



↘ [Requisitos previos:](#)

Instalar minikube, kubectl con sus: bash_completion; como referencia puede consultarse un post precedente:

https://www.cadilinea.com/blog/wp-content/uploads/2019/05/01-kubernetes_cats_and_dogs.pdf

```
[labs@hp minikube]$ vim ~/.bashrc
...
# User specific aliases and functions

# minikube completion
if command -v minikube &>/dev/null
then
  eval "$(minikube completion bash)"
fi

# kubectl completion
if command -v kubectl &>/dev/null
then
  eval "$(kubectl completion bash)"
fi

[labs@hp minikube]$ source ~/.bashrc
```

↘ [Iniciamos minikube.](#)

```
[labs@hp minikube]$ minikube start
☺ minikube v1.2.0 on linux (amd64)
💡 Tip: Use 'minikube start -p <name>' to create a new cluster, or 'minikube delete' to delete this
one.
🔄 Restarting existing virtualbox VM for "minikube" ...
⌚ Waiting for SSH access ...
🐙 Configuring environment for Kubernetes v1.15.0 on Docker 18.09.6
🔄 Relaunching Kubernetes v1.15.0 using kubeadm ...
⌚ Verifying: apiserver proxy etcd scheduler controller dns
🏠 Done! kubectl is now configured to use "minikube"
```

```
[labs@hp minikube]$ minikube status
host: Running
kubelet: Running
apiserver: Running
kubectl: Correctly Configured: pointing to minikube-vm at 192.168.99.101
```

```
[labs@hp minikube]$ kubectl cluster-info
Kubernetes master is running at https://192.168.99.101:8443
KubeDNS is running at https://192.168.99.101:8443/api/v1/namespaces/kube-system/services/kube-dns:dns/proxy
```



To further debug and diagnose cluster problems, use 'kubectl cluster-info dump'.

```
[labs@hp minikube]$ curl https://192.168.99.101:8443 --insecure
{
  "kind": "Status",
  "apiVersion": "v1",
  "metadata": {

  },
  "status": "Failure",
  "message": "forbidden: User \"system:anonymous\" cannot get path \"\"",
  "reason": "Forbidden",
  "details": {

  },
  "code": 403
}
```

↘ [Descargamos y aplicamos el '.yaml'.](#)

```
[labs@hp minikube]$ kubectl apply -f
https://raw.githubusercontent.com/kubernetes/dashboard/master/aio/deploy/recommended/
kubernetes-dashboard.yaml
secret/kubernetes-dashboard-certs unchanged
secret/kubernetes-dashboard-csrf unchanged
serviceaccount/kubernetes-dashboard unchanged
role.rbac.authorization.k8s.io/kubernetes-dashboard-minimal unchanged
rolebinding.rbac.authorization.k8s.io/kubernetes-dashboard-minimal unchanged
deployment.apps/kubernetes-dashboard unchanged
service/kubernetes-dashboard unchanged
```

↘ [Creamos nuestro '.yaml' personalizado para la autenticación.](#)

```
[labs@hp minikube]$ cat dashboard-adminuser.yaml
apiVersion: v1
kind: ServiceAccount
metadata:
  name: admin-user
  namespace: kube-system
apiVersion: rbac.authorization.k8s.io/v1
kind: ClusterRoleBinding
metadata:
  name: admin-user
roleRef:
  apiGroup: rbac.authorization.k8s.io
  kind: ClusterRole
  name: cluster-admin
subjects:
```

