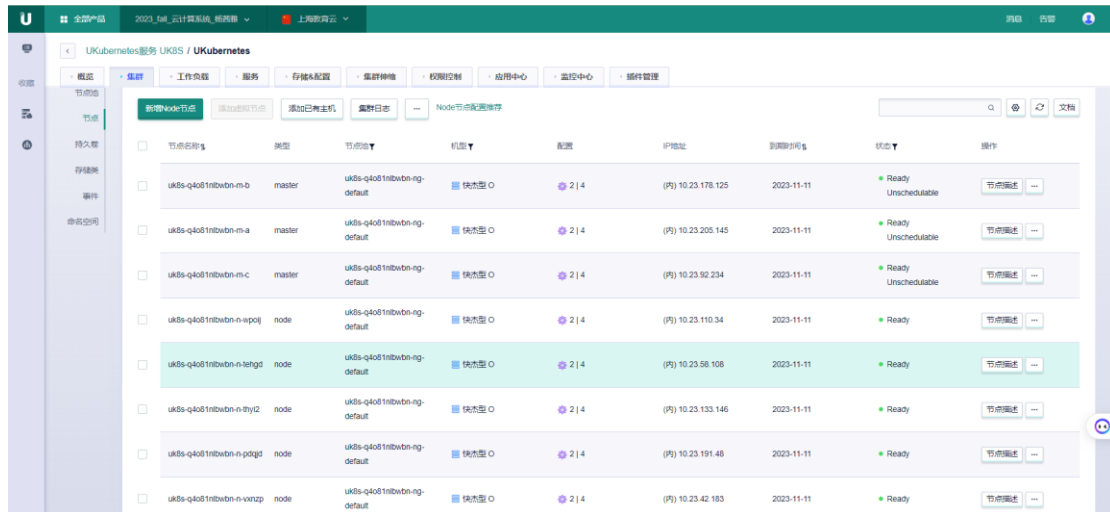


实验八报告

--10215501435 杨茜雅

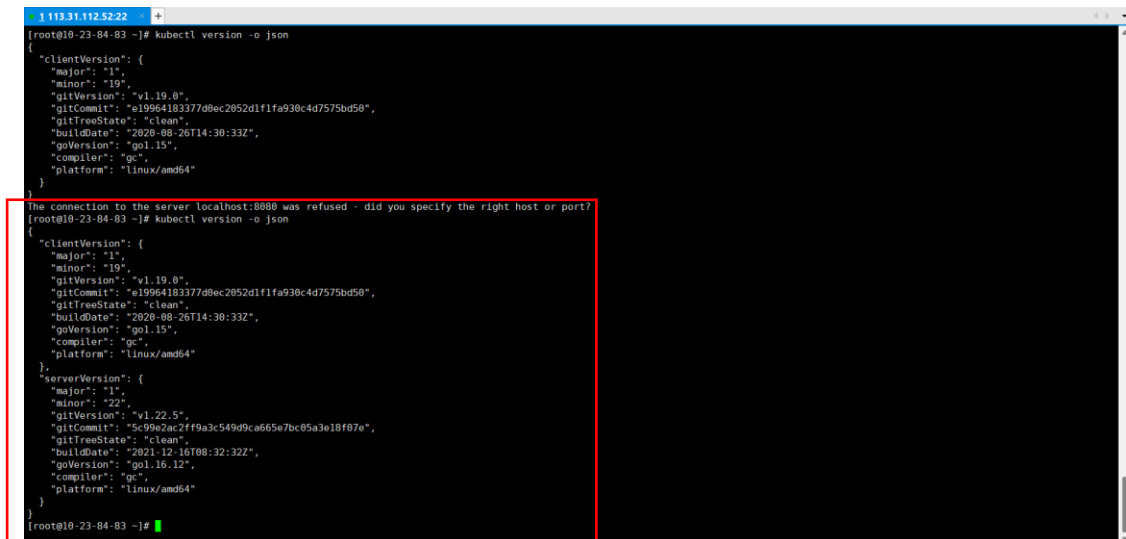
作业 1:



The screenshot shows the UKubernetes console interface. The main table lists the nodes in the cluster. The table has columns for node name, type, role, status, configuration, IP address, creation time, and status. The nodes are listed as follows:

