

Loadbalancer in minikube

A LoadBalancer service in Kubernetes exposes an application to the internet using an external IP. It is commonly used in cloud environments (AWS, GCP, Azure) to distribute traffic across multiple pods.

```
C: > Users > Niree > ! service.yml
1  apiVersion: v1
2  kind: Service
3  metadata:
4    name: nginx-service
5  spec:
6    selector:
7      app: nginx
8    ports:
9      - protocol: TCP
10        port: 80      # Exposes the service on port 80
11        targetPort: 80 # Forwards traffic to container port 80
12    type: LoadBalancer # Exposes the service with an external IP
13
14
15
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS CODE REFERENCE LOG

minikube

```
PS C:\Users\Niree> kubectl apply -f service.yml
service/nginx-service configured
PS C:\Users\Niree> kubectl get svc
NAME          TYPE          CLUSTER-IP    EXTERNAL-IP    PORT(S)          AGE
example-service  LoadBalancer  10.100.164.58  <pending>      8765:31040/TCP   8h
kubernetes     ClusterIP     10.96.0.1     <none>         443/TCP          3d21h
nginx-service   LoadBalancer  10.108.58.137  <pending>      80:30080/TCP     40m
```

```
PS C:\Users\Niree> minikube tunnel
✅ Tunnel successfully started

🚧 NOTE: Please do not close this terminal as this process must stay alive for the tunnel to be accessible ...

🚧 Starting tunnel for service example-service.
! Access to ports below 1024 may fail on Windows with OpenSSH clients older than v8.1. For more information, see: https://minikube.sigs.k8s.io/docs/handbook/accessing/#access-to-ports-1024-on-windows-requires-root-permission
🚧 Starting tunnel for service nginx-service.
```

- Apply Service.yml file
- then get svc
- it shows loadbalancer in svc
- if need to expose in minikube means
- need to use (minikube tunnel) command
- This will create an external IP that can be accessed locally.

```
kubectl apply -f service.yml
```

```
kubectl get svc
```

```
minikube tunnel
```