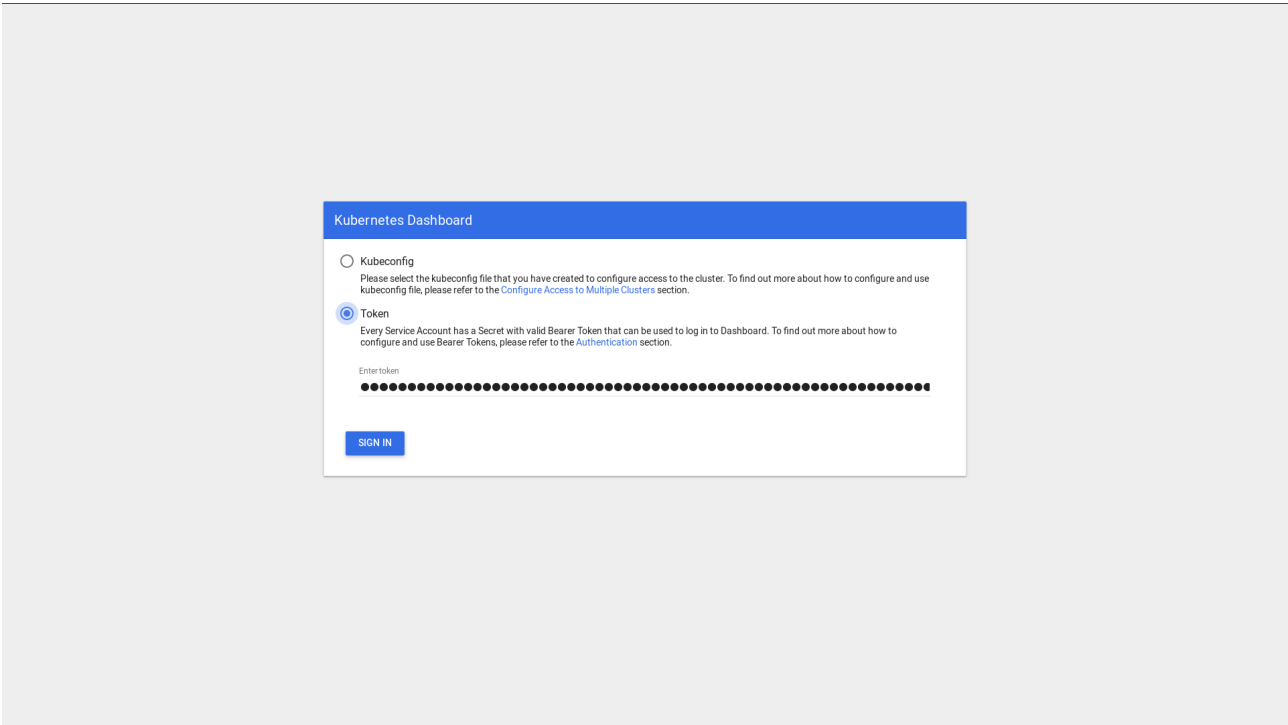



↘ [Lanzamos en un terminal 'daemonizado'.](#)

```
[labs@hp minikube]$ kubectl proxy  
Starting to serve on 127.0.0.1:8001
```

↘ [Aplicamos el 'token' previamente copiado.](#)

<http://localhost:8001/api/v1/namespaces/kube-system/services/https:kubernetes-dashboard:/proxy/>





kubernetes + CREATE | ↻

Overview

Cluster

- Namespaces
- Nodes
- Persistent Volumes
- Roles
- Storage Classes

Namespace: default

Overview

Workloads

- Cron Jobs
- Daemon Sets
- Deployments
- Jobs
- Pods
- Replica Sets
- Replication Controllers
- Stateful Sets

Discovery and Load Balancing

- Ingresses
- Services

Config and Storage

- Config Maps
- Persistent Volume Claims
- Secrets

Settings

Discovery and Load Balancing

Services

Name	Labels	Cluster IP	Internal endpoints	External endpoints	Age
kubernetes	component: apiserver provider: kubernetes	10.96.0.1	kubernetes:443 TCP	-	13 hours

Config and Storage

Secrets

Name	Type	Age
default-token-lf8m8	kubernetes.io/service-account-token	13 hours

localhost:8001/api/v1/namespaces/kube-system/services/https:kubernetes-dashboard:/proxy/#/secret?namespace=default

kubernetes + CREATE | ↻

Cluster > Namespaces

Cluster

- Namespaces
- Nodes
- Persistent Volumes
- Roles
- Storage Classes

Namespace: default

Overview

Workloads

- Cron Jobs
- Daemon Sets
- Deployments
- Jobs
- Pods
- Replica Sets
- Replication Controllers
- Stateful Sets

Discovery and Load Balancing

- Ingresses
- Services

Config and Storage

- Config Maps
- Persistent Volume Claims
- Secrets

Settings

Namespaces

Name	Labels	Status	Age
default	-	Active	13 hours
kube-node-lease	-	Active	13 hours
kube-public	-	Active	13 hours
kube-system	-	Active	13 hours

localhost:8001/api/v1/namespaces/kube-system/services/https:kubernetes-dashboard:/proxy/#/ingress?namespace=default



