

INSTALLING KUBERNETES DASHBOARD

Steps for Master

Visit the following website

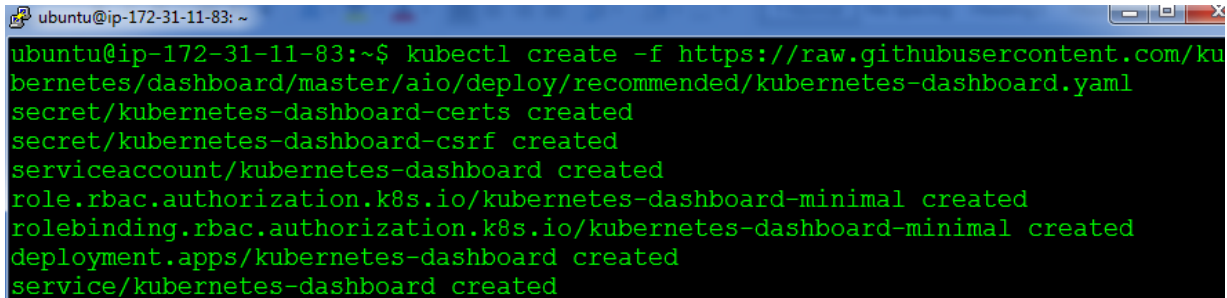
<https://kubernetes.io/docs/tasks/access-application-cluster/web-ui-dashboard/#deploying-the-dashboard-ui>

Step 1: Copy the following link from the above website and paste in the terminal

Deploying the Dashboard UI

The Dashboard UI is not deployed by default. To deploy it, run the following command:

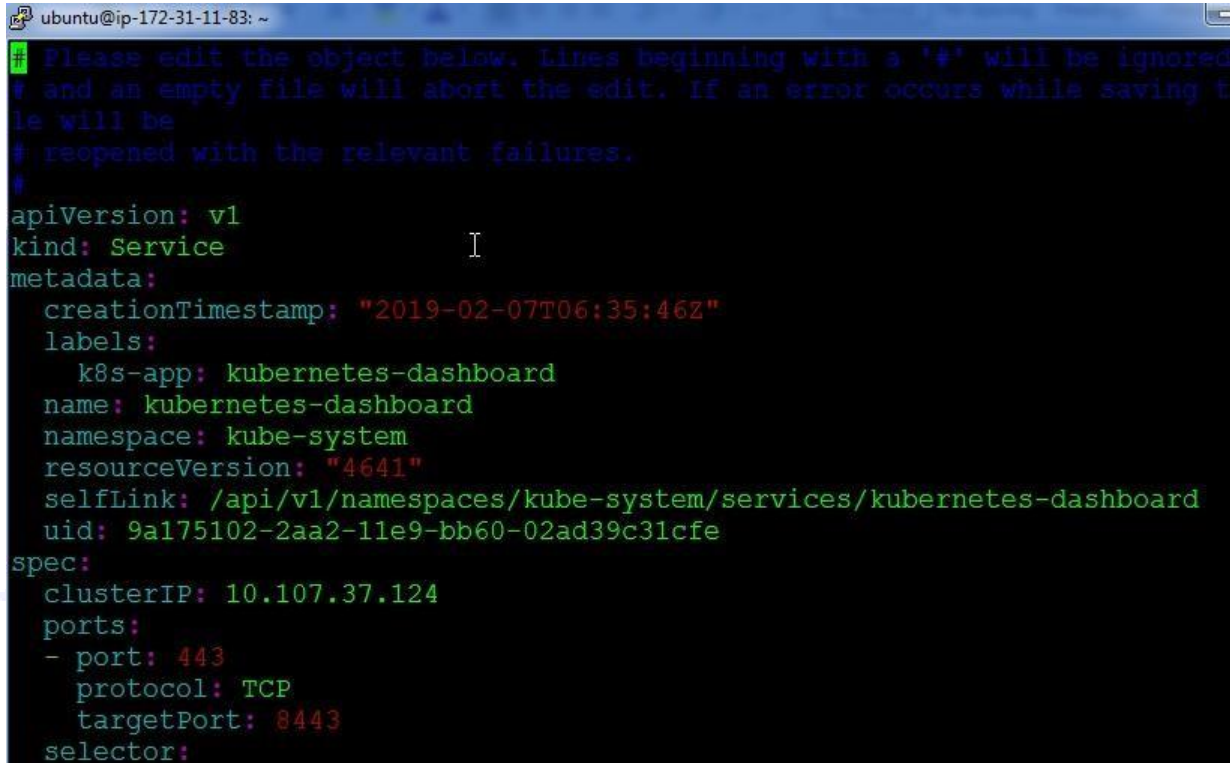
```
kubectl apply -f https://raw.githubusercontent.com/kubernetes/dashboard/v2.0.0/aio/
```



```
ubuntu@ip-172-31-11-83: ~  
ubuntu@ip-172-31-11-83:~$ kubectl create -f https://raw.githubusercontent.com/kubernetes/dashboard/master/aio/deploy/recommended/kubernetes-dashboard.yaml  
secret/kubernetes-dashboard-certs created  
secret/kubernetes-dashboard-csrf 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
```

