

Dashboard WithOut Proxy

Enable additional Add-Ons

We will need to enable a few additional Kubernetes add-ons to get this functionality up and running.

```
microk8s enable ingress # Ingress exposes HTTP and HTTPS routes from outside the cluster to services within the cluster.
```

```
microk8s enable dashboard # web-based Kubernetes user interface
```

```
microk8s enable dns # creates DNS records for services and pods
```

```
microk8s enable storage # provide both long-term and temporary storage to Pods in your cluster.
```

Enable Host Access

We need to also enable one more additional add-on `host-access` to enable the access to services running on the host machine via fixed IP address.

We can enable to make use of the default address

```
microk8s enable host-access
```

Edit Kubernetes Dashboard Service

We need to edit the `kubernetes-dashboard` service file which provides dash-board functionality. To edit this we need to edit dashboard service and change service **type** from **ClusterIP** to **NodePort**.

We use the following command to edit the file using vim.

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

This should open the contents of the file in vim and it should look something similar file below

You need to change `type` to `NodePort`

```
# 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: v1
kind: Service
metadata:
  annotations:
    kubectl.kubernetes.io/last-applied-configuration: |
      {"apiVersion":"v1","kind":"Service","metadata":{"annotations":{"k8s-app":"kubernetes-
      dashboard"},"name":"kubernetes-dashboard","namespace":"kube-system"},"spec":{"ports":[{"
      port":443,"targetPort":8443}],"selector":{"k8s-app":"kubernetes-dashboard"}}}
    creationTimestamp: "2022-03-09T14:10:50Z"
  labels:
    k8s-app: kubernetes-dashboard
  name: kubernetes-dashboard
  namespace: kube-system
  resourceVersion: "1029725"
  selfLink: /api/v1/namespaces/kube-system/services/kubernetes-dashboard
  uid: b2608643-a712-4b44-abad-160cf140df49
spec:
  clusterIP: 10.152.183.220
  clusterIPs:
    - 10.152.183.220
  externalTrafficPolicy: Cluster
  internalTrafficPolicy: Cluster
  ipFamilies:
    - IPv4
  ipFamilyPolicy: SingleStack
  ports:
    - nodePort: 30536
  port: 443
  protocol: TCP
  targetPort: 8443
  selector:
    k8s-app: kubernetes-dashboard
  sessionAffinity: None
  type: clusterIP ## Change this to NodePort
status:
  loadBalancer: {}
```

Once you save and exit the file K8s will automatically restart the service.

We can then get the Port the service is running by using the following command

```
kubectl -n kube-system get services
```

Which should display something similar to the below and which we can see that the Dashboard is available on port `30536` in my case

Check Port

```
sudo snap install nmap
```

```
nmap localhost -p 32061
```

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
metrics-server	ClusterIP	10.152.183.108	<none>	443/TCP	7d4h
dashboard-metrics-scraper	ClusterIP	10.152.183.170	<none>	8000/TCP	7d4h
kube-dns	ClusterIP	10.152.183.10	<none>	53/UDP,53/TCP,9153/TCP	7d4h
kubernetes-dashboard	NodePort	10.152.183.220	<none>	443:30536/TCP	7d4h

We can now open our Firefox browser on any workstation on our network and navigate to

`https://{server ip}:{port number}` in my case it is <https://192.168.0.35:30536>

