Kubernetes graphical dashboard

A graphical web user interface (dashboard) has been introduced in recent versions of Kubernetes. The dashboard allows you to get started quickly and enables some of the functionality found in the CLI as a more approachable and discoverable way of interacting with the system.

To get started, run the following command to grant cluster level permissions:

```
kubectl create clusterrolebinding cluster-admin-binding --
clusterrole=cluster-admin --user=$(gcloud config get-value account)
```

With the appropriate permissions set, run the following command to create a new dashboard service:

```
kubectl apply -f
https://raw.githubusercontent.com/kubernetes/dashboard/v1.10.1/src/deploy/rec
ommended/kubernetes-dashboard.yaml
```

You should receive a similar output:

```
secret "kubernetes-dashboard-certs" created
serviceaccount "kubernetes-dashboard" created
role.rbac.authorization.k8s.io "kubernetes-dashboard-minimal" created
rolebinding.rbac.authorization.k8s.io "kubernetes-dashboard-minimal" created
deployment.apps "kubernetes-dashboard" created
service "kubernetes-dashboard" created
```

Now run the following command to edit the `yaml` representation of the dashboard service:

```
kubectl -n kube-system edit service kubernetes-dashboard
```

Press `i` to enter the editing mode.
Change `type: ClusterIP` to `type: NodePort`.
After making the change, save and close this file. Press **Esc**, then:

```
:wq
```

To log in to the Kubernetes dashboard you must authenticate using a token. Use a token allocated to a service account, such as the `namespace-controller`.
To get the token value, run the following command:

```
kubectl -n kube-system describe $(kubectl -n kube-system \
get secret -n kube-system -o name | grep namespace) | grep token:
```

You should receive a similar Output:

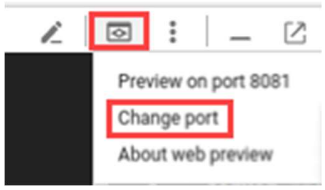
```
token:
eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJrdWJlcm5ldGVzL3NlcnZpY2VhY2Nv
dW50Iiwia3ViZXJuZXRlcy5pby9zZXJ2aWNlYWNjb3VudC9uYW1lc3BhY2UiOiJrdWJlLXN5c3Rlb
SIsImt1YmVybmV0ZXMuaW8vc2VydmljZWFjY291bnQvc2VjcmV0Lm5hbWUiOiJuYW1lc3BhY2UtY2
9udHJvbGxlci10b2tlbi1kOTZyNCIsImt1YmVybmV0ZXMuaW8vc2VydmljZWFjY291bnQvc2Vydml
```

```
jZS1hY2NvdW50Lm5hbWUiOiJuYW1lc3BhY2UtY29udHJvbGxlciIsImt1YmVybmV0ZXMuaW8vc2Vy
dmljZWFjY291bnQvc2VydmljZS1hY2NvdW50LnVpZCI6ImU2ZmFkNGQ5LTJjNjYtMTFlOC05NDFiL
TQyMDEwYTgwMDFlYiIsInN1YiI6InN5c3RlbTpzZXJ2aWNlYWNjb3VudDprdWJlLXN5c3RlbTpuYW
1lc3BhY2UtY29udHJvbGxlciJ9.AY3Fp-T_4wxTzvo4kiWi4zxojVTSr1Wy7BL_-
HmIRlWTRAUmy_1RAJS19zn4BbSkxlV13Y9Bv3NoVcG01jKd4QoM172OXo2TqSU5v2B62i3-
_CDZtf3CVgQIp9jiuxACcR5zg3w-
4ewGfH4C3ospoKCuayyRaADLq0ThWLGaTQv9e7UjSfWAPir3XPXQut3mMRYrSiHcFNiEGeztSfF3c
yhuvL2I5Lfh20yYuqW5j-w72BLnlqQGPuhJXJgH1_35XUCU8WtnkEK-qYX40ajDWJYa1s9_R-
MWzF6Zwji2Gh5txOvxG3lZuIq9GSAOBp85617wB3eCGio6Nu3L9TwWXA
```

Copy the token and save it to use later to get into the Kubernetes dashboard. Run the following command to open a connection:

```
kubectl proxy --port 8081
```

Then use the Cloud Shell Web preview feature to change ports to **8081**:



This should send you to the API endpoint.

