在K8s/K3s集群中安装与卸载Dashboard

Z orin 已于 2025-03-13 01:03:50 修改

1.因为安装dashboard需要 helm命令，因此首先安装helm至master节点 Releases · helm/helm · GitHub 这里网上都有教程不做阐述

2.(k8s忽略直接下一步)

helm会使用kubectl默认的KUBECONFIG配置，这里我们需要将KUBECONFIG换成k3s的否则会链接失败。在master主机上输入命令

```
export KUBECONFIG=/etc/rancher/k3s/k3s.yaml
```

3.helm下载完毕后，根据dashboard官网GitHub - kubernetes/dashboard: General-purpose web UI for Kubernetes clusters

在master主机中添加dashboard源

```
helm repo add kubernetes-dashboard https://kubernetes.github.io/dashboard/
```

之后我们直接进行一个更新

```
helm upgrade --install kubernetes-dashboard kubernetes-dashboard/kubernetes-dashboard --create-namespace --namespace kubernetes-dashboard
```

会出现以下结果

```
NAME: kubernetes-dashboard
LAST DEPLOYED: Sun Apr 28 09:08:59 2024
NAMESPACE: kubernetes-dashboard
STATUS: deployed
REVISION: 1
TEST SUITE: None
NOTES:
**********************************************************************************************
*** PLEASE BE PATIENT: Kubernetes Dashboard may need a few minutes to get up and become ready ***
**********************************************************************************************

Congratulations! You have just installed Kubernetes Dashboard in your cluster.

To access Dashboard run:
  kubectl -n kubernetes-dashboard port-forward svc/kubernetes-dashboard-kong-proxy 8443:443

NOTE: In case port-forward command does not work, make sure that kong service name is correct.
      Check the services in Kubernetes Dashboard namespace using:
        kubectl -n kubernetes-dashboard get svc

Dashboard will be available at:
  https://localhost:8443
```


但是我们发现外部网站并不能访问dashboard

4.查看 命名空间 kubernetes-dashboard下的服务

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

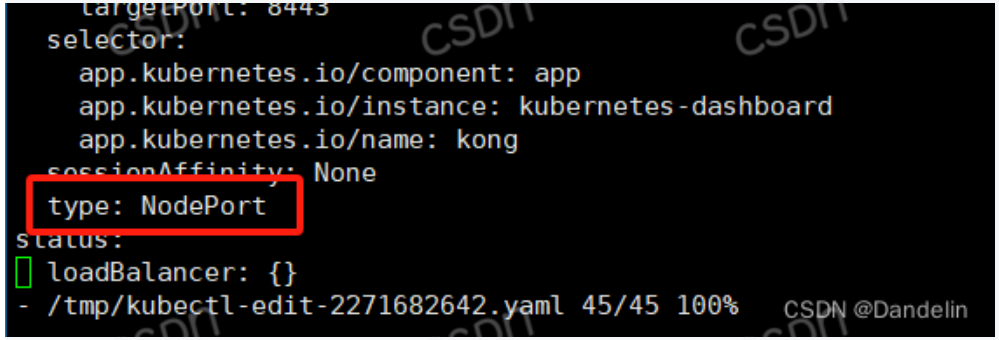
```
[root@master ~]# kubectl -n kubernetes-dashboard get svc
NAME                                TYPE        CLUSTER-IP      EXTERNAL-IP   PORT(S)                        AGE
kubernetes-dashboard-kong-manager   NodePort    10.43.93.102    <none>        8002:31887/TCP,8445:31020/TCP  109s
kubernetes-dashboard-kong-proxy     ClusterIP   10.43.213.25    <none>        443/TCP                        109s
kubernetes-dashboard-api            ClusterIP   10.43.251.93    <none>        8000/TCP                       109s
kubernetes-dashboard-auth           ClusterIP   10.43.195.84    <none>        8000/TCP                       109s
kubernetes-dashboard-metrics-scraper ClusterIP  10.43.255.183   <none>        8000/TCP                       109s
kubernetes-dashboard-web            ClusterIP   10.43.4.171     <none>        8000/TCP                       109s
```


与网上常规的只有一个 kubernetes -dashboard服务不同 这里有多个kubernetes-dashboard服务

网上并没有详细说明，经过测试我发现 我们只需对kubernetes-dashboard-kong-proxy的type进行修改

5.将kubernetes-dashboard-kong-proxy的TYPE从ClusterIp修改为NodePort这样dashboard才能提供外部的访问端口

```
kubectl -n kubernetes-dashboard edit svc kubernetes-dashboard-kong-proxy
```



6.在任何地方新建的一个yaml名称为dashboard-admin.yaml

```
vi dashboard-admin.yaml
```

内容为：

```
# vim dashboard.admin-user.yaml
# 创建ServiceAccount
apiVersion: v1
kind: ServiceAccount
metadata:
 name: admin-user
 namespace: kubernetes-dashboard
---
#创建clusterRoleBinding
apiVersion: rbac.authorization.k8s.io/v1
kind: ClusterRoleBinding
metadata:
 name: admin-user
roleRef:
 apiGroup: rbac.authorization.k8s.io
 kind: ClusterRole
 name: cluster-admin  #k8s中内置的 ClusterRole，拥有对集群中所有资源的完全控制权
subjects:
```

```
19  - kind: ServiceAccount
                          20      name: admin-user
21    namespace: kubernetes-dashboard
```

7.之后我们运行如下指令：

```
kubectl apply -f dashboard-admin.yaml
```

8.

