```
kirillspitsvn@LAPTOP-VPGTN0GN: ~
kirillspitsvn@LAPTOP-VPGTN@GN:~$ minikube start --nodes 2 -p multinode-demo
[B [multinode-demo] minikube v1.32.0 on Ubuntu 22.04 (amd64)
Automatically selected the docker driver
   Using Docker driver with root privileges
B
   Starting control plane node multinode-demo in cluster multinode-demo
```

Pulling base image ... Creating docker container (CPUs=2, Memory=2200MB) ...

Preparing Kubernetes v1.28.3 on Docker 24.0.7 ...

 Generating certificates and keys ... Booting up control plane ...

• Configuring RBAC rules ... Configuring CNI (Container Networking Interface) ... Using image gcr.io/k8s-minikube/storage-provisioner:v5

Verifying Kubernetes components... Enabled addons: default-storageclass, storage-provisioner

Starting worker node multinode-demo-m02 in cluster multinode-demo

Found network options:

Pulling base image ... Creating docker container (CPUs=2, Memory=2200MB) ...

NO PROXY=192.168.58.2

env NO PROXY=192.168.58.2

Preparing Kubernetes v1.28.3 on Docker 24.0.7 ...

Verifying Kubernetes components... Done! kubectl is now configured to use "multinode-demo" cluster and "default" namespace by default

kirillspitsyn@LAPTOP-VPGTN0GN:~\$

```
kirillspitsyn@LAPTOP-VPGTN0GN: ~
kirillspitsyn@LAPTOP-VPGTN@GN:~$ kubectl get nodes
NAME
                     STATUS
                            ROLES
                                              AGE
                                                     VERSION
multinode-demo
                            control-plane
                    Ready
                                             1075
                                                     v1.28.3
multinode-demo-m02
                    Ready
                                              905
                                                     v1.28.3
                              <none>
kirillspitsyn@LAPTOP-VPGTN0GN:~$
```

```
kirillspitsyn@LAPTOP-VPGTN0GN: ~
kirillspitsyn@LAPTOP-VPGTN@GN:~$ minikube status -p multinode-demo
multinode-demo
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
```

kubeconfig: Configured
multinode-demo-m02
type: Worker

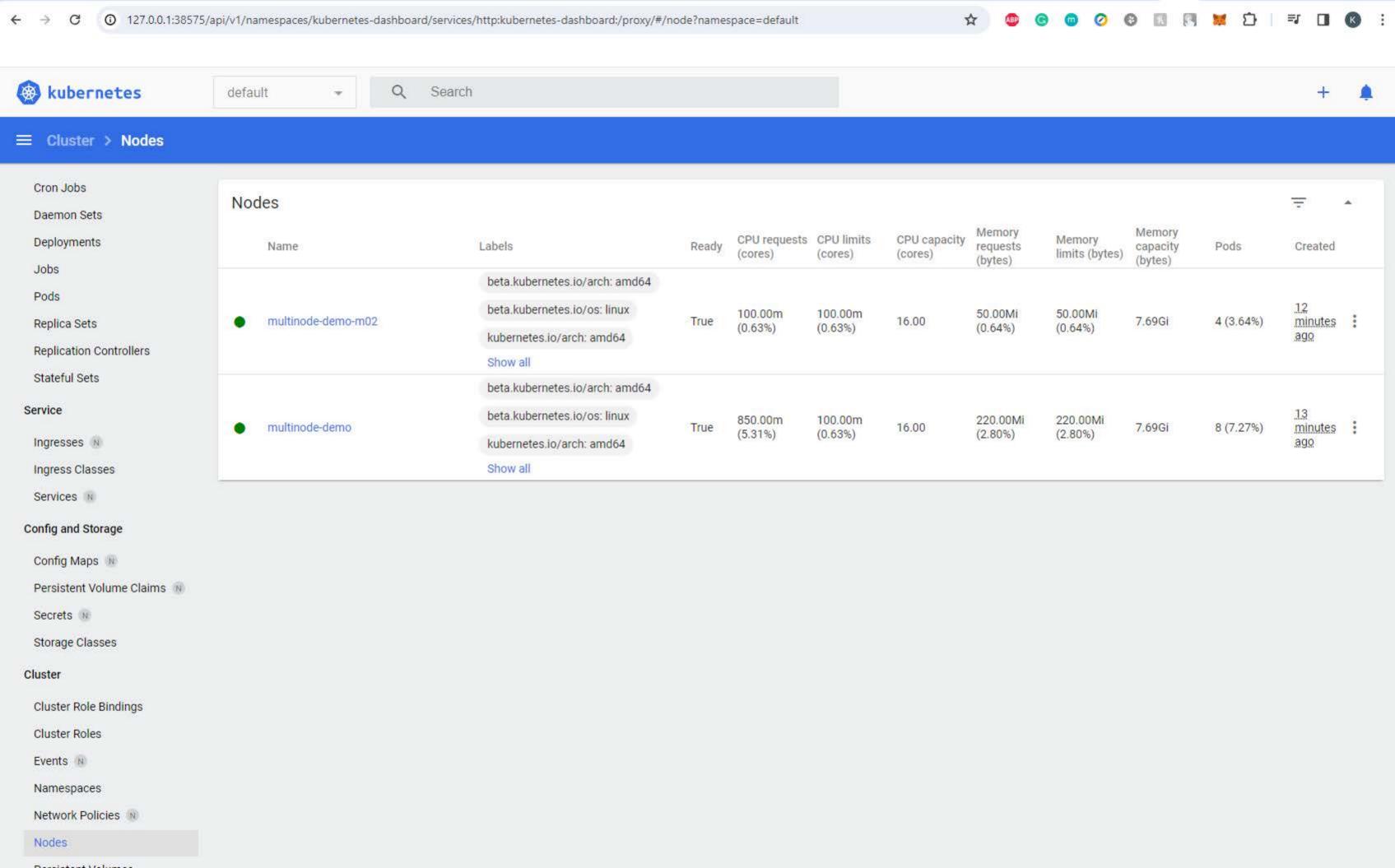
host: Running kubelet: Running

```
kirillspitsyn@LAPTOP-VPGTN0GN: ~
kirillspitsyn@LAPTOP-VPGTN0GN:~$ minikube dashboard -p multinode-demo
   Enabling dashboard ...

    Using image docker.io/kubernetesui/dashboard:v2.7.0

    Using image docker.io/kubernetesui/metrics-scraper:v1.0.8

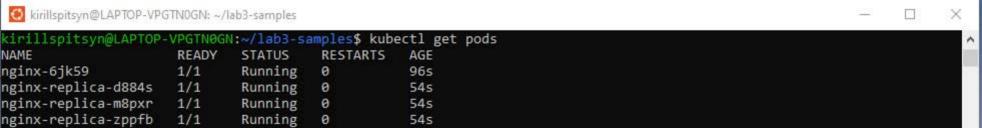
   Some dashboard features require the metrics-server addon. To enable all features please run:
       minikube -p multinode-demo addons enable metrics-server
   Verifying dashboard health ...
   Launching proxy ...
   Verifying proxy health ...
   Opening http://127.0.0.1:38575/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/ in
vour default browser...
   http://127.0.0.1:38575/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/
```



