Miguel Angel Ceballos Yate - 2259619 G50 Desarrollo de Software 3

1. Microservicio corriendo con uso de virtual threads en el thread pool de Tomcat activo.


```
─ ⏶ ⌂ ~ ···················································· at ⏱ 05:20:34 PM ─
─⟩ minikube start
😄   minikube v1.36.0 en Endeavouros
✨   Using the docker driver based on existing profile
👍   Starting "minikube" primary control-plane node in "minikube" cluster
🔄   Pulling base image v0.0.47 ...
🏃   Updating the running docker "minikube" container ...
🐳   Preparando Kubernetes v1.33.1 en Docker 28.1.1...
🔎   Verifying Kubernetes components...
    ■ Using image gcr.io/k8s-minikube/storage-provisioner:v5
🌟   Complementos habilitados: storage-provisioner, default-storageclass
💡   kubectl not found. If you need it, try: 'minikube kubectl -- get pods -A'
🏄   Done! kubectl is now configured to use "minikube" cluster and "default" na
mespace by default
```



```
─ ⏶ ⌂ ~ ···················································· at ⏱ 05:25:03 PM ─
─⟩ kubectl get nodes

NAME       STATUS   ROLES          AGE     VERSION
minikube   Ready    control-plane  5m25s   v1.33.1
```

2. Desplegar la aplicación

```
                                          at ⏱ 05:25:03 PM
  ⟩ kubectl get nodes

NAME       STATUS   ROLES          AGE      VERSION
minikube   Ready    control-plane  5m25s    v1.33.1

  ▲  🏠  ~  ············································· at ⏱ 05:25:04 PM
  ⟩ kubectl create deployment nginx-deploy --image=nginx
deployment.apps/nginx-deploy created

  ▲  🏠  ~  ············································· at ⏱ 05:28:02 PM
  ⟩ kubectl get pods
NAME                            READY   STATUS             RESTARTS   AGE
nginx-deploy-c9d9f6c6c-dh9gd    0/1     ContainerCreating  0          5s

  ▲  🏠  ~  ············································· at ⏱ 05:28:07 PM
  ⟩ kubectl get pods
NAME                            READY   STATUS             RESTARTS   AGE
nginx-deploy-c9d9f6c6c-dh9gd    0/1     ContainerCreating  0          24s

  ▲  🏠  ~  ············································· at ⏱ 05:28:26 PM
  ⟩ kubectl expose deployment nginx-deploy --type=NodePort --port=80
service/nginx-deploy exposed

  ▲  🏠  ~  ············································· at ⏱ 05:28:50 PM
  ⟩ kubectl get services
NAME           TYPE        CLUSTER-IP      EXTERNAL-IP   PORT(S)        AGE
kubernetes     ClusterIP   10.96.0.1       <none>        443/TCP        9m45s
nginx-deploy   NodePort    10.110.222.137  <none>        80:32272/TCP   43s
```
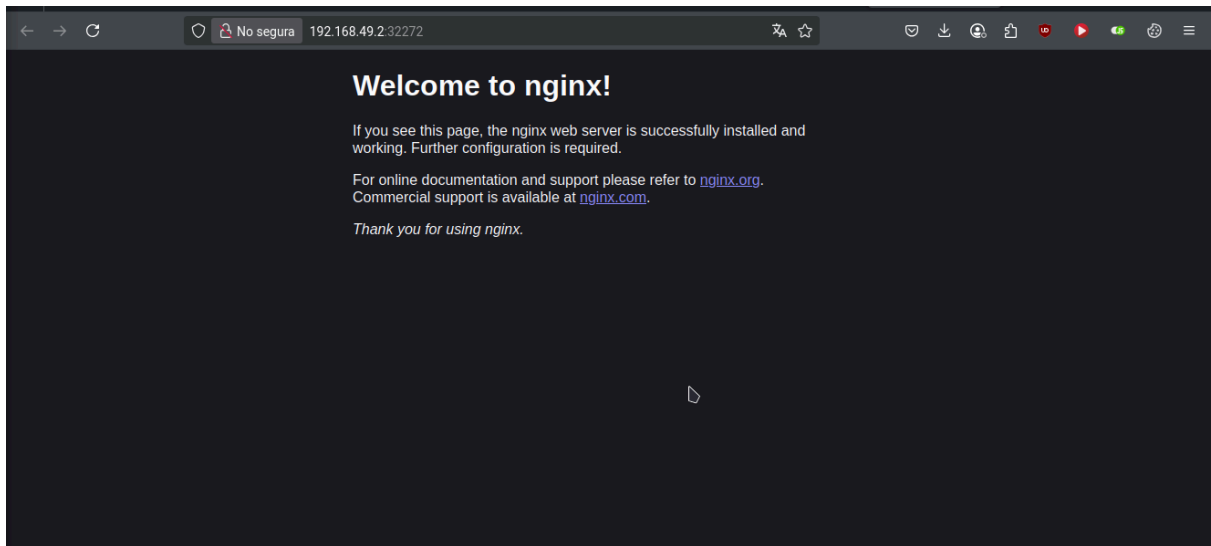
3. Accedo a nginx

```
  ▲  🏠  ~  ·················································································
  ⟩ minikube service nginx-deploy
|-----------|--------------|-------------|---------------------------|
| NAMESPACE |     NAME     | TARGET PORT |           URL             |
|-----------|--------------|-------------|---------------------------|
| default   | nginx-deploy |          80 | http://192.168.49.2:32272 |
|-----------|--------------|-------------|---------------------------|
🎉  Opening service default/nginx-deploy in default browser...
Gtk-Message: 17:31:26.241: Failed to load module "colorreload-gtk-module"
Gtk-Message: 17:31:26.243: Failed to load module "window-decorations-gtk-module"
```

4. Escalar la aplicación


```
> kubectl scale deployment nginx-deploy --replicas=3
deployment.apps/nginx-deploy scaled

> kubectl get pods
NAME                          READY   STATUS             RESTARTS   AGE
nginx-deploy-c9d9f6c6c-dh9gd   1/1    Running            0          6m2s
nginx-deploy-c9d9f6c6c-l9x2d   0/1    ContainerCreating  0          7s
nginx-deploy-c9d9f6c6c-nplwt   0/1    ContainerCreating  0          7s

> kubectl get pods
NAME                          READY   STATUS    RESTARTS   AGE
nginx-deploy-c9d9f6c6c-dh9gd   1/1    Running   0          6m6s
nginx-deploy-c9d9f6c6c-l9x2d   1/1    Running   0          11s
nginx-deploy-c9d9f6c6c-nplwt   1/1    Running   0          11s

>
```

5. Eliminar todo

```
  └─❯ kubectl delete service nginx-deploy
service "nginx-deploy" deleted

  ┌─▲ 🏠 ~ ·····································
  └─❯ kubectl delete deployment nginx-deploy
deployment.apps "nginx-deploy" deleted

  ┌─▲ 🏠 ~ ·····································
  └─❯ minikube stop
✋  Stopping node "minikube"  ...
🔴  Apagando "minikube" mediante SSH...
^[🔴  1 node stopped.

  ┌─▲ 🏠 ~ ·····································
  └─❯
```