节点名称	类型	节点角色	状态	配置	IP地址	创建时间	状态	操作
uk8s-q4081n1bwbn-m-b	master	uk8s-q4081n1bwbn-ng-default	快速型 O	2 4	(内) 10.23.178.125	2023-11-11	Ready Unschedulable	节点描述
uk8s-q4081n1bwbn-m-a	master	uk8s-q4081n1bwbn-ng-default	快速型 O	2 4	(内) 10.23.205.145	2023-11-11	Ready Unschedulable	节点描述
uk8s-q4081n1bwbn-m-c	master	uk8s-q4081n1bwbn-ng-default	快速型 O	2 4	(内) 10.23.52.234	2023-11-11	Ready Unschedulable	节点描述
uk8s-q4081n1bwbn-n-epoj	node	uk8s-q4081n1bwbn-ng-default	快速型 O	2 4	(内) 10.23.110.34	2023-11-11	Ready	节点描述
uk8s-q4081n1bwbn-n-tshgt	node	uk8s-q4081n1bwbn-ng-default	快速型 O	2 4	(内) 10.23.56.108	2023-11-11	Ready	节点描述
uk8s-q4081n1bwbn-n-tyt2	node	uk8s-q4081n1bwbn-ng-default	快速型 O	2 4	(内) 10.23.133.146	2023-11-11	Ready	节点描述
uk8s-q4081n1bwbn-n-pdgt	node	uk8s-q4081n1bwbn-ng-default	快速型 O	2 4	(内) 10.23.191.48	2023-11-11	Ready	节点描述
uk8s-q4081n1bwbn-n-vorzp	node	uk8s-q4081n1bwbn-ng-default	快速型 O	2 4	(内) 10.23.42.183	2023-11-11	Ready	节点描述

作业 2:



```
[root@10-23-84-83 ~]# kubectl version -o json
{
  "clientVersion": {
    "major": "1",
    "minor": "19",
    "gitVersion": "v1.19.0",
    "gitCommit": "e19964183377d8ec2852d1ffa938c4d7575bd50",
    "gitTreeState": "clean",
    "buildDate": "2020-08-26T14:30:33Z",
    "goVersion": "go1.15",
    "compiler": "gc",
    "platform": "linux/amd64"
  },
  "serverVersion": {
    "major": "1",
    "minor": "22",
    "gitVersion": "v1.22.5",
    "gitCommit": "5c99e2ac2ff9a3c549d9ca665e7bc85a3e18f07e",
    "gitTreeState": "clean",
    "buildDate": "2021-12-16T08:32:32Z",
    "goVersion": "go1.16.12",
    "compiler": "gc",
    "platform": "linux/amd64"
  }
}
```

作业 3:

```
19:20 x1021 5222 - root@10-23-84-83: ~ - Xshell 7 (Free for Home/School)
文件(F) 编辑(E) 查看(V) 工具(T) 选项卡(O) 窗口(W) 帮助(H)
ssh://root@113.31.112.5222
新添加的会话，点击左边的箭头标识。
会话管理
113.31.112.5222 2113.31.112.5222
所有会话
名称 所有会话
类型 文件类
子项目 0
主机
端口 22
协议 SSH
用户名
说明
deployment.apps/webapp created
[root@10-23-84-83 ~]# export POD_NAME=$(kubectl get pods --o go-template --template '{{range .items}}{{.metadata.name}}{{"\n"}}{{end}}')
[root@10-23-84-83 ~]# echo Name of the Pod: $POD_NAME
Name of the Pod: webapp-88c56994c-pbnzd
[root@10-23-84-83 ~]# curl http://localhost:8081/api/v1/namespaces/default/pods/$POD_NAME/proxy/
curl: (7) Failed to connect to localhost port 8081: Connection refused
[root@10-23-84-83 ~]# export POD_NAME=$(kubectl get pods --o go-template --template '{{range .items}}{{.metadata.name}}{{"\n"}}{{end}}')
[root@10-23-84-83 ~]# echo Name of the Pod: $POD_NAME
Name of the Pod: webapp-88c56994c-pbnzd
[root@10-23-84-83 ~]# curl http://localhost:8081/api/v1/namespaces/default/pods/$POD_NAME/proxy/
<!DOCTYPE html>
<html lang="en">
<head>
<!-- Basic Page Needs -->
<meta charset="utf-8">
<title>Docker :</title>
<meta name="description" content="">
<meta name="author" content="">
<!-- Mobile Specific Metas -->
<meta name="viewport" content="width=device-width, initial-scale=1">
<!-- FONT -->
<link href="//fonts.googleapis.com/css?family=Roboto:400,300,600" rel="stylesheet" type="text/css">
<!-- CSS -->
<link rel="stylesheet" href="css/normalize.css">
<link rel="stylesheet" href="css/skeleton.css">
<!-- Favicon -->
<link rel="icon" type="image/png" href="images/favicon.png">
</head>
<body>
<!-- Primary Page Layout -->
<div class="container">
<div class="row">
<div class="one-half column" style="margin-top: 25px">
<h4>Hello Docker!</h4>
<p>This is being served from a <strong>Docker</strong> container running Nginx.</p>
</div>
</div>
<!-- End Document -->
</body>
</html>
[root@10-23-84-83 ~]#
```

