.187
  clusterIPs:
  - 10.110.153.187
  externalTrafficPolicy: Cluster
  internalTrafficPolicy: Cluster
  ipFamilies:
  - IPv4
  ipFamilyPolicy: SingleStack
  ports:
  - nodePort: 30683
    port: 80
    protocol: TCP
    targetPort: 80
  selector:
    run: nginx-pod
  sessionAffinity: None
  type: LoadBalancer
status:
  loadBalancer: {}
~
~
~
```

192.168.112.128

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.