1.24之后Kubernetes不再为ServiceAccound自动生成Secret，因此之后需要tocken使用如下方式创建：

```
kubectl -n kubernetes-dashboard create token admin-user
```

```
[root@master ~]# kubectl -n kubernetes-dashboard create token admin-user
eyJhbGciOiJSUzI1NiIsImtpZCI6IkJkSVUteGkySG5ubWRCUzM3T2NPcl9aOXIiZUt2RnJSZTZiQ3hfYTdTQ00ifQ.eyJhdWQiOlsiaHR0cHM6Ly9rdWJlcm5ldGVzLmRlZmF1bHQuc3ZjLmNsdXN0ZXIubG9jYWwiLCJrM3MiXSwiZXhwIjoxNzE0MzI1MjIxLCJpYXQiOjE3MTQzMjE2MjEsImlzcyI6Imh0dHBzOi8va3ViZXJuZXRlcy5kZWZhdWx0LnN2Yy5jbHVzdGVyLmxvY2FsIiwia3ViZXJuZXRlcy5pby9zZXJ2aWNlYWNjb3VudC9uYW1lc3BhY2UiOiJrdWJlcm5ldGVzLWRhc2hib2FyZCIsInNlcnZpY2VhY2NvdW50L2lkIjoiYTM3NzRmNmUtNTRlYS00ODYxLWJiMzctZWEyN2Q2OGQ3YjczIn19LCJuYmYiOjE3MTQzMjE2MjEsInN1YiI6InN5c3RlbTpzZXJ2aWNlYWNjb3VudDprdWJlcm5ldGVzLWRhc2hib2FyZDphZG1pbi11c2VyIn0.lGU0HF0aR7G3jLOMW9d0BPwUzZvIJyRJASKsfmPQLKXulZOLA9Z2Q_Oo6uLO-8AxjZSifgm8R2a8A6hZlgBjRZZ07-_RD2zLesp6abOGY6HJbSXjo7QMcblRwCTYz_Soyp6qJz-YZRbqG5iFnFx43PLP3IfuFZUMJ14fFjrmoqPYgUDbR8BNIUmO8LdRQvVjdIHJHJFk5EsgOMS01A3CknaEyw-6bXeFkz3dXEPAXlsvgH38hfemMfeTvWq8E_1frGzuWu7RkjY8Ku3Rp56N1Ry4QqpfG8v_UueU-lYdeJbS4Mk3ijjPxlI8R4EDlL5szUJiDGz878PwzyYLPg1nkw
```