↘ [En otro terminal distinto del 'daemonizado' anteriormente.](#)

[labs@hp minikube]\$ minikube ssh

Archivo Editar Ver Buscar Terminal Ayuda

[labs@hp minikube]\$ minikube ssh



```

$ docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS             PORTS             NAMES
7ed9091f1d16      eb516548c180      "/coredns -conf /etc..." About an hour ago   Up About an hour   k8s_coredns_coredns-5c98db65d4-hms9m_kube-system_6c2b7719-472f-424d-8094-b8c4c9fadf
51_2
c64613b2eb02      f9aed6685b81      "/dashboard --insecu..." About an hour ago   Up About an hour   k8s_kubernetes-dashboard_kubernetes-dashboard-7d75c474bb-j71gk_kube-system_c8676aed
-f9ae-4914-adf0-26b2fa2707b3_2
1f981b512eb9      eb516548c180      "/coredns -conf /etc..." About an hour ago   Up About an hour   k8s_coredns_coredns-5c98db65d4-5ckwh_kube-system_f9ffd30a-fe61-42ef-ad3d-b5606fe5ab
10_2
94fa45b6a375      4689881edbd10     "/storage-provisioner"   About an hour ago   Up About an hour   k8s_storage-provisioner_storage-provisioner_kube-system_f5acae23-58f4-4eb2-aa33-6c1
d5f1831f4_2
97e46ac486bc      d235b23c3570     "/usr/local/bin/kube..." About an hour ago   Up About an hour   k8s_kube-proxy_kube-proxy-7dx9d_kube-system_46c0376e-c18b-47c1-a033-82bb881d15b5_1
fb8981be57d3      k8s.gcr.io/pause:3.1 "/pause"               About an hour ago   Up About an hour   k8s_POD_kubernetes-dashboard-7d75c474bb-j71gk_kube-system_c8676aed-f9ae-4914-adf8-2
6b2fa2707b3_1
3b707b302202      k8s.gcr.io/pause:3.1 "/pause"               About an hour ago   Up About an hour   k8s_POD_storage-provisioner_kube-system_f5acae23-58f4-4eb2-aa33-6c1d3f1831f4_1
c51523e52cf4      k8s.gcr.io/pause:3.1 "/pause"               About an hour ago   Up About an hour   k8s_POD_kube-proxy-7dx9d_kube-system_46c0376e-c18b-47c1-a033-82bb881d15b5_1
d080d88e8c7       k8s.gcr.io/pause:3.1 "/pause"               About an hour ago   Up About an hour   k8s_POD_coredns-5c98db65d4-5ckwh_kube-system_f9ffd30a-fe61-42ef-ad3d-b5606fe5ab10_1
7d7a7d5985ea      k8s.gcr.io/pause:3.1 "/pause"               About an hour ago   Up About an hour   k8s_POD_coredns-5c98db65d4-hms9m_kube-system_6c2b7719-472f-424d-8094-b8c4c9fadf51_1
9db3e9e2874       119781e77cbc      "/opt/kube-addons.sh"  About an hour ago   Up About an hour   k8s_kube-addon-manager_kube-addon-manager-minikube_kube-system_65a31d2b812b11a2835f
37c8a742e4ef_1
d78667b99b63      8328bb49b652     "kube-controller-man..." About an hour ago   Up About an hour   k8s_kube-controller-manager_kube-controller-manager-minikube_kube-system_676a8a1e3e
146d0cf7c4f6e1e96b578_1
b6039a3e8ed3      2d3813851e87     "kube-scheduler --bi..." About an hour ago   Up About an hour   k8s_kube-scheduler_kube-scheduler-minikube_kube-system_31d9ee8b7fb12e797dc981a8686f
6b2b_1
5f9af89aecd5      201c7a840312     "kube-apiserver --ad..." About an hour ago   Up About an hour   k8s_kube-apiserver_kube-apiserver-minikube_kube-system_12f54e5387d19f3c6bd14c78587
5ee6_1
83af5d513ee8      2c4adeb21b4f     "etcd --advertise-cl..." About an hour ago   Up About an hour   k8s_etcd_etcd-minikube_kube-system_2e969a54c3593327ed8c59da52f8d9fe_1
08826943c53      k8s.gcr.io/pause:3.1 "/pause"               About an hour ago   Up About an hour   k8s_POD_kube-controller-manager-minikube_kube-system_676a8a1e3e146d0cf7c4f6e1e96b5
78_1
73321eab9f4d      k8s.gcr.io/pause:3.1 "/pause"               About an hour ago   Up About an hour   k8s_POD_kube-scheduler-minikube_kube-system_31d9ee8b7fb12e797dc981a8686f6b2b_1
6e70148a7c55      k8s.gcr.io/pause:3.1 "/pause"               About an hour ago   Up About an hour   k8s_POD_kube-apiserver-minikube_kube-system_12f54e5387d19f3c6bd14c785875ee6_1
8eae03a8ff6e4      k8s.gcr.io/pause:3.1 "/pause"               About an hour ago   Up About an hour   k8s_POD_kube-addon-manager-minikube_kube-system_65a31d2b812b11a2835f37c8a742e4ef_1
442245b30413      k8s.gcr.io/pause:3.1 "/pause"               About an hour ago   Up About an hour   k8s_POD_etcd-minikube_kube-system_2e969a54c3593327ed8c59da52f8d9fe_1
$