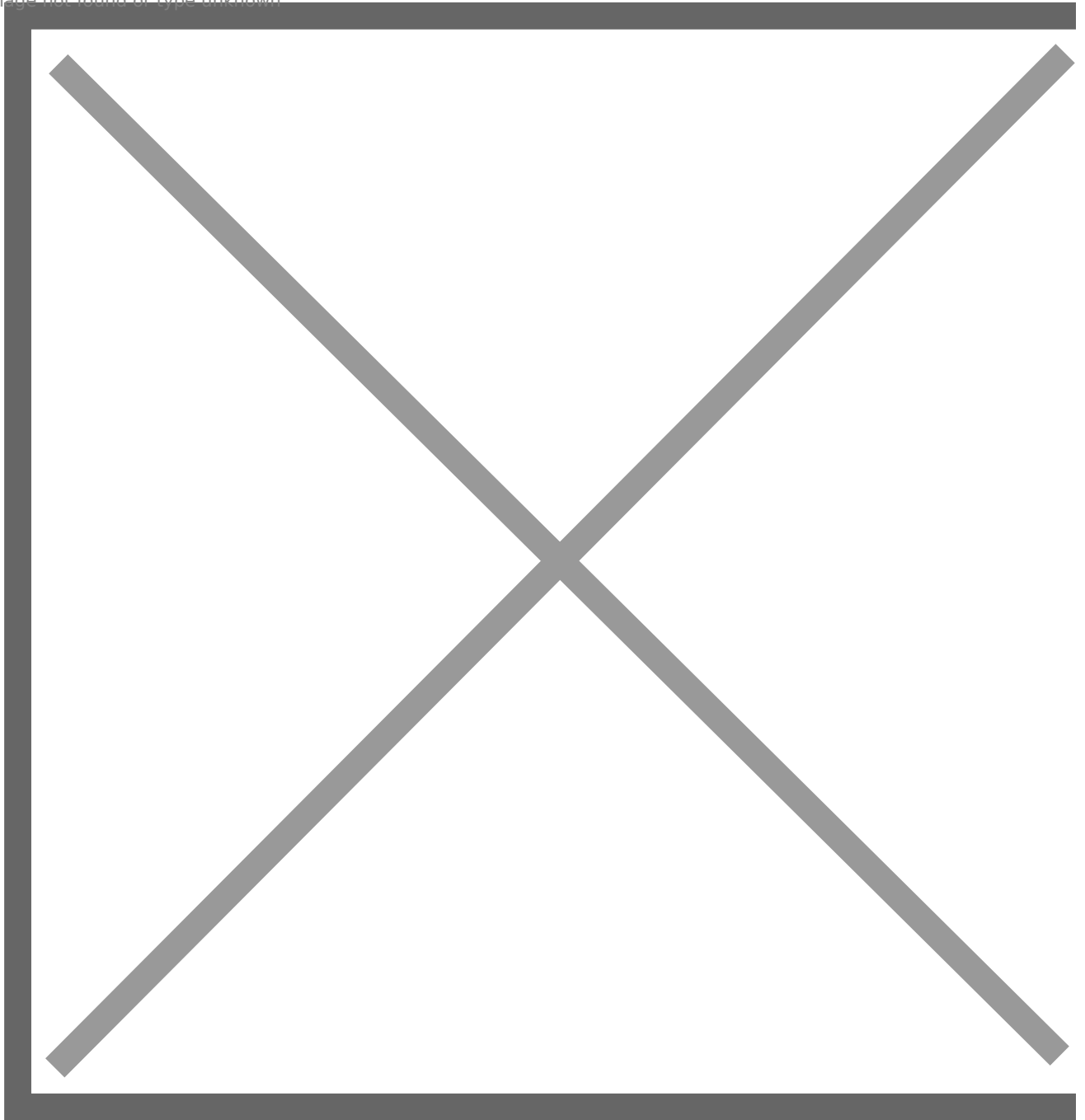
Get the token

We need to get the token from the server so we can do so using the following command in the server terminal

```
token=$(kubectl -n kube-system get secret | grep default-token | cut -d " " -f1) kubectl -n kube-system describe secret $token
```