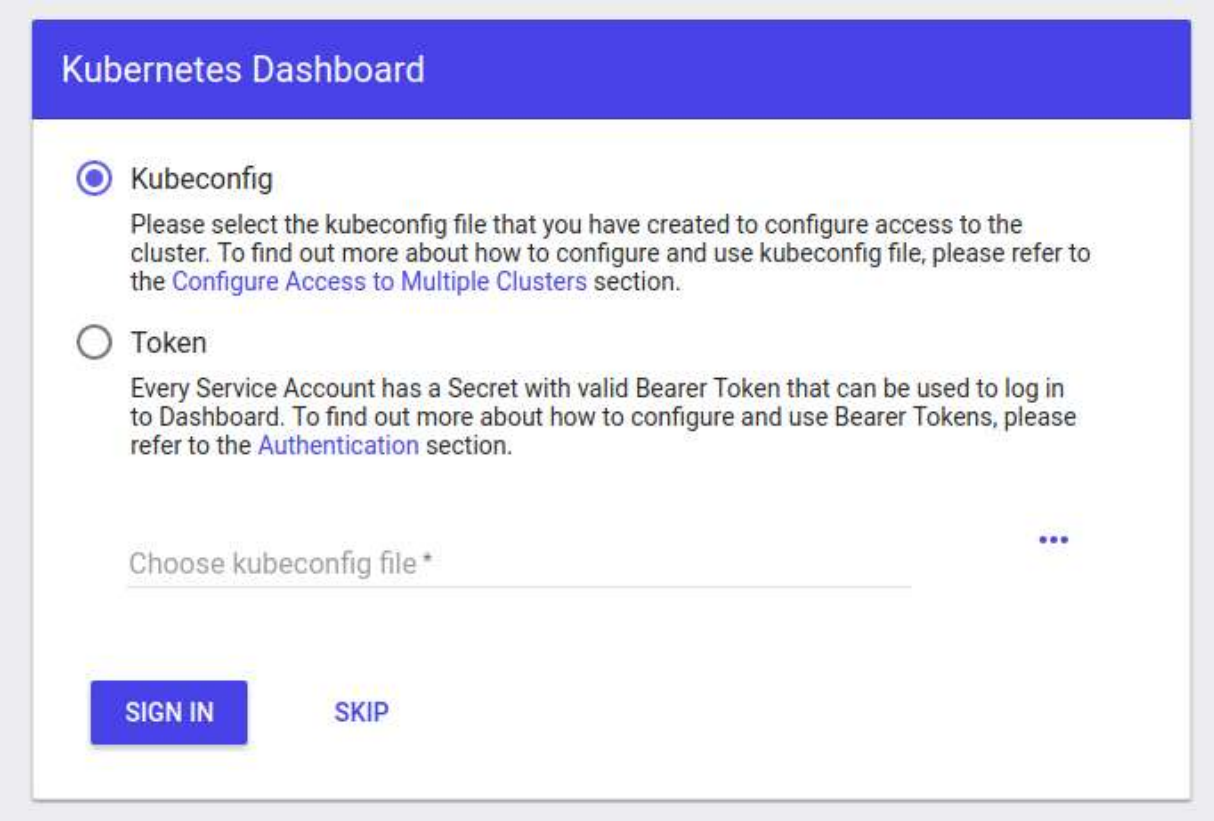
To get to the dashboard, remove `/?authuser=0` and append the URL with the following:

```
/api/v1/namespaces/kube-system/services/https:kubernetes-
dashboard:/proxy/#!/overview?namespace=default
```

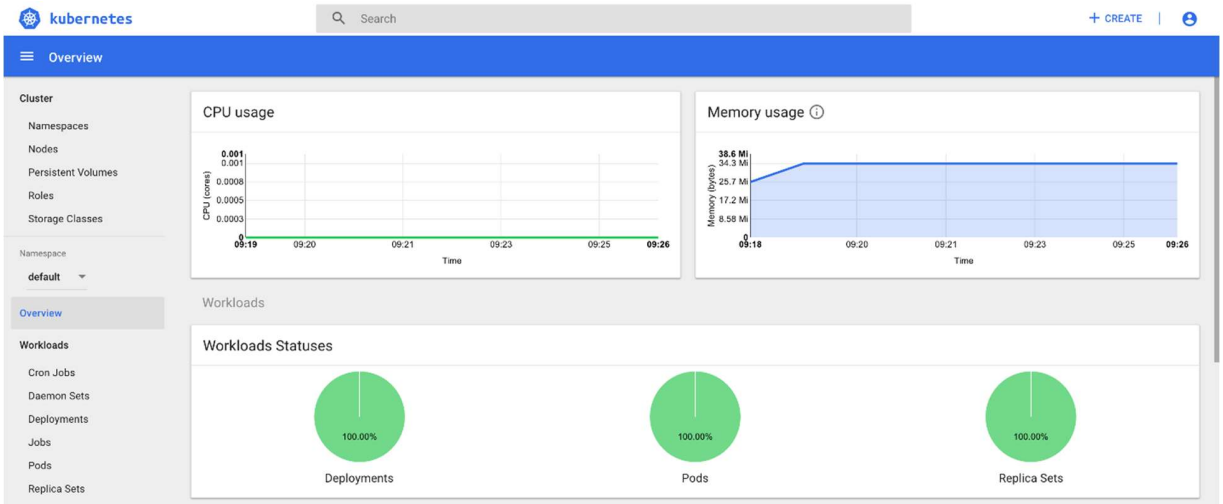
Your final URL should resemble the following:

```
https://8081-dot-5177448-dot-devshell.appspot.com/api/v1/namespaces/kube-
system/services/https:kubernetes-
dashboard:/proxy/#!/overview?namespace=default
```