```



```
[labs@hp minikube]$ kubectl get all
```

```
NAME          TYPE          CLUSTER-IP  EXTERNAL-IP  PORT(S)  AGE
service/kubernetes ClusterIP  10.96.0.1   <none>       443/TCP  14h
```

```
[labs@hp minikube]$ kubectl get nodes
```

```
NAME      STATUS  ROLES  AGE  VERSION
minikube  Ready  master  14h  v1.15.0
```

```
[labs@hp minikube]$ kubectl get namespaces
```

```
NAME          STATUS  AGE
default       Active  14h
kube-node-lease Active  14h
kube-public   Active  14h
kube-system   Active  14h
```

```
[labs@hp minikube]$ kubectl get services
```

```
NAME          TYPE          CLUSTER-IP  EXTERNAL-IP  PORT(S)  AGE
service/kubernetes ClusterIP  10.96.0.1   <none>       443/TCP  14h
```

↘ [Iniciamos nuestros pods en el namespace → 'default'.](#)

```
[labs@hp minikube]$ kubectl run nuestro-httpd --image=httpd --replicas=3
```

```
kubectl run --generator=deployment/apps.v1 is DEPRECATED and will be removed in a future version. Use kubectl run --generator=run-pod/v1 or kubectl create instead.
deployment.apps/nuestro-httpd created
```

```
[labs@hp minikube]$ kubectl get pods
```

```
NAME                                READY  STATUS   RESTARTS  AGE
nuestro-httpd-6dd7c74c9c-78msm     1/1    Running  0          7m8s
nuestro-httpd-6dd7c74c9c-ft6pv     1/1    Running  0          7m8s
nuestro-httpd-6dd7c74c9c-xnj9w     1/1    Running  0          7m8s
```

```
[labs@hp minikube]$ kubectl describe pod nuestro-httpd-6dd7c74c9c-78msm
```

```
Name:          nuestro-httpd-6dd7c74c9c-78msm
Namespace:     default
Priority:       0
Node:          minikube/10.0.2.15
Start Time:    Tue, 25 Jun 2019 09:31:41 +0200
Labels:        pod-template-hash=6dd7c74c9c
               run=nuestro-httpd
Annotations:   <none>
Status:        Running
IP:            172.17.0.7
Controlled By: ReplicaSet/nuestro-httpd-6dd7c74c9c
Containers:
  nuestro-httpd:
```



```
Container ID:
docker://20c3a49f683c7200410e44ad98e201f0cf29f1d800d1f633cd60d70d0f796499
Image:      httpd
Image ID:
docker-pullable://httpd@sha256:a129c3a747fe9e406bf91d4d1fb2d4ed7b51d7a1f523fcf372c18c3c35981d12
Port:       <none>
Host Port:  <none>
State:      Running
  Started:   Tue, 25 Jun 2019 09:32:24 +0200
Ready:      True
Restart Count: 0
Environment: <none>
Mounts:
  /var/run/secrets/kubernetes.io/serviceaccount from default-token-lsfm8 (ro)
Conditions:
Type      Status
Initialized True
Ready     True
ContainersReady True
PodScheduled True
Volumes:
default-token-lsfm8:
  Type:      Secret (a volume populated by a Secret)
  SecretName: default-token-lsfm8
  Optional:  false
QoS Class:   BestEffort
Node-Selectors: <none>
Tolerations: node.kubernetes.io/not-ready:NoExecute for 300s
              node.kubernetes.io/unreachable:NoExecute for 300s
Events:
Type Reason Age From Message
---- -
Normal Scheduled 10m default-scheduler Successfully assigned default/nuestro-httpd-6dd7c74c9c-78msm to minikube
Normal Pulling 10m kubelet, minikube Pulling image "httpd"
Normal Pulled 10m kubelet, minikube Successfully pulled image "httpd"
Normal Created 10m kubelet, minikube Created container nuestro-httpd
Normal Started 10m kubelet, minikube Started container nuestro-httpd
```




