

# Kubernetes 과정 평가

차아린

## (Master)

kubectl get nodes

```
[root@master /allnew/docker/k8s]# kubectl get nodes
```

NAME	STATUS	ROLES	AGE	VERSION
master	Ready	control-plane	23h	v1.27.1
node1	Ready	<none>	23h	v1.27.1

cat -n nginx-deployment.yaml

```
[root@master /allnew/docker/k8s]# cat -n nginx-deployment.yaml
 1  apiVersion: apps/v1
 2  kind: Deployment
 3  metadata:
 4    name: nginx-deployment
 5    labels:
 6      app: nginx
 7  spec:
 8    replicas: 3 # three pod
 9    selector:
10      matchLabels:
11        app: nginx
12    template:
13      metadata:
14        labels:
15          app: nginx
16      spec:
17        containers:
18        - name: nginx
19          image: nginx:1.14.2
20          ports:
21            - containerPort: 80 # container port (pod port)
```

kubectl apply -f nginx-deployment.yaml

```
[root@master /allnew/docker/k8s]# kubectl apply -f nginx-deployment.yaml
deployment.apps/nginx-deployment created
```

kubectl get deployment

```
[root@master /allnew/docker/k8s]# kubectl get deployment
```

NAME	READY	UP-TO-DATE	AVAILABLE	AGE
nginx-deployment	3/3	3	3	11s

kubectl get pod

```
[root@master /allnew/docker/k8s]# kubectl get pod
NAME                                READY   STATUS    RESTARTS   AGE
nginx-deployment-cbdccf466-pwmzn   1/1     Running   0           26s
nginx-deployment-cbdccf466-v6wtj   1/1     Running   0           26s
nginx-deployment-cbdccf466-vpvv9   1/1     Running   0           26s
```

kubectl get pod -o yaml | grep nodeName

```
[root@master /allnew/docker/k8s]# kubectl get pod -o yaml | grep nodeName
  nodeName: node1
  nodeName: node1
  nodeName: node1
```

kubectl get pod -o yaml | grep " podIP:"

```
[root@master /allnew/docker/k8s]# kubectl get pod -o yaml | grep " podIP:"
  podIP: 10.44.0.3
  podIP: 10.44.0.2
  podIP: 10.44.0.1
```

## (Node1)

curl 10.44.0.1 | grep title

```
[root@node1 ~]# curl 10.