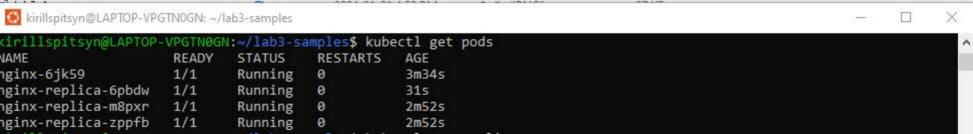
```
kirillspitsyn@LAPTOP-VPGTN0GN: ~
<irillspitsvn@LAPTOP-VPGTN@GN:~$ minikube stop -p multinode-demo</p>
Stopping node "multinode-demo" ...
Powering off "multinode-demo" via SSH ...
Stopping node "multinode-demo-m02" ...
Powering off "multinode-demo-m02" via SSH ...
2 nodes stopped.
```

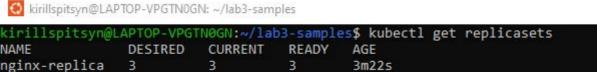
```
kirillspitsyn@LAPTOP-VPGTN0GN: ~
kirillspitsyn@LAPTOP-VPGTN@GN:~$ minikube delete --all
Deleting "minikube" in docker ...
   Removing /home/kirillspitsyn/.minikube/machines/minikube ...
   Removed all traces of the "minikube" cluster.
   Deleting "multinode-demo" in docker ...
   Removing /home/kirillspitsyn/.minikube/machines/multinode-demo ...
   Removing /home/kirillspitsvn/.minikube/machines/multinode-demo-m02 ...
   Removed all traces of the "multinode-demo" cluster.
  Successfully deleted all profiles
```

```
Выбрать kirillspitsyn@LAPTOP-VPGTN0GN: ~/lab3-samples
kirillspitsyn@LAPTOP-VPGTN0GN:~/lab3-samples$ kubectl apply -f replicatset.yaml
replicaset.apps/nginx-replica created
kirillspitsyn@LAPTOP-VPGTN0GN:~/lab3-samples$
```



```
kirillspitsyn@LAPTOP-VPGTN0GN: ~/lab3-samples
kirillspitsyn@LAPTOP-VPGTN0GN:~/lab3-samples$ kubectl get pods
NAME
                      READY
                              STATUS
                                        RESTARTS
                                                   AGE
nginx-6jk59
                      1/1
                              Running
                                                   965
nginx-replica-d884s
                     1/1
                             Running
                                                   545
nginx-replica-m8pxr
                     1/1
                             Running
                                                   545
nginx-replica-zppfb 1/1
                              Running
                                                   545
kirillspitsvn@LAPTOP-VPGTN@GN:~/lab3-samples$ kubectl delete pod nginx-replica-d884s
pod "nginx-replica-d884s" deleted
```