Step 2: Edit the Kubernetes Dashboard service with this command

```
$ kubectl edit svc kubernetes-dashboard -n kubernetes-  
dashboard
```



```
ubuntu@ip-172-31-11-83: ~  
# 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,  
# the file will be  
# reopened with the relevant failures.  
#  
apiVersion: v1  
kind: Service  
metadata:  
  creationTimestamp: "2019-02-07T06:35:46Z"  
  labels:  
    k8s-app: kubernetes-dashboard  
  name: kubernetes-dashboard  
  namespace: kube-system  
  resourceVersion: "4641"  
  selfLink: /api/v1/namespaces/kube-system/services/kubernetes-dashboard  
  uid: 9a175102-2aa2-11e9-bb60-02ad39c31cfe  
spec:  
  clusterIP: 10.107.37.124  
  ports:  
  - port: 443  
    protocol: TCP  
    targetPort: 8443  
  selector:
```

Step 3: Change the text “clusterip” to “nodeport”, once done save and exit.

```
ubuntu@ip-172-31-11-83: ~  
apiVersion: v1  
kind: Service  
metadata:  
  creationTimestamp: "2019-02-07T06:35:  
  labels:  
    k8s-app: kubernetes-dashboard  
  name: kubernetes-dashboard  
  namespace: kube-system  
  resourceVersion: "4641"  
  selfLink: /api/v1/namespaces/kube-sys  
  uid: 9a175102-2aa2-11e9-bb60-02ad39c3  
spec:  
  clusterIP: 10.107.37.124  
  ports:  
  - port: 443  
    protocol: TCP  
    targetPort: 8443  
  selector:  
    k8s-app: kubernetes-dashboard  
  sessionAffinity: None  
  type: NodePort  
status:  
  loadBalancer: {}
```