作业 4:

```
113.31.112.5222 2113.31.112.5222
</div>
</div>
<!-- End Document -->
</body>
</html>
[root@10-23-84-83 ~]# kubectl scale deployments/webapp --replicas=10
deployment.apps/webapp scaled
[root@10-23-84-83 ~]# kubectl get pods -o wide
NAME READY STATUS RESTARTS AGE IP NODE NOMINATED NODE READINESS GATES
webapp-88c56994c-4g7td 0/1 ContainerCreating 0 11s <none> 10.23.133.146 <none> <none>
webapp-88c56994c-755nh 0/1 ContainerCreating 0 11s <none> 10.23.42.183 <none> <none>
webapp-88c56994c-7pctx 0/1 ContainerCreating 0 11s <none> 10.23.133.146 <none> <none>
webapp-88c56994c-dbtv 0/1 ContainerCreating 0 11s <none> 10.23.133.146 <none> <none>
webapp-88c56994c-dtcrk 0/1 ContainerCreating 0 11s <none> 10.23.58.108 <none> <none>
webapp-88c56994c-hzvhv 0/1 ContainerCreating 0 11s <none> 10.23.110.34 <none> <none>
webapp-88c56994c-kv6jj 0/1 ContainerCreating 0 11s <none> 10.23.42.183 <none> <none>
webapp-88c56994c-nkgls 0/1 ContainerCreating 0 11s <none> 10.23.58.108 <none> <none>
webapp-88c56994c-pbnzd 1/1 Running 0 2m41s 10.23.11.90 10.23.191.48 <none> <none>
webapp-88c56994c-x7725 1/1 Running 0 11s 10.23.139.175 10.23.191.48 <none> <none>
[root@10-23-84-83 ~]# kubectl get pods -o wide
NAME READY STATUS RESTARTS AGE IP NODE NOMINATED NODE READINESS GATES
webapp-88c56994c-4g7td 1/1 Running 0 21s 10.23.231.98 10.23.133.146 <none> <none>
webapp-88c56994c-755nh 1/1 Running 0 21s 10.23.27.5 10.23.42.183 <none> <none>
webapp-88c56994c-7pctx 1/1 Running 0 21s 10.23.193.37 10.23.133.146 <none> <none>
webapp-88c56994c-dbtv 1/1 Running 0 21s 10.23.77.154 10.23.133.146 <none> <none>
webapp-88c56994c-dtcrk 1/1 Running 0 21s 10.23.157.216 10.23.58.108 <none> <none>
webapp-88c56994c-hzvhv 1/1 Running 0 21s 10.23.58.223 10.23.110.34 <none> <none>
webapp-88c56994c-kv6jj 1/1 Running 0 21s 10.23.193.162 10.23.42.183 <none> <none>
webapp-88c56994c-nkgls 1/1 Running 0 21s 10.23.161.15 10.23.58.108 <none> <none>
webapp-88c56994c-pbnzd 1/1 Running 0 2m51s 10.23.11.90 10.23.191.48 <none> <none>
webapp-88c56994c-x7725 1/1 Running 0 21s 10.23.139.175 10.23.191.48 <none> <none>
[root@10-23-84-83 ~]# kubectl expose deployment webapp --type=LoadBalancer --port=80
service/webapp exposed
[root@10-23-84-83 ~]# kubectl get services
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
kubernetes ClusterIP 172.17.0.1 <none> 443/TCP 25m
webapp LoadBalancer 172.17.11.56 113.31.114.187 80:32140/TCP 9s
[root@10-23-84-83 ~]#
```