kirillspitsyn@LAPTOP-VPGTN0GN: ~/lab3-samples kirillspitsyn@LAPTOP-VPGTN@GN:~/lab3-samples\$ kubectl apply -f deploy-replica.yaml deployment.apps/nginx-deployment-replica created

kirillspitsyn@LAPTOP-VPGTN0GN:~/lab3-samples\$

kirillspitsyn@LAPTOP-VPGTN0GN: ~/lab3-samples kirillspitsyn@LAPTOP-VPGTN0GN:~/lab3-samples\$ kubectl rollout status deployment nginx-deployment-replica deployment "nginx-deployment-replica" successfully rolled out

7

kirillspitsyn@LAPTOP-VPGTN@GN:~/lab3-samples\$

```
kirillspitsyn@LAPTOP-VPGTN0GN: ~/lab3-samples
kirillspitsyn@LAPTOP-VPGTN@GN:~/lab3-samples$ kubectl apply -f statefulsets.yaml
service/nginx created
statefulset.apps/web created
```

kirillspitsyn@LAPTOP-VPGTN0GN:~/lab3-samples\$

Running

8m2s

1/1

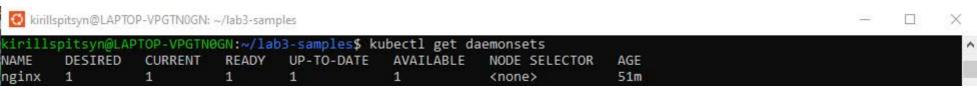
web-0

```
6 kirillspitsyn@LAPTOP-VPGTN0GN: ~/lab3-samples
kirillspitsvn@LAPTOP-VPGTN@GN:~/lab3-samples$ kubectl get statefulsets
NAME READY AGE
web 3/3 9m12s
```



daemonset.apps/nginx created

```
kirillspitsvn@LAPTOP-VPGTN0GN: ~/lab3-samples
kirillspitsyn@LAPTOP-VPGTN0GN:~/lab3-samples$ kubectl get pods
NAME
                                                                RESTARTS
                                             READY
                                                      STATUS
                                                                            AGE
nginx-6jk59
                                             1/1
                                                      Running
                                                                0
                                                                            51m
nginx-deployment-replica-5479df7db-6gxlk
                                             1/1
                                                      Running
                                                                0
                                                                            24m
nginx-deployment-replica-5479df7db-9zv59
                                             1/1
                                                      Running
                                                                0
                                                                            24m
nginx-deployment-replica-5479df7db-m29vz
                                             1/1
                                                      Running
                                                                0
                                                                            24m
nginx-replica-6pbdw
                                             1/1
                                                      Running
                                                                0
                                                                            30m
nginx-replica-m8pxr
                                             1/1
                                                      Running
                                                                0
                                                                            33m
nginx-replica-zppfb
                                             1/1
                                                      Running
                                                                0
                                                                            33m
web-0
                                                      Running
                                                                            17m
                                             1/1
                                                                0
```



kirillspitsyn@LAPTOP-VPGTN0GN: ~/lab3-samples	ite.	×
kirillspitsyn@LAPTOP-VPGTN0GN:~/lab3-samples\$ kubectl apply -f deployment-resource.yaml deployment.apps/nginx-deployment created		

Running

Running

0

0

40m

25m

1/1

1/1

nginx-replica-zppfb

web-0

Killispisylle Ent for VI o	11400141 -/1000 301	ilbica			
kirillspitsyn@LAPTOP-\	/PGTN0GN:~/la	ab3-samples\$	kubectl	get	deployments
NAME	READY	UP-TO-DATE	AVAILA	BLE	AGE
nginy-denloyment	2/2	2	2		5m13c

nginx-depioyment nginx-deployment-replica

kirillsnitsvn@LAPTOP-VPGTN0GN: ~/lah3-samnles

kirillspitsyn@LAPTOP-VPGTN@GN:~/lab3-samples\$

37m

kirillspitsyn@LAPTOP-VPGTN0GN: ~/lab3-samples kirillspitsvn@LAPTOP-VPGTN@GN:~/lab3-samples\$ kubectl apply -f deploy-health.yaml deployment.apps/nginx-deployment configured

kirillspitsyn@LAPTOP-VPGTN@GN:~/lab3-samples\$

1/1

1/1

1/1

Running

Running

Running

0

0

0

51m

51m

35m

nginx-replica-m8pxr

nginx-replica-zppfb

web-0

