











Creating an IBM Cloud Kubernetes cluster

Run with the following command to create a cluster:

Replace the workers parameter above with the desired number of worker nodes.

If you're starting in a fresh account with no public and private VLANs, they are created automatically for you when creating a Kubernetes cluster with worker nodes provider classic for the first time. If you already have VLANs configured in your account, retrieve them via <code>ibmcloud ks vlans --zone \${CLUSTER_ZONE}</code> and include the public and private VLAN ids (set in the PUBLIC_VLAN_ID and PRIVATE_VLAN_ID environment variables) in the command.

```
ibmcloud ks cluster create ${WORKER_N
--name=$CLUSTER_NAME \
--zone=$CLUSTER_ZONE \
--version=${KUBERNETES_VERSION} \
--flavor ${WORKER_NODE_FLAVOR} \
--workers=2 \
--private-vlan ${PRIVATE_VLAN_ID} \
--public-vlan ${PUBLIC_VLAN_ID}
```

Wait until the cluster is deployed and configured. It can take a while for the cluster to be ready. Run with following command to periodically check the state of your cluster. Your cluster is ready when the state is normal.

```
ibmcloud ks clusters --provider ${WOR
```

Verifying the cluster

To use the created cluster, switch the Kubernetes context to point to the cluster with the command

```
ibmcloud ks cluster config --cluster
```

Make sure all worker nodes are up with the command below

```
kubectl get nodes
```

and make sure all the nodes are in Ready state.

Delete the cluster

Delete the cluster including it's storage:

ibmcloud ks cluster rm --force-delete

docker build -t tutum/hello-world .

You can now push your new image to the registry:

sudo docker push tutum/hello-world

Running your Hello World docker image

Start your image:

sudo docker run -d -p 80 tutum/hello-world

It will print the new container ID (like d35bf1374e88). Get the allocated external port:

sudo docker port d35bf1374e88 80

It will print the allocated port (like 4751). Test your deployment:

curl http://localhost:4751/

Hello world!