

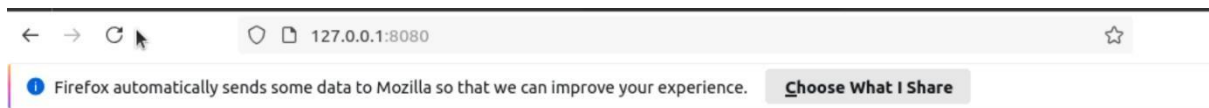
# KUBERNETES DOCUMENT

## Kubernetes: Deploy and Scale Nginx

- 1 Create a YAML file (nginx-pod.yaml) defining an Nginx pod.
- 2 Apply the configuration using `kubectl apply -f nginx-pod.yaml`.

```
master@master-vm:~/Desktop$ kubectl run nginx2-pod --image=nginx --restart=Never
pod/nginx2-pod created
master@master-vm:~/Desktop$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
nginx-pod     1/1     Running   0           2m15s
nginx1-pod    1/1     Running   0           103s
nginx2-pod    1/1     Running   0           8s
nginxpod      0/1     Completed 0           19h
nginxx-pod    1/1     Running   0           2m7s
master@master-vm:~/Desktop$ kubectl port-forward nginx-pod 8080:80
Forwarding from 127.0.0.1:8080 -> 80
Forwarding from [::1]:8080 -> 80
Handling connection for 8080
Handling connection for 8080

^Cmaster@master-vm:~/Desktop$ kubectl port-forward nginx-pod 8080:80
Forwarding from 127.0.0.1:8080 -> 80
Forwarding from [::1]:8080 -> 80
Handling connection for 8080
Handling connection for 8080
^Cmaster@master-vm:~/Desktop$ kubectl delete pod nginx-pod
pod "nginx-pod" deleted
master@master-vm:~/Desktop$
```



## 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](https://nginx.org).  
Commercial support is available at [nginx.com](https://nginx.com).

*Thank you for using nginx.*

Verify the pod status with kubectl get pods.

Expose the pod using kubectl port-forward pod/nginx-pod 8080:80.

```
master@master-vn:~/Desktop$ kubectl create deployment nginx-deployment --image=nginx
deployment.apps/nginx-deployment created
master@master-vn:~/Desktop$ kubectl get deployments
NAME                READY   UP-TO-DATE   AVAILABLE   AGE
nginx-deployment    1/1     1            1           14s
master@master-vn:~/Desktop$ kubectl scale deployment nginx-deployment --replicas=3
deployment.apps/nginx-deployment scaled
master@master-vn:~/Desktop$ kubectl get pods -o wide
NAME                READY   STATUS    RESTARTS   AGE   IP            NODE       NOMINATED NODE   READINESS GATE
nginx-deployment-6cfb98644c-m4g47 1/1     Running   0          13s   10.244.0.21   minikube   <none>           <none>
nginx-deployment-6cfb98644c-mqrz5 1/1     Running   0          14s   10.244.0.20   minikube   <none>           <none>
nginx-deployment-6cfb98644c-vqp6s 1/1     Running   0          40s   10.244.0.19   minikube   <none>           <none>
nginx-pod            1/1     Running   1 (20m ago) 18h   10.244.0.14   minikube   <none>           <none>
nginxpod             0/1     Completed 0          18h   10.244.0.11   minikube   <none>           <none>
master@master-vn:~/Desktop$ kubectl delete deployment nginx-deployment
deployment.apps "nginx-deployment" deleted
master@master-vn:~/Desktop$
```