作业 5:

```
1 113.31.112.52:22 2 113.31.112.52:22
</div>
</div>
<!-- End Document -->
</body>
</html>
[root@10-23-84-83 ~]# kubectl scale deployments/webapp --replicas=10
deployment.apps/webapp scaled
[root@10-23-84-83 ~]# kubectl get pods -o wide
NAME READY STATUS RESTARTS AGE IP NODE NOMINATED NODE READINESS GATES
webapp-88c56994c-4g7td 0/1 ContainerCreating 0 11s <none> 10.23.133.146 <none> <none>
webapp-88c56994c-755nh 0/1 ContainerCreating 0 11s <none> 10.23.42.183 <none> <none>
webapp-88c56994c-7pchx 0/1 ContainerCreating 0 11s <none> 10.23.133.146 <none> <none>
webapp-88c56994c-d6wtv 0/1 ContainerCreating 0 11s <none> 10.23.133.146 <none> <none>
webapp-88c56994c-dtcrk 0/1 ContainerCreating 0 11s <none> 10.23.58.108 <none> <none>
webapp-88c56994c-hzyhv 0/1 ContainerCreating 0 11s <none> 10.23.110.34 <none> <none>
webapp-88c56994c-kv6jj 0/1 ContainerCreating 0 11s <none> 10.23.42.183 <none> <none>
webapp-88c56994c-nkg15 0/1 ContainerCreating 0 11s <none> 10.23.58.108 <none> <none>
webapp-88c56994c-pbnzd 1/1 Running 0 2m1s 10.23.11.90 10.23.191.48 <none> <none>
webapp-88c56994c-x77z5 1/1 Running 0 11s 10.23.139.175 10.23.191.48 <none> <none>
[root@10-23-84-83 ~]# kubectl get pods -o wide
NAME READY STATUS RESTARTS AGE IP NODE NOMINATED NODE READINESS GATES
webapp-88c56994c-4g7td 1/1 Running 0 21s 10.23.231.98 10.23.133.146 <none> <none>
webapp-88c56994c-755nh 1/1 Running 0 21s 10.23.27.5 10.23.42.183 <none> <none>
webapp-88c56994c-7pchx 1/1 Running 0 21s 10.23.193.37 10.23.133.146 <none> <none>
webapp-88c56994c-d6wtv 1/1 Running 0 21s 10.23.77.154 10.23.133.146 <none> <none>
webapp-88c56994c-dtcrk 1/1 Running 0 21s 10.23.157.216 10.23.58.108 <none> <none>
webapp-88c56994c-hzyhv 1/1 Running 0 21s 10.23.50.223 10.23.110.34 <none> <none>
webapp-88c56994c-kv6jj 1/1 Running 0 21s 10.23.193.162 10.23.42.183 <none> <none>
webapp-88c56994c-nkg15 1/1 Running 0 21s 10.23.161.15 10.23.58.108 <none> <none>
webapp-88c56994c-pbnzd 1/1 Running 0 2m51s 10.23.11.90 10.23.191.48 <none> <none>
webapp-88c56994c-x77z5 1/1 Running 0 21s 10.23.139.175 10.23.191.48 <none> <none>
[root@10-23-84-83 ~]# kubectl expose deployment webapp --type=LoadBalancer --port=80
service/webapp exposed
[root@10-23-84-83 ~]# kubectl get services
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
kubernetes ClusterIP 172.17.0.1 <none> 443/TCP 25m
webapp LoadBalancer 172.17.11.56 113.31.114.187 80:32140/TCP 9s
[root@10-23-84-83 ~]# ^C
[root@10-23-84-83 ~]#
```



Hello Docker!

This is being served from a docker container running Nginx.