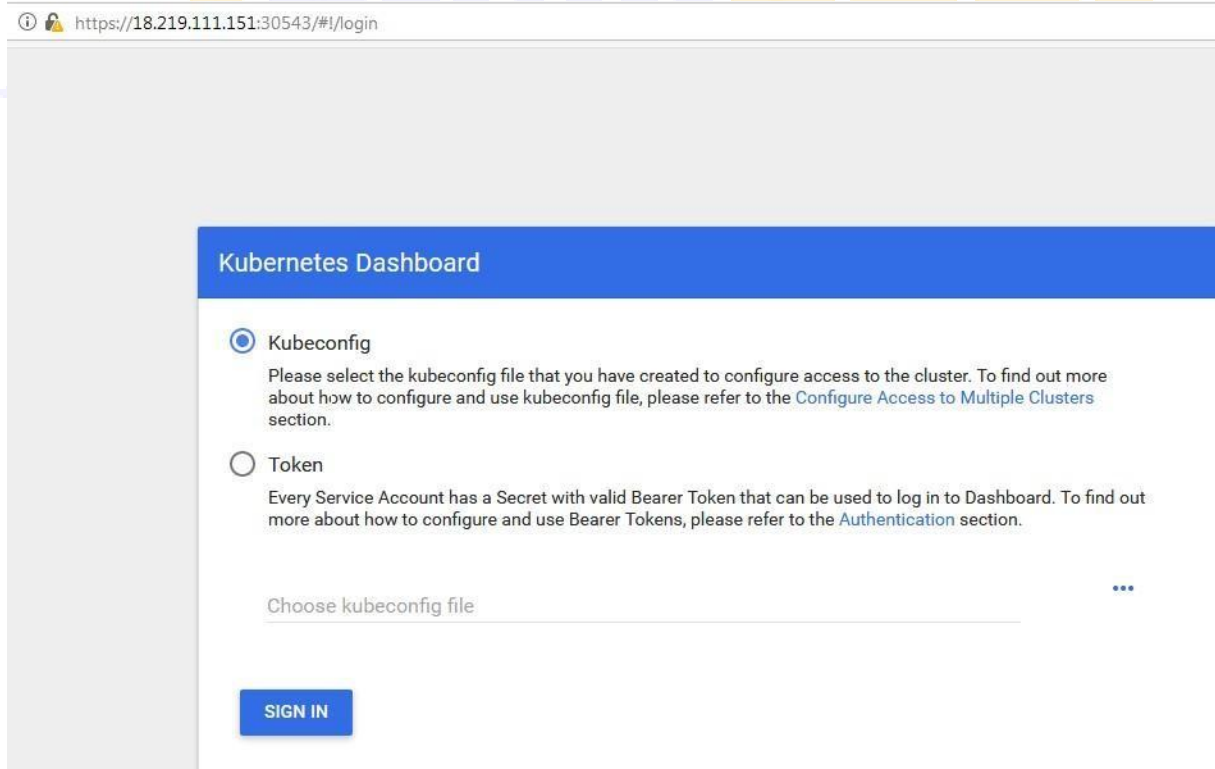
Step 4: Finally note down the IP address of the kubernetes-dashboard service using the following command:

```
$ kubectl get svc kubernetes-dashboard -n kubernetes-dashboard
```

```
ubuntu@ip-172-31-11-83: ~  
ubuntu@ip-172-31-11-83:~$ kubectl get svc kubernetes-dashboard -n kube-system  
NAME                                TYPE             CLUSTER-IP      EXTERNAL-IP      PORT(S)  
AGE  
kubernetes-dashboard               NodePort          10.107.37.124    <none>           443:30543/TCP  
8m39s  
ubuntu@ip-172-31-11-83:~$
```

Step 5: Next browse, to the following address, to see the login page of the dashboard:

```
https://<ip-address-of-master-or-slave>:<nodeport>
```



The screenshot shows a web browser window with the address bar displaying `https://18.219.111.151:30543/#/login`. The page content is the Kubernetes Dashboard login interface. It has a blue header bar with the text "Kubernetes Dashboard". Below the header, there are two radio button options: "Kubeconfig" (which is selected) and "Token". The "Kubeconfig" option has a descriptive paragraph and a link to "Configure Access to Multiple Clusters". The "Token" option also has a descriptive paragraph and a link to "Authentication". Below these options is a text input field labeled "Choose kubeconfig file" with a three-dot menu icon to its right. At the bottom left of the form is a blue "SIGN IN" button.