kubernetes + CREATE ⌵

Overview

Cluster

- Namespaces
- Nodes
- Persistent Volumes
- Roles
- Storage Classes

Namespace: default

Overview

Workloads

- Cron Jobs
- Daemon Sets
- Deployments
- Jobs
- Pods
- Replica Sets
- Replication Controllers
- Stateful Sets

Discovery and Load Balancing

- Ingresses
- Services

Config and Storage

- Config Maps
- Persistent Volume Claims
- Secrets

Settings

Workloads Statuses

100.00% Deployments 100.00% Pods 100.00% Replica Sets

Deployments

Name	Labels	Pods	Age	Images
✔ nuestro-httpd	run.nuestro-httpd	3 / 3	59 seconds	httpd

Pods

Name	Node	Status	Restarts	Age
✔ nuestro-httpd-6dd7c74c9c-78msm	minikube	Running	0	59 seconds
✔ nuestro-httpd-6dd7c74c9c-ft6pv	minikube	Running	0	59 seconds
✔ nuestro-httpd-6dd7c74c9c-xnj9w	minikube	Running	0	59 seconds

Replica Sets

Name	Labels	Pods	Age	Images
✔ nuestro-httpd-6dd7c74c9c	pod-template-hash: 6dd7c74c9c run.nuestro-httpd	3 / 3	59 seconds	httpd

Discovery and Load Balancing

Services

Name	Labels	Cluster IP	Internal endpoints	External endpoints	Age
------	--------	------------	--------------------	--------------------	-----

kubernetes + CREATE ⌵

Cluster > Namespaces > default OVERVIEW

Cluster

- Namespaces
- Nodes
- Persistent Volumes
- Roles
- Storage Classes

Namespace: default

Overview

Workloads

- Cron Jobs
- Daemon Sets
- Deployments
- Jobs
- Pods
- Replica Sets
- Replication Controllers
- Stateful Sets