9，查看更改后 Dashboard向外部提供的访问端口

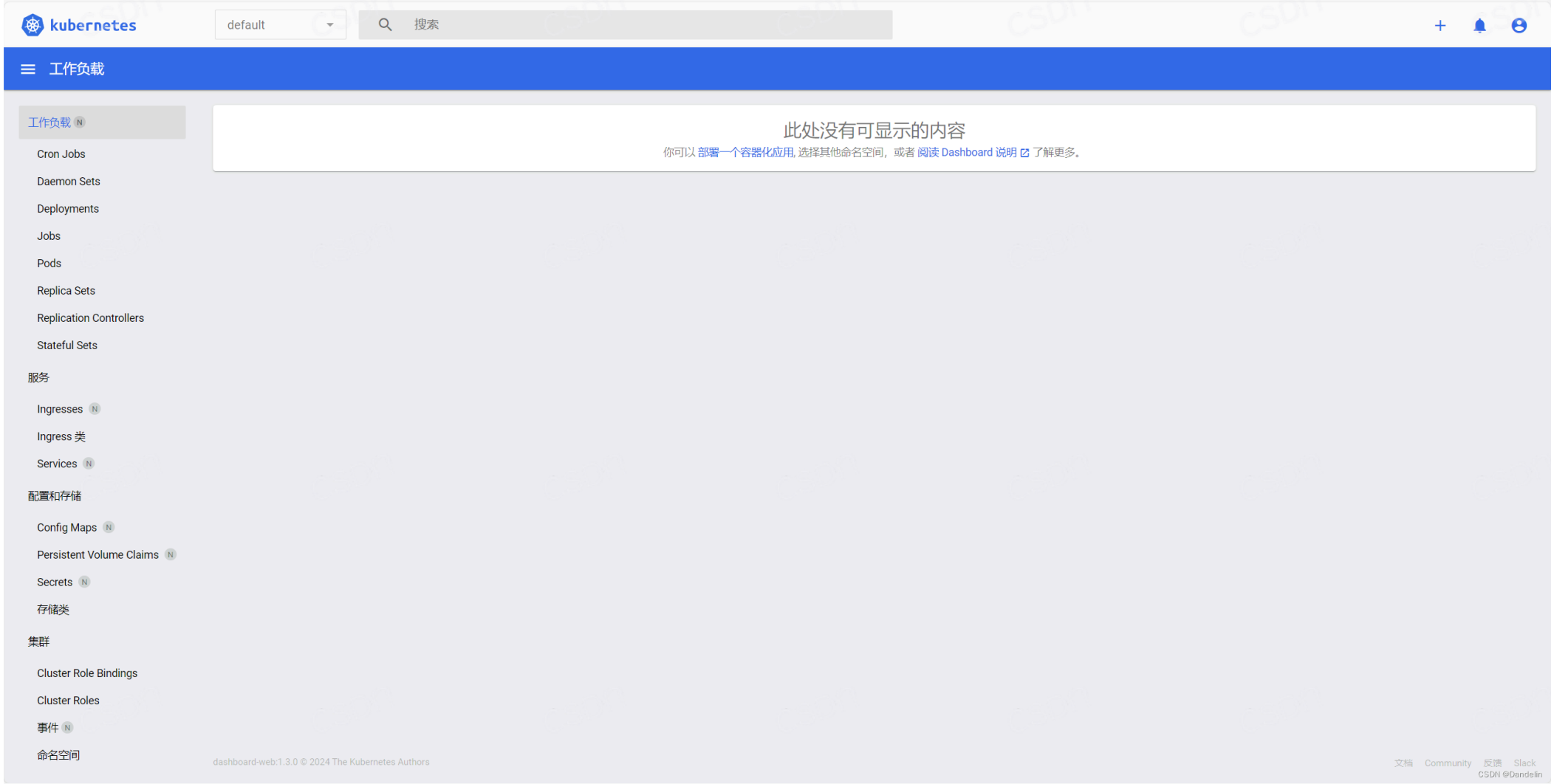
```
[root@master ~]# kubectl -n kubernetes-dashboard get svc
NAME                                TYPE        CLUSTER-IP      EXTERNAL-IP   PORT(S)                      AGE
kubernetes-dashboard-kong-manager   NodePort    10.43.93.102    <none>        8002:31887/TCP,8445:31020/TCP   15m
kubernetes-dashboard-api            ClusterIP   10.43.251.93    <none>        8000/TCP                     15m
kubernetes-dashboard-auth           ClusterIP   10.43.195.84    <none>        8000/TCP                     15m
kubernetes-dashboard-metrics-scraper ClusterIP  10.43.255.183   <none>        8000/TCP                     15m
kubernetes-dashboard-web            ClusterIP   10.43.4.171     <none>        8000/TCP                     15m
kubernetes-dashboard-kong-proxy     NodePort    10.43.213.25    <none>        443:30877/TCP                15m
```

在外部浏览器输入

注意红框是你自己的master主机的IP地址，可以用ip addr 查看 ens33的ip地址即是

10.

第一次访问需要点高级 选择继续访问，然后复制之前提供的token粘贴上去 即可登录dashboard



卸载：

因为是用helm安装的 所以用它来卸载

helm list -n kubernetes-dashboard

helm uninstall <release-name> -n kubernetes-dashboard

将 <release-name> 替换为实际的 Helm Release 名称。（命令helm list -n kubernetes-dashboard查看kubernetes-dashboard命名空间下的Helm Release）

以下框住的内容可以直接通过 kubectl delete -f admin-user.yaml 来删除（一键删除admin-user.yaml文件定义的所有资源）

删除当前的 ServiceAccount 和 ClusterRoleBinding

kubectl get serviceaccount -n kubernetes-dashboard

kubectl get clusterrolebinding

使用以下命令确认资源已被删除。

kubectl delete serviceaccount admin-user -n kubernetes-dashboard

kubectl delete clusterrolebinding admin-user

确保 admin-user 不在列表中

---

1. . 检查 Kubernetes Dashboard 资源是否已删除

kubectl get all -n kubernetes-dashboard

2. 删除 kubernetes-dashboard 命名空间

kubectl delete namespace kubernetes-dashboard

3. 验证命名空间删除情况

```
kubectl get namespaces
```

4. 验证清理结果

```
kubectl get all --all-namespaces | grep dashboard
```

如果没有输出，说明所有与 Kubernetes Dashboard 相关的资源都已成功删除

5.将k8s资源从 helm仓库移除

```
helm repo remove kubernetes-dashboard
```