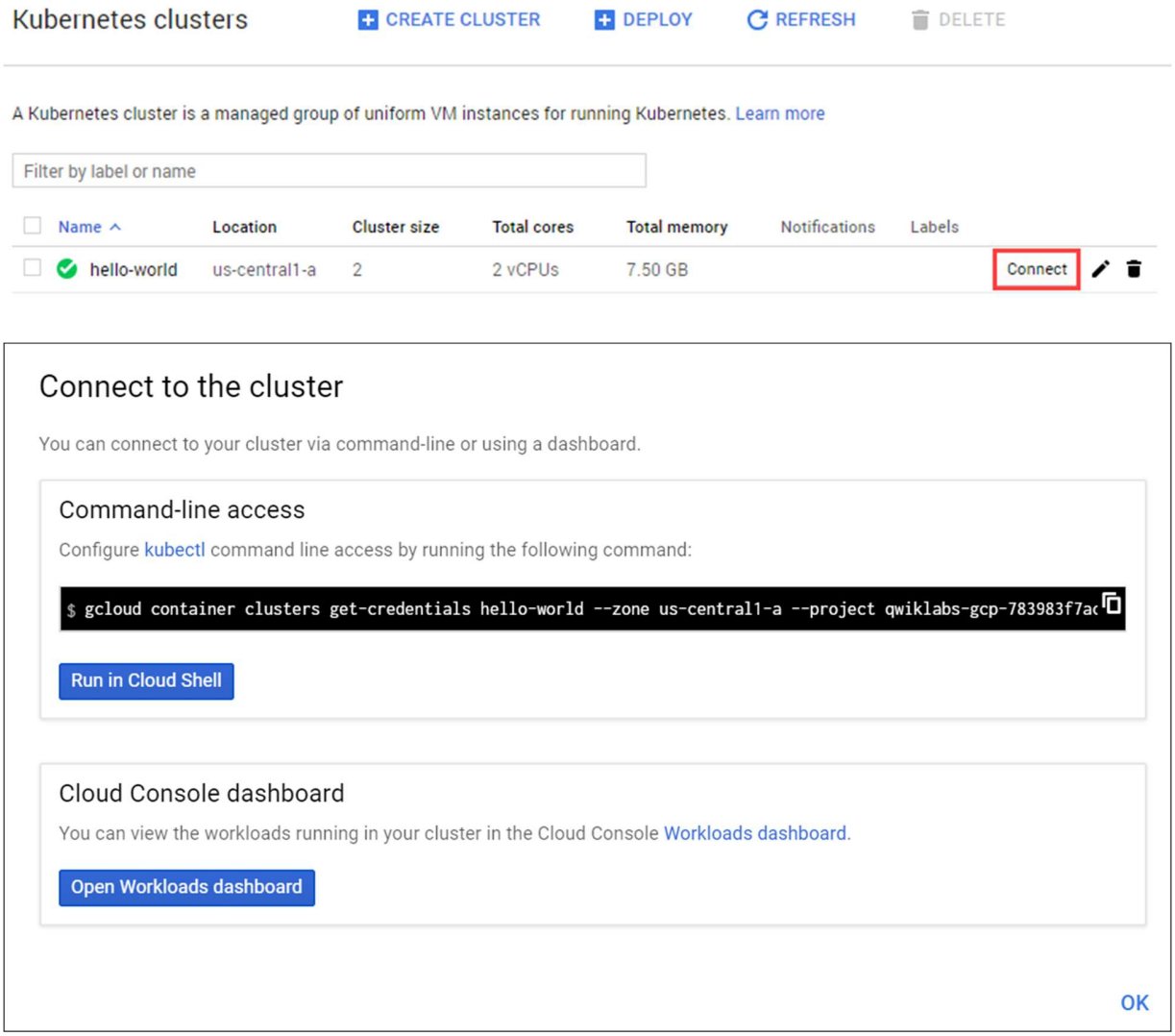
You will then be taken a web preview:



Select the **Token** radio button and paste the token copied from previous step.
Click **Sign In**.
Enjoy the Kubernetes graphical dashboard and use it for deploying containerized applications, as well as for monitoring and managing your clusters!



You can access the dashboard from a development or local machine from the Web console. You would select **Navigation menu** > **Kubernetes Engine**, and then click the **Connect** button for the cluster you want to monitor.



Learn more about the Kubernetes dashboard by taking the Dashboard tour.