Discovery and Load Balancing

- Ingresses
- Services

Config and Storage

- Config Maps
- Persistent Volume Claims
- Secrets

Settings

Details

Name: default
Creation Time: 2019-06-24T17:04 UTC
Status: Active

Events

Message	Source	Sub-object	Count	First seen	Last seen
Successfully assigned default/nuestro-httpd-6dd7c74c9c-78msm to minikube	default-scheduler	-	1	2019-06-25T07:31 UTC	2019-06-25T07:31 UTC
Pulling image 'httpd'	kubelet minikube	spec.containers(nuestro-httpd)	1	2019-06-25T07:31 UTC	2019-06-25T07:31 UTC
Successfully pulled image 'httpd'	kubelet minikube	spec.containers(nuestro-httpd)	1	2019-06-25T07:32 UTC	2019-06-25T07:32 UTC
Created container nuestro-httpd	kubelet minikube	spec.containers(nuestro-httpd)	1	2019-06-25T07:32 UTC	2019-06-25T07:32 UTC
Started container nuestro-httpd	kubelet minikube	spec.containers(nuestro-httpd)	1	2019-06-25T07:32 UTC	2019-06-25T07:32 UTC
Successfully assigned default/nuestro-httpd-6dd7c74c9c-ft6pv to minikube	default-scheduler	-	1	2019-06-25T07:31 UTC	2019-06-25T07:31 UTC
Pulling image 'httpd'	kubelet minikube	spec.containers(nuestro-httpd)	1	2019-06-25T07:31 UTC	2019-06-25T07:31 UTC
Successfully pulled image 'httpd'	kubelet minikube	spec.containers(nuestro-httpd)	1	2019-06-25T07:32 UTC	2019-06-25T07:32 UTC
Created container nuestro-httpd	kubelet minikube	spec.containers(nuestro-httpd)	1	2019-06-25T07:32 UTC	2019-06-25T07:32 UTC
Started container nuestro-httpd	kubelet minikube	spec.containers(nuestro-httpd)	1	2019-06-25T07:32 UTC	2019-06-25T07:32 UTC

1 - 10 of 19 |< < > >|

```
[labs@hp minikube]$ kubectl get pods
NAME                                READY STATUS RESTARTS AGE
nuestro-httpd-6dd7c74c9c-78msm    1/1   Running 0      29m
nuestro-httpd-6dd7c74c9c-ft6pv    1/1   Running 0      29m
nuestro-httpd-6dd7c74c9c-xnj9w    1/1   Running 0      29m
```



↘ [Exponemos para el puerto '80'.](#)

```
[labs@hp minikube]$ kubectl expose pod nuestro-httpd-6dd7c74c9c-78msm --port=80 --name=nuestro-httpd-expuesto --type=NodePort
service/nuestro-httpd-expuesto exposed
```

```
[labs@hp minikube]$ kubectl get services
NAME                TYPE        CLUSTER-IP    EXTERNAL-IP  PORT(S)        AGE
kubernetes          ClusterIP   10.96.0.1     <none>       443/TCP        14h
nuestro-httpd-expuesto NodePort    10.104.149.190 <none>      80:31871/TCP   24s
```

```
[labs@hp minikube]$ minikube ip
192.168.99.101
```

```
[labs@hp minikube]$ curl 192.168.99.101:31871
<html><body><h1>It works!</h1></body></html>
```

```
[labs@hp minikube]$ kubectl get all
NAME                READY STATUS RESTARTS AGE
pod/nuestro-httpd-6dd7c74c9c-78msm 1/1   Running 0       33m
pod/nuestro-httpd-6dd7c74c9c-ft6pv 1/1   Running 0       33m
pod/nuestro-httpd-6dd7c74c9c-xnj9w 1/1   Running 0       33m
```

```
NAME                TYPE        CLUSTER-IP    EXTERNAL-IP  PORT(S)        AGE
service/kubernetes  ClusterIP   10.96.0.1     <none>       443/TCP        15h
service/nuestro-httpd-expuesto NodePort    10.104.149.190 <none>      80:31871/TCP   7m32s
```

```
NAME                READY UP-TO-DATE AVAILABLE AGE
deployment.apps/nuestro-httpd 3/3   3       3       33m
```

```
NAME                DESIRED CURRENT READY AGE
replicaset.apps/nuestro-httpd-6dd7c74c9c 3      3       3       33m
```

```
[labs@hp minikube]$ kubectl get events --sort-by=.metadata.creationTimestamp | tail -n 30
LAST SEEN   TYPE      REASON          OBJECT                                     MESSAGE
48m        Normal    Scheduled       pod/nuestro-httpd-6dd7c74c9c-78msm      Successfully assigned default/nuestro-httpd-6dd7c74c9c-78msm to minikube
48m        Normal    SuccessfulCreate replicaset/nuestro-httpd-6dd7c74c9c      Created pod: nuestro-httpd-6dd7c74c9c-ft6pv
48m        Normal    SuccessfulCreate replicaset/nuestro-httpd-6dd7c74c9c      Created pod: nuestro-httpd-6dd7c74c9c-78msm
48m        Normal    SuccessfulCreate replicaset/nuestro-httpd-6dd7c74c9c      Created pod: nuestro-httpd-6dd7c74c9c-xnj9w
```



```

48m    Normal    Scheduled    pod/nuestro-httpd-6dd7c74c9c-xnj9w    Successfully assigned
default/nuestro-httpd-6dd7c74c9c-xnj9w to minikube
48m    Normal    Scheduled    pod/nuestro-httpd-6dd7c74c9c-ft6pv    Successfully assigned
default/nuestro-httpd-6dd7c74c9c-ft6pv to minikube
48m    Normal    ScalingReplicaSet    deployment/nuestro-httpd    Scaled up replica set
nuestro-httpd-6dd7c74c9c to 3
48m    Normal    Pulling     pod/nuestro-httpd-6dd7c74c9c-ft6pv    Pulling image "httpd"
48m    Normal    Pulling     pod/nuestro-httpd-6dd7c74c9c-xnj9w    Pulling image "httpd"
48m    Normal    Pulling     pod/nuestro-httpd-6dd7c74c9c-78msm    Pulling image "httpd"
48m    Normal    Created     pod/nuestro-httpd-6dd7c74c9c-xnj9w    Created container
nuestro-httpd
48m    Normal    Started     pod/nuestro-httpd-6dd7c74c9c-xnj9w    Started container
nuestro-httpd
48m    Normal    Pulled     pod/nuestro-httpd-6dd7c74c9c-xnj9w    Successfully pulled
image "httpd"
48m    Normal    Pulled     pod/nuestro-httpd-6dd7c74c9c-ft6pv    Successfully pulled image
"httpd"
48m    Normal    Created     pod/nuestro-httpd-6dd7c74c9c-ft6pv    Created container
nuestro-httpd
48m    Normal    Started     pod/nuestro-httpd-6dd7c74c9c-ft6pv    Started container nuestro-
httpd
48m    Normal    Started     pod/nuestro-httpd-6dd7c74c9c-78msm    Started container
nuestro-httpd
48m    Normal    Created     pod/nuestro-httpd-6dd7c74c9c-78msm    Created container
nuestro-httpd
48m    Normal    Pulled     pod/nuestro-httpd-6dd7c74c9c-78msm    Successfully pulled
image "httpd"