Step 6: For logging in, use the following commands:

```
# Create service account

kubectl create serviceaccount cluster-admin-dashboard-sa

# Bind ClusterAdmin role to the service account

kubectl create clusterrolebinding cluster-admin-dashboard-sa \
--clusterrole=cluster-admin \
--serviceaccount=default:cluster-admin-dashboard-sa

# Parse the token

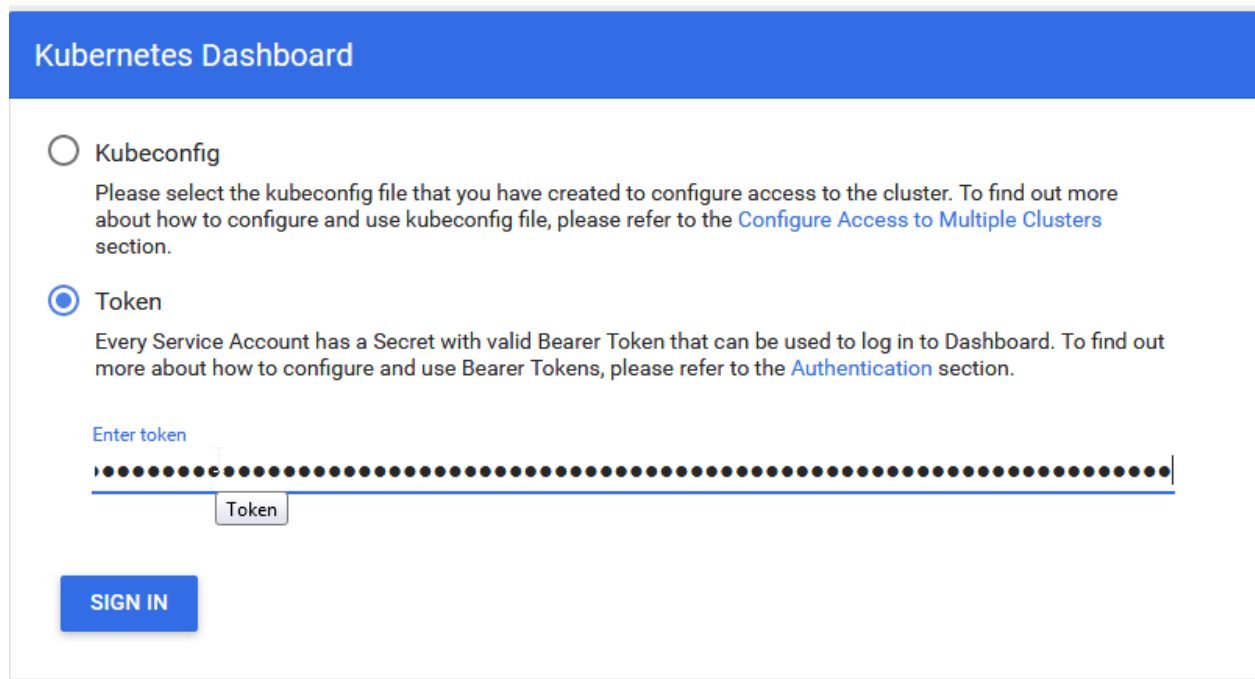
TOKEN=$(kubectl describe secret $(kubectl -n kube-system get secret | awk '/^cluster-admin-dashboard-token-/ {print $1}') | awk '$1=="token:" {print $2}')
```

Step 7: Now pass the following command, to view the token:

