



**Codelab Kubernetes nivel básico local**

**Desarrollo de Software III**

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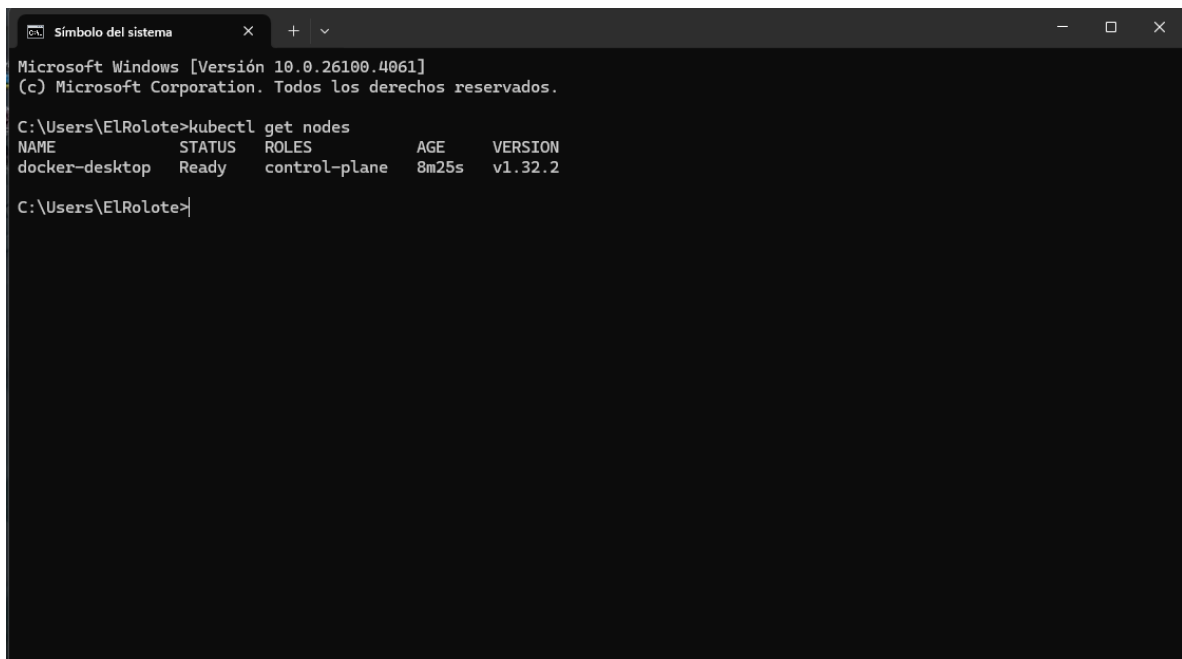
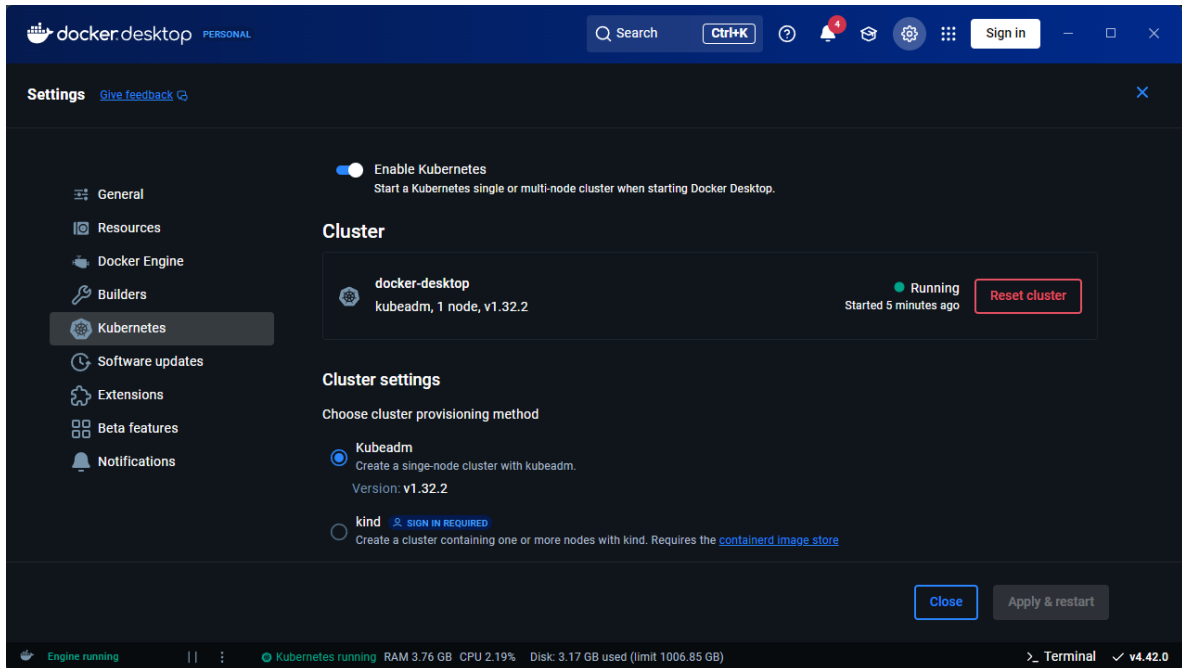
**Sede Tuluá**