```

↘ [Creamos un despliegue para otro namespace distinto → 'kube-public'.](#)

```

[labs@hp minikube]$ kubectl run nuestro-nginx --image=nginx --replicas=2
--namespace=kube-public --labels="app=nuestro-nginx-demo1"
kubectl run --generator=deployment/apps.v1 is DEPRECATED and will be removed in a future
version. Use kubectl run --generator=run-pod/v1 or kubectl create instead.
deployment.apps/nuestro-nginx created

```

```

[labs@hp minikube]$ kubectl get pods --namespace kube-public
NAME                                READY STATUS RESTARTS AGE
nuestro-nginx-85d8dc99c6-5twgr      1/1   Running 0      2m40s
nuestro-nginx-85d8dc99c6-j7rxb      1/1   Running 0      2m40s

```

```

[labs@hp minikube]$ kubectl get all --namespace kube-public
NAME                                READY STATUS RESTARTS AGE
pod/nuestro-nginx-85d8dc99c6-5twgr  1/1   Running 0      3m31s
pod/nuestro-nginx-85d8dc99c6-j7rxb  1/1   Running 0      3m31s

```

```

NAME                                READY UP-TO-DATE AVAILABLE AGE

```



```
deployment.apps/nuestro-nginx 2/2 2 2 3m31s
```

```
NAME                               DESIRED  CURRENT  READY  AGE
replicaset.apps/nuestro-nginx-85d8dc99c6 2      2      2      3m31s
```

```
[labs@hp minikube]$ kubectl get pods --namespace kube-public -l "app=nuestro-nginx-demo1"
```

```
NAME                               READY  STATUS   RESTARTS  AGE
nuestro-nginx-85d8dc99c6-5twgr 1/1    Running  0          8m12s
nuestro-nginx-85d8dc99c6-j7rxk 1/1    Running  0          8m12s
```

```
[labs@hp minikube]$ kubectl get deploy --namespace=kube-public
```

```
NAME      READY  UP-TO-DATE  AVAILABLE  AGE
nuestro-nginx 2/2    2          2          19m
```