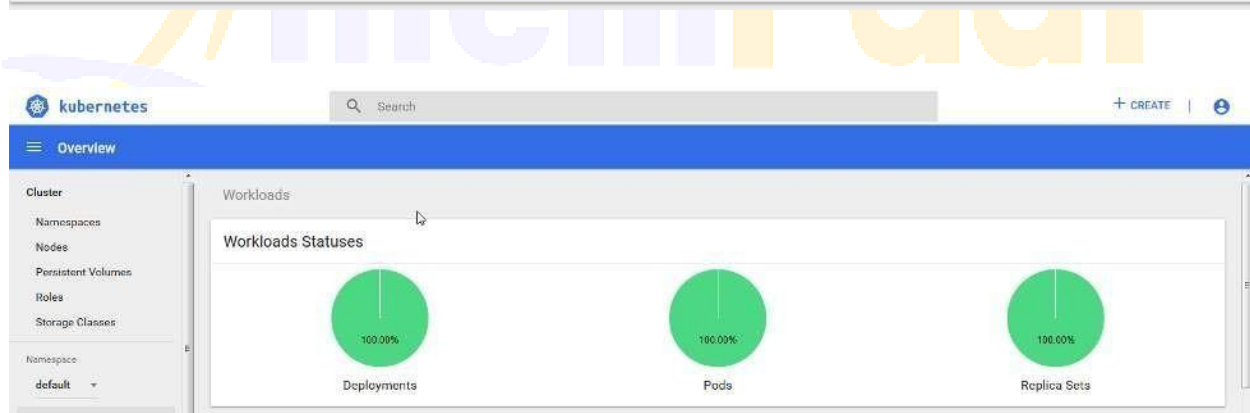
```
echo $TOKEN
```

```
ubuntu@ip-172-31-11-83: ~
ubuntu@ip-172-31-11-83:~$ echo $TOKEN
eyJhbGciOiJSUzI1NiIsImtpZCI6IiJ9.eyJpc3MiOiJrdWJlcm5ldGVzL3N1cnZpY2VhY2NvdW50Iiwia3ViZXJ2ZXRlc5pby9zZXJ2aWNlYWNjb3VudC9uYW1lc3BhY2UiOiJkZWZhdWx0Iiwia3ViZXJ2ZXRlc5pby9zZXJ2aWNlYWNjb3VudC9zZWNyZXQubmFtZSI6ImNsdXN0ZXItYWRtaW4tZGFzaGJvYXJkLXNhLXRva2VuLTJua3R0Iiwia3ViZXJ2ZXRlc5pby9zZXJ2aWNlYWNjb3VudC9zZXJ2aWNlLWFfjY291bnQubmFtZSI6ImNsdXN0ZXItYWRtaW4tZGFzaGJvYXJkLXNhIiwia3ViZXJ2ZXRlc5pby9zZXJ2aWNlYWNjb3VudC9zZXJ2aWNlLWFfjY291bnQudWlkIjoizGEeXOWU0YjgtMmFhNC0xMWU5LWJiInJATMDJhZDM5Y2MxY2ZlIiwic3ViIjoiczlzdGVtOnN1cnZpY2VhY2NvdW50OmRlZmFlbHQ6Y2xlc3RlcilhZG1pbilKYXN0Ym9hcmQtc2EifQ.Vs8Nq2x3tIs2varemmnY3Mnz3IkBoT58Dur7ERB9_DteuHoMvw6vdmNlKbcMvbbcfQ8wlatSPawOIHEOUT37hbXC7DUWgx5dEO2m_Pii12lFt7zOwdK6fYappJTYEvSSTZdJMXn-80BKJJdd1JanYgVljKQTOnhPlmewEzSKYKMLztVC-RKoVe849sdJXCOTE_M_acIEq0tPDsOK4risKdR2q7_4PtJOFDikuYqZVM_pYor9pcAlto7TMITg_2-KNSABGRAR5XVYmhH_USHiUQjaZv_SeU-45LDQGEz34uatUqb0v81yy7iGwFfWtIKF7P1KKGZ2YVl1RffBgkf66Wg_eYJhbGciOiJSUzI1NiIsImtpZCI6IiJ9.eyJpc3MiOiJrdWJlcm5ldGVzL3N1cnZpY2VhY2NvdW50Iiwia3ViZXJ2ZXRlc5pby9zZXJ2aWNlYWNjb3VudC9uYW1lc3BhY2UiOiJkZWZhdWx0Iiwia3ViZXJ2ZXRlc5pby9zZXJ2aWNlYWNjb3VudC9zZWNyZXQubmFtZSI6ImRlZmFlbHQtdG9rZW4tNnQ4eHEiLCJrdWJlcm5ldGVzLmlvL3N1cnZpY2VhY2NvdW50L3N1cnZpY2UtyWNjb3VudC5uYW1lIjoizGVmYXVsdCIsImt1YmVybmV0ZXMuaW8vc2VydmljZWFfjY291bnQvc2VydmljZS1hY2NvdW50LnVpZCI6ImQzNGZmNGZlLTJhOWItMTFfLOSliYjYwLTAYYWQzOWMzMWNmZSIsInN1YiI6InN5c3RlbTpzZXJ2aWNlYWNjb3VudDpkZWZhdWx0OmRlZmFlbHQifQ.kjvJvGy9jOfzo1GhmQLQcSDmtfVUn4lwEmaE7K8VWPR2sFhJAlDcyf4aLme7dn6CMPe4VPpCWEPcQeee3QmDQI-o8JrFOVy5G5U0iJoJTWegOg_h3XSTF4nI6m4aOEeSvG1Z0AQf2RdJ75Gp9nLzIf47oMA4Jla4Ru0RMA5SbWtmwtDVNOHID2zXzVqZ3NTuw0Q3tt-aUP-q5U7b3BHmtdx3lroNFUVfasm9iv0q2tH-igeslBjvUraW9iMPFuN29H0uaYeiZCz4eK_zt9RNoTehH7FWNkzy_rmZBC_Uoqmp00J5PJgaKpka9B12h5Yo0G20n44Po_iCBEGnxqVeaW
```

Step 8: Copy this token and paste it in the login page of Kubernetes Dashboard:



The image shows the login page of the Kubernetes Dashboard. It has a blue header with the text "Kubernetes Dashboard". Below the header, there are two radio button options: "Kubeconfig" and "Token". The "Token" option is selected. Below the "Token" option, there is a text input field with a blue border and a blue underline. The input field contains a long string of black dots, representing a Bearer Token. Below the input field, there is a blue button with the text "SIGN IN".



Kubernetes Dashboard is now successfully installed!