**Septimo Semestre**

**2025**

# Evidencias codelab

## Se habilita kubernetes en Docker desktop



## Desplegamos la aplicación

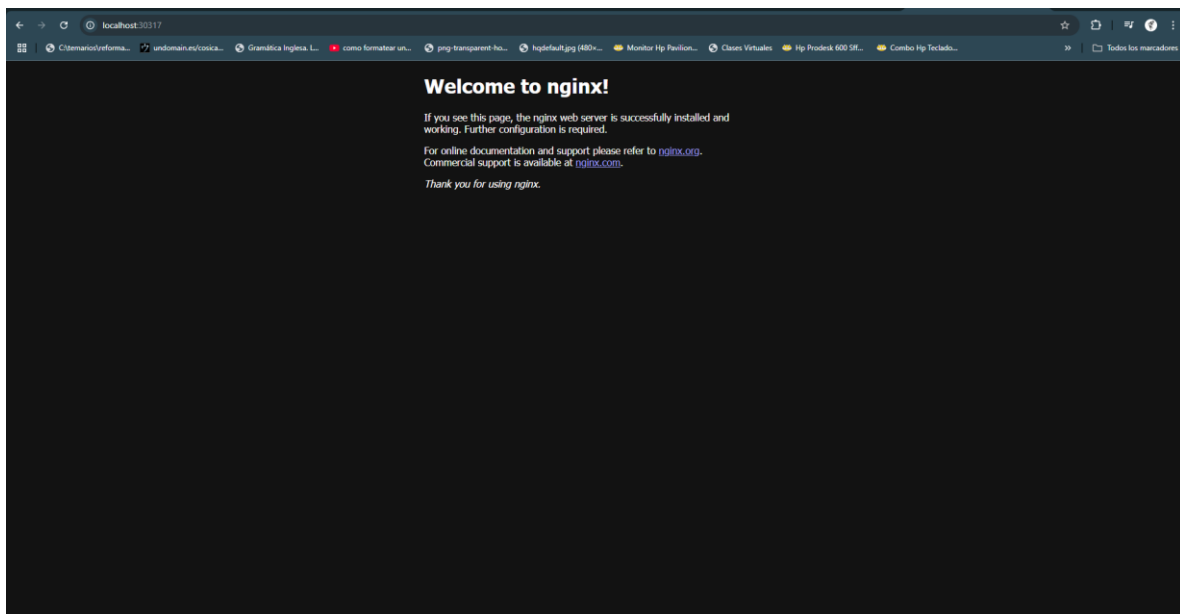
```
C:\Users\ElRolote>kubectl create deployment nginx-deploy --image=nginx
deployment.apps/nginx-deploy created
```

```
C:\Users\ElRolote>kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
nginx-deploy-c9d9f6c6c-vhlpw       1/1     Running   0           83s
C:\Users\ElRolote>
```

```
C:\Users\ElRolote>kubectl expose deployment nginx-deploy --type=NodePort --port=80
service/nginx-deploy exposed
```

```
C:\Users\ElRolote>kubectl get services
NAME             TYPE        CLUSTER-IP    EXTERNAL-IP   PORT(S)          AGE
kubernetes       ClusterIP   10.96.0.1     <none>        443/TCP          16m
nginx-deploy     NodePort    10.101.221.203 <none>        80:30317/TCP     8s
C:\Users\ElRolote>
```

## Accedemos desde el navegador



## Escalamos la aplicación

```
C:\Users\ElRolote>kubectl scale deployment nginx-deploy --replicas=3
deployment.apps/nginx-deploy scaled
```

```
C:\Users\ElRolote>kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
nginx-deploy-c9d9f6c6c-7pqzg       1/1     Running   0           4s
nginx-deploy-c9d9f6c6c-c2s25       1/1     Running   0           4s
nginx-deploy-c9d9f6c6c-vhlpw       1/1     Running   0          16m
```

## Limpiamos los recursos creados

```
C:\Users\ElRolote>kubectl delete service nginx-deploy
service "nginx-deploy" deleted

C:\Users\ElRolote>kubectl delete deployment nginx-deploy
deployment.apps "nginx-deploy" deleted
```