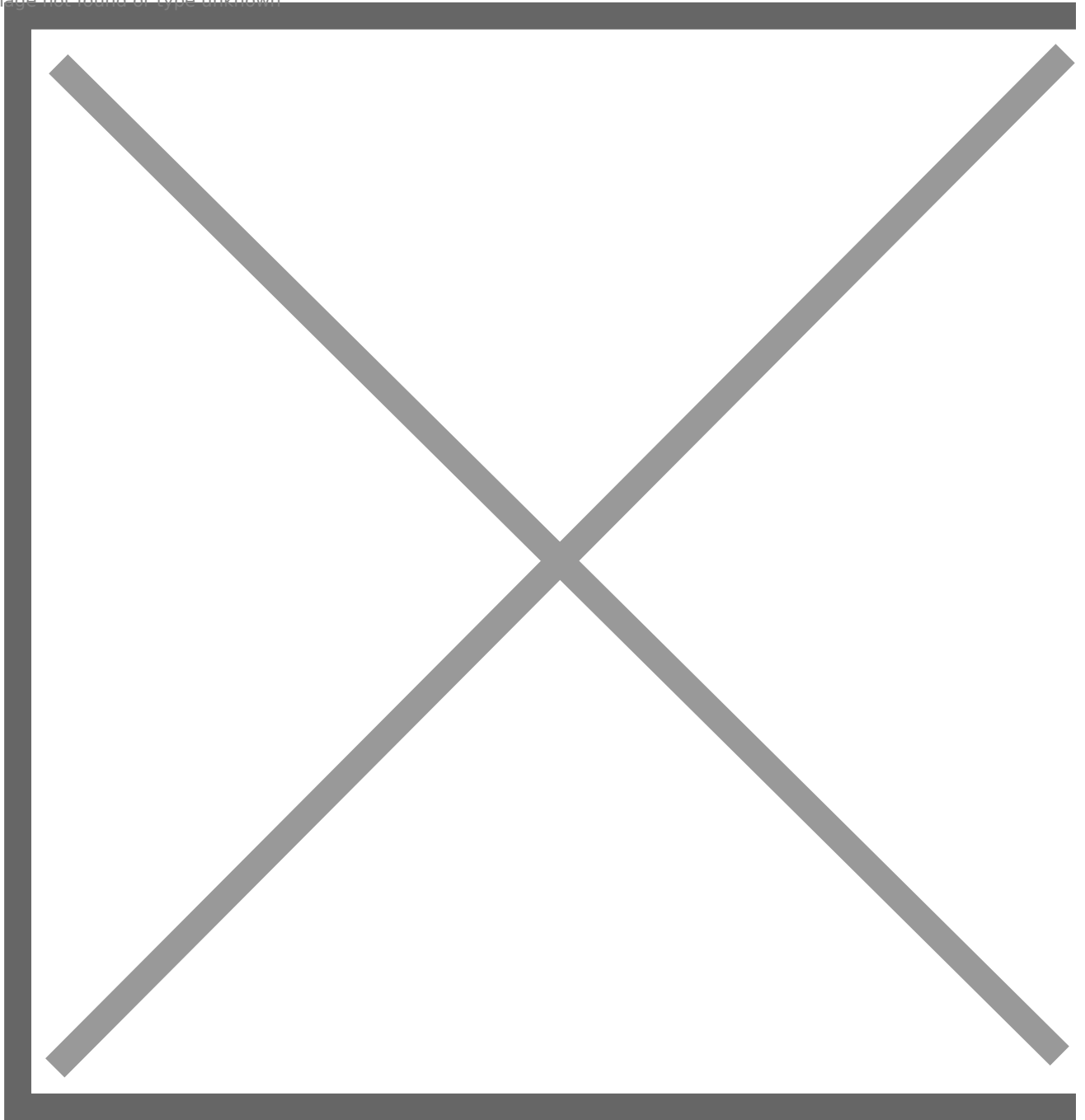
This should return something similar too