↘ [Podemos editar nuestro despliegue con 'vim', ...](#)

```
[labs@hp minikube]$ kubectl edit deploy nuestro-nginx --namespace=kube-public
```

```
# Please edit the object below. Lines beginning with a '#' will be ignored,
# and an empty file will abort the edit. If an error occurs while saving this file will be
# reopened with the relevant failures.
```

```
#
```

```
apiVersion: extensions/v1beta1
```

```
kind: Deployment
```

```
metadata:
```

```
  annotations:
```

```
    deployment.kubernetes.io/revision: "1"
```

```
  creationTimestamp: "2019-06-25T08:31:49Z"
```

```
  generation: 1
```

```
  labels:
```

```
    app: nuestro-nginx-demo1
```

```
  name: nuestro-nginx
```

```
  namespace: kube-public
```

```
  resourceVersion: "20343"
```

```
  selfLink: /apis/extensions/v1beta1/namespaces/kube-public/deployments/nuestro-nginx
```

```
  uid: 1daef957-6293-4cc5-8465-fe0d8748db4d
```

```
spec:
```

```
  progressDeadlineSeconds: 600
```

```
  replicas: 2
```

```
  revisionHistoryLimit: 10
```

```
  selector:
```

```
    matchLabels:
```

```
      app: nuestro-nginx-demo1
```

```
  strategy:
```

```
    rollingUpdate:
```

```
      maxSurge: 25%
```

```
      maxUnavailable: 25%
```



```
type: RollingUpdate
template:
  metadata:
    creationTimestamp: null
  labels:
    app: nuestro-nginx-demo1
  spec:
    containers:
      - image: nginx
        imagePullPolicy: Always
        name: nuestro-nginx
        resources: {}
        terminationMessagePath: /dev/termination-log
        terminationMessagePolicy: File
    dnsPolicy: ClusterFirst
    restartPolicy: Always
    schedulerName: default-scheduler
    securityContext: {}
    terminationGracePeriodSeconds: 30
status:
  availableReplicas: 2
  conditions:
    - lastTransitionTime: "2019-06-25T08:32:28Z"
      lastUpdateTime: "2019-06-25T08:32:28Z"
      message: Deployment has minimum availability.
      reason: MinimumReplicasAvailable
      status: "True"
      type: Available
    - lastTransitionTime: "2019-06-25T08:31:49Z"
      lastUpdateTime: "2019-06-25T08:32:28Z"
      message: ReplicaSet "nuestro-nginx-85d8dc99c6" has successfully progressed.
      reason: NewReplicaSetAvailable
      status: "True"
      type: Progressing
  observedGeneration: 1
  readyReplicas: 2
  replicas: 2
  updatedReplicas: 2
```

```
[labs@hp minikube]$ kubectl get rs --namespace=kube-public
```

NAME	DESIRED	CURRENT	READY	AGE
nuestro-nginx-85d8dc99c6	2	2	2	22m



REFERENCIAS:

<https://www.cadilinea.com/blog/wp-content/uploads/2019/05/01-kubernetes-cats-and-dogs.pdf>

<https://kubernetes.io/docs/tasks/access-application-cluster/web-ui-dashboard/>

Learn Openshift – Pack Publishing – Denis Zuev, Aertemii Kropachev (2018)

Creative Commons

Reconocimiento-NoComercial-CompartirIgual 3.1 ESPAÑA

© 2019 by carlos briso. Usted es libre de copiar, distribuir y comunicar públicamente la obra y hacer obras derivadas bajo las condiciones siguientes:

a) Debe reconocer y citar al autor original.

b) No puede utilizar esta obra para fines comerciales (incluyendo su publicación, a través de cualquier medio, por entidades con fines de lucro.

c) Si altera o transforma esta obra o genera una obra derivada, sólo puede distribuir la obra generada bajo una licencia idéntica a ésta. Al reutilizar o distribuir la obra, tiene que dejar bien claro los términos de la licencia de esta obra.

Alguna de estas condiciones puede no aplicarse si se obtiene el permiso del titular de los derechos de autor. Los derechos derivados de usos legítimos u otras limitaciones no se ven afectados por lo anterior. Licencia completa en castellano.

→ La información contenida en este documento y los derivados de éste se proporcionan tal cual son y los autores no asumirán responsabilidad alguna si el usuario o lector hace mal uso de éstos.