

```
ubuntu@DESKTOP-MJGHIPO:~$ kubectl describe pod my-pod
```

```
Name:          my-pod
Namespace:     default
Priority:       0
Service Account: default
Node:          minikube/192.168.49.2
Start Time:    Thu, 20 Mar 2025 05:27:17 +0000
Labels:        run=my-pod
Annotations:    <none>
Status:        Running
IP:            10.244.0.7
IPs:
  IP: 10.244.0.7
Containers:
  my-pod:
    Container ID:  docker://78c794e03fcec0f24234314ba74fd22401fbd5d076025c683e13faf13befedab
    Image:         nginx
    Image ID:      docker-pullable://nginx@sha256:124b44bfc9ccd1f3cedf4b592d4d1e8bddb78b51ec2ed5056c52d3692baebc19
    Port:          80/TCP
    Host Port:     0/TCP
    State:         Running
      Started:     Thu, 20 Mar 2025 05:27:22 +0000
    Ready:         True
    Restart Count: 0
    Environment:   <none>
    Mounts:
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-kj4gj (ro)
Conditions:
  Type                               Status
  PodReadyToStartContainers         True
  Initialized                       True
  Ready                             True
```

```
Node-Selectors:      <none>
Tolerations:         node.kubernetes.io/not-ready:NoExecute op=Exists for 300s
                     node.kubernetes.io/unreachable:NoExecute op=Exists for 300s

Events:
  Type     Reason          Age    From          Message
  ----     -
Normal    Scheduled       3m34s  default-scheduler Successfully assigned default/my-pod to minikube
Normal    Pulling         3m34s  kubelet       Pulling image "nginx"
Normal    Pulled          3m30s  kubelet       Successfully pulled image "nginx" in 4.236s (4.236s ino
2004242 bytes.
Normal    Created         3m30s  kubelet       Created container: my-pod
Normal    Started         3m30s  kubelet       Started container my-pod
ubuntu@DESKTOP-MJGHIPO:~$ kubectl logs my-pod
kubectl logs my-pod: command not found
ubuntu@DESKTOP-MJGHIPO:~$ kubectl logs my-pod
kubectl logs my-pod: command not found
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get pods
NAME      READY   STATUS    RESTARTS   AGE
my-pod    1/1     Running   0           12m
ubuntu@DESKTOP-MJGHIPO:~$ kubectl logs my-pod
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
```

```
minikube v1.35.0 on Ubuntu 24.04 (amd64)
Using the docker driver based on existing profile
Starting "minikube" primary control-plane node in "minikube"
Pulling base image v0.0.46 ...
Updating the running docker "minikube" container ...
Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...
Verifying Kubernetes components...
  ▪ Using image gcr.io/k8s-minikube/storage-provisioner:v9
  ▪ Using image docker.io/kubernetesui/dashboard:v2.7.0
  ▪ Using image docker.io/kubernetesui/metrics-scraper:v1.0.8
Some dashboard features require the metrics-server add-on
```

```
minikube addons enable metrics-server
```

```
Enabled addons: storage-provisioner, dashboard, default-storageclass
Done! kubectl is now configured to use "minikube" cluster
```

```
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get pod
```

NAME	READY	STATUS	RESTARTS	AGE
minikube-pod	1/1	Running	2 (39s ago)	174m

```
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get rs
```

```
No resources found in default namespace.
```

```
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get namespaces
```

NAME	STATUS	AGE
default	Active	25h
kube-node-lease	Active	25h
kube-public	Active	25h
kube-system	Active	25h
kubernetes-dashboard	Active	7m41s

```

ubuntu@DESKTOP-MJGHIPO: ~$ minikube v1.35.0 on Ubuntu 24.04 (amd64)
ubuntu@DESKTOP-MJGHIPO: ~$ minikube start --driver=docker --profile=minikube
minikube v1.35.0 on Ubuntu 24.04 (amd64)
Pulling base image v0.0.46 ...
Updating the running docker "minikube" container ...
Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...
Verifying Kubernetes components...
  ▪ Using image gcr.io/k8s-minikube/storage-provisioner:v5
  ▪ Using image docker.io/kubernetesui/dashboard:v2.7.0
  ▪ Using image docker.io/kubernetesui/metrics-scraper:v1.0.8
Some dashboard features require the metrics-server addon. To enable all features please run:

    minikube addons enable metrics-server

Enabled addons: storage-provisioner, dashboard, default-storageclass
Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get pod
NAME          READY   STATUS    RESTARTS   AGE
minikube-pod  1/1     Running   2 (39s ago) 174m
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get rs
No resources found in default namespace.
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get namespaces
NAME                STATUS    AGE
default             Active   25h
kube-node-lease     Active   25h
kube-public         Active   25h
kube-system         Active   25h
kubernetes-dashboard Active   7m41s
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get rs --all-namespaces
NAMESPACE          NAME                                DESIRED   CURRENT   READY   AGE
kube-system        coredns-668d6bf9bc                 1         1         1       25h
kubernetes-dashboard dashboard-metrics-scraper-5d59dccf9b 1         1         1       7m55s
kubernetes-dashboard kubernetes-dashboard-7779f9b69b    1         1         1       7m55s

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Search



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ubuntu@DESKTOP-MJGHIPO:~$ kubectl create deployment webapp --image=nginx --replicas=1
deployment.apps/webapp created
ubuntu@DESKTOP-MJGHIPO:~$ kubectl create deployment webnginx2 --image=nginx.latest --replicas=1
deployment.apps/webnginx2 created
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get pod
Command 'kubectl' not found, did you mean:
  command 'kubectl' from snap kubectl (1.32.3)
See 'snap info <snapname>' for additional versions.
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get pod
NAME                                READY   STATUS              RESTARTS   AGE
my-pod                              1/1     Running             2 (10m ago) 3h4m
webapp-6fddc68b96-j5twc             1/1     Running             0           2m13s
webnginx2-568694467f-lwsmx         0/1     ErrImagePull        0           41s
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get rs
NAME                                DESIRED   CURRENT   READY   AGE
webapp-6fddc68b96                  1         1         1       2m42s
webnginx2-568694467f              1         1         0       70s
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get rs --all --all
error: unknown flag: --all
See 'kubectl get --help' for usage.
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get rs --all-all
error: unknown flag: --all-all
See 'kubectl get --help' for usage.
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get rs --all-namespaces
NAMESPACE   NAME                                DESIRED   CURRENT   READY   AGE
default     webapp-6fddc68b96                  1         1         1       3m57s
default     webnginx2-568694467f              1         1         0       2m25s
kube-system coredns-668d6bf9bc                 1         1         1       25h
kubernetes-dashboard dashboard-metrics-scraper-5d59dccf9b 1         1         1       16m
kubernetes-dashboard kubernetes-dashboard-7779f9b69b     1         1         1       16m
ubuntu@DESKTOP-MJGHIPO:~$ ls
devops  docker-compose.yml  pod.yml

```

NAMESPACE	NAME	TARGET PORT	URL
default	my-service	9000	http://192.168.49.2:30002

🔗 Starting tunnel for service my-service.

NAMESPACE	NAME	TARGET PORT	URL
default	my-service		http://127.0.0.1:32961

🔗 Opening service default/my-service in default browser...

👉 http://127.0.0.1:32961

! Because you are using a Docker driver on linux, the terminal needs to be open to run it.

^C 🛑 Stopping tunnel for service my-service.

ubuntu@DESKTOP-MJGHIPO:~\$ curl http://192.168.49.2:30002

```
<!doctype html><html lang="en"><head><title>HTTP Status 404 - Not Found</title><style type="text/css">body {font-family:Tahoma,Arial,
sans-serif;} h1, h2, h3, b {color:white;background-color:#525D76;} h1 {font-size:22px;} h2 {font-size:16px;} h3 {font-size:14px;} p {
font-size:12px;} a {color:black;} .line {height:1px;background-color:#525D76;border:none;}</style></head><body><h1>HTTP Status 404 -
Not Found</h1><hr class="line" /><p><b>Type</b> Status Report</p><p><b>Description</b> The origin server did not find a current repre
sentation for the target resource or is not willing to disclose that one exists.</p><hr class="line" /><h3>Apache Tomcat/9.0.102</h3>
</body></html>ubuntu@DESKTOP-MJGHIPO:~$ curl http://192.168.49.2:30002/my-app/
```

```
<!doctype html><html lang="en"><head><title>HTTP Status 404 - Not Found</title><style type="text/css">body {font-family:Tahoma,Arial,
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Not Found</h1><hr class="line" /><p><b>Type</b> Status Report</p><p><b>Description</b> The origin server did not find a current repre
sentation for the target resource or is not willing to disclose that one exists.</p><hr class="line" /><h3>Apache Tomcat/9.0.102</h3>
</body></html>ubuntu@DESKTOP-MJGHIPO:~$ curl http://192.168.49.2:30002/maven-web-app/
<html>
<body>
<h2>Hello World!</h2>
</body>
</html>
```


<h2>Hello World!</h2>

</body>

</html>

```
ubuntu@DESKTOP-MJGHIPO:~$ kunectl get ns
Command 'kunectl' not found, did you mean:
  command 'kubectl' from snap kubectl (1.32.3)
See 'snap info <snapname>' for additional versions.
```

```
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get ns
```

NAME	STATUS	AGE
default	Active	28h
kube-node-lease	Active	28h
kube-public	Active	28h
kube-system	Active	28h
kubernetes-dashboard	Active	165m

```
ubuntu@DESKTOP-MJGHIPO:~$ kubectl create ns mydeploy
```

namespace/mydeploy created

```
ubuntu@DESKTOP-MJGHIPO:~$ kubectl apply -f deploy.yml -n mydeploy
```

deployment.apps/my-deploy created

The Service "my-service" is invalid: spec.ports[0].nodePort: Invalid value: 30002: provided port is already allocated

```
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get pod
```

NAME	READY	STATUS	RESTARTS	AGE
my-deploy-6ffffb5f7d-zmbdv	1/1	Running	0	37m
my-pod	1/1	Running	2 (164m ago)	5h38m
webapp-6fddc68b96-2fv6g	1/1	Running	0	139m
webapp-6fddc68b96-j5twc	1/1	Running	0	156m
webapp-6fddc68b96-prqdl	1/1	Running	0	139m
webnginx2-568694467f-lwsmx	0/1	ImagePullBackOff	0	155m

```
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get deploy
```

NAME	READY	UP-TO-DATE	AVAILABLE	AGE
my-deploy	1/1	1	1	67m
webapp	3/3	3	3	157m
webnginx2	0/1	1	0	156m

```
ubuntu@DESKTOP-MJGHIPO:~$ |
```

Show desktop

<h2>Hello World!</h2>

</body>

</html>

```
ubuntu@DESKTOP-MJGHIPO:~$ kunectl get ns
Command 'kunectl' not found, did you mean:
  command 'kubectl' from snap kubectl (1.32.3)
See 'snap info <snapname>' for additional versions.
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```
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get ns
```

NAME	STATUS	AGE
default	Active	28h
kube-node-lease	Active	28h
kube-public	Active	28h
kube-system	Active	28h
kubernetes-dashboard	Active	165m

```
ubuntu@DESKTOP-MJGHIPO:~$ kubectl create ns mydeploy
```

namespace/mydeploy created

```
ubuntu@DESKTOP-MJGHIPO:~$ kubectl apply -f deploy.yml -n mydeploy
```

deployment.apps/my-deploy created

The Service "my-service" is invalid: spec.ports[0].nodePort: Invalid value: 30002: provided port is already allocated

```
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get pod
```

NAME	READY	STATUS	RESTARTS	AGE
my-deploy-6ffffb5f7d-zmbdv	1/1	Running	0	37m
my-pod	1/1	Running	2 (164m ago)	5h38m
webapp-6fddc68b96-2fv6g	1/1	Running	0	139m
webapp-6fddc68b96-j5twc	1/1	Running	0	156m
webapp-6fddc68b96-prqdl	1/1	Running	0	139m
webnginx2-568694467f-lwsmx	0/1	ImagePullBackOff	0	155m

```
ubuntu@DESKTOP-MJGHIPO:~$ kubectl get deploy
```

NAME	READY	UP-TO-DATE	AVAILABLE	AGE
my-deploy	1/1	1	1	67m
webapp	3/3	3	3	157m
webnginx2	0/1	1	0	156m

```
ubuntu@DESKTOP-MJGHIPO:~$ |
```

Show desktop


```

ubundu@DESKTOP-MJGHIPO:~$ kubectl get deploy
NAME          READY   UP-TO-DATE   AVAILABLE   AGE
my-deploy     1/1     1             1           67m
webapp        3/3     3             3           157m
webnginx2     0/1     1             0           156m
ubundu@DESKTOP-MJGHIPO:~$ kubectl get pod -n mydeploy
NAME                                READY   STATUS    RESTARTS   AGE
my-deploy-6ffffb5f7d-qlc9d         1/1     Running   0           3m1s
ubundu@DESKTOP-MJGHIPO:~$ kubectl get deploy -n mydeploy
NAME          READY   UP-TO-DATE   AVAILABLE   AGE
my-deploy     1/1     1             1           3m39s
ubundu@DESKTOP-MJGHIPO:~$ kubectl get all --namespace mydeploy
NAME                                READY   STATUS    RESTARTS   AGE
pod/my-deploy-6ffffb5f7d-qlc9d     1/1     Running   0           5m12s

NAME          READY   UP-TO-DATE   AVAILABLE   AGE
deployment.apps/my-deploy  1/1     1             1           5m12s

NAME                                DESIRED   CURRENT   READY   AGE
replicaset.apps/my-deploy-6ffffb5f7d  1         1         1       5m12s
ubundu@DESKTOP-MJGHIPO:~$ sudo nano ns.yml
[sudo] password for ubundu:
ubundu@DESKTOP-MJGHIPO:~$ kubectl apply -f ns.yml
namespace/my-demo-ns created
ubundu@DESKTOP-MJGHIPO:~$ sudo nano pod-ns.yml
ubundu@DESKTOP-MJGHIPO:~$ kubectl get pod -n my-demo-ns
No resources found in my-demo-ns namespace.
ubundu@DESKTOP-MJGHIPO:~$ kubectl apply -f pod-ns.yml
pod/my-pod created
ubundu@DESKTOP-MJGHIPO:~$ kubectl get pod -n my-demo-ns
NAME    READY   STATUS    RESTARTS   AGE
my-pod  1/1     Running   0           5s
ubundu@DESKTOP-MJGHIPO:~$ |

```