Image not found or type unknown



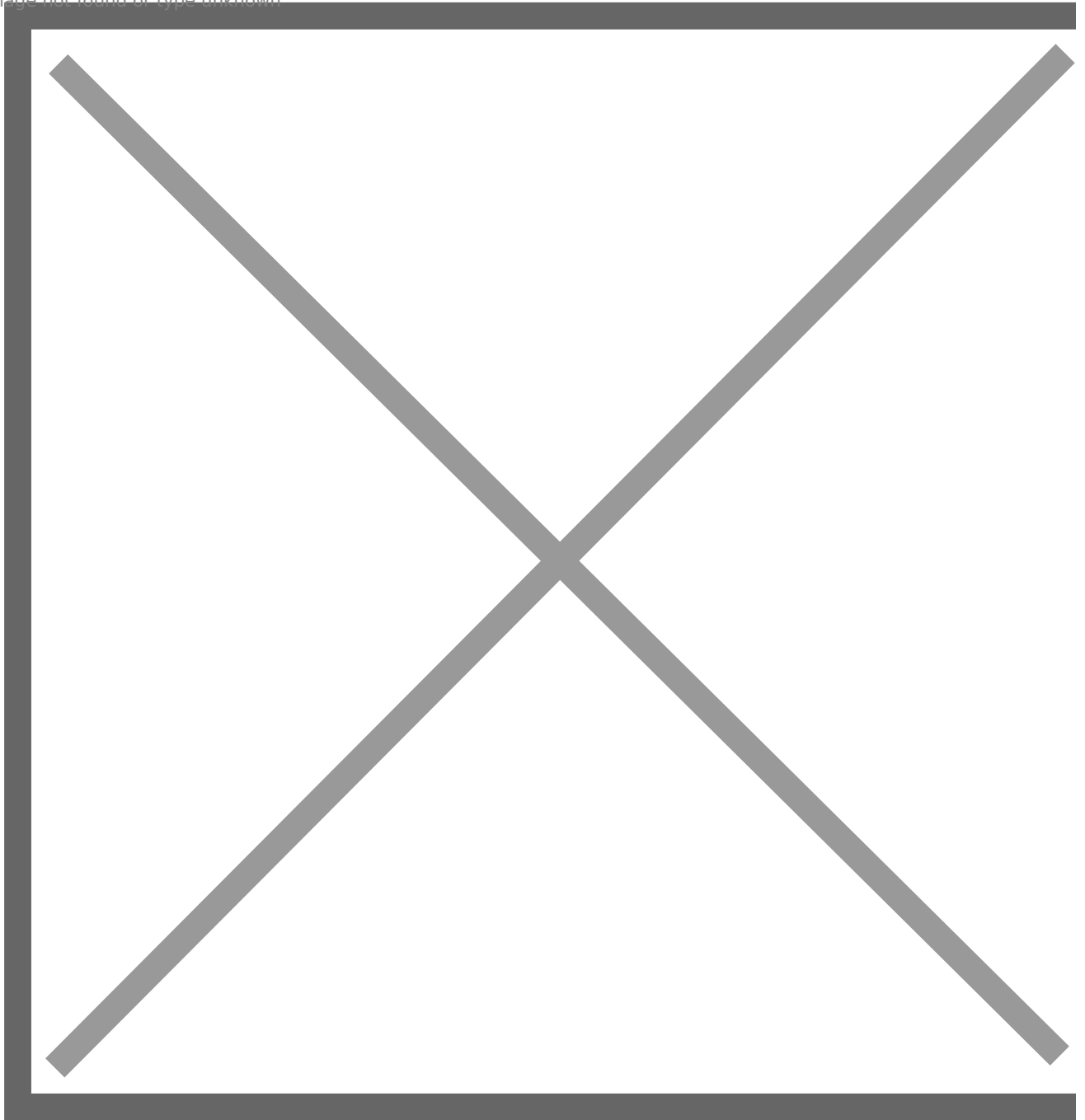
Copy the token text and paste it into the login dialog in the browser

Image not found or type unknown



Then you should be able to login with ease.

Image not found or type unknown



Revision #6

Created 22 May 2023 06:40:18 by Alois

Updated 6 June 2023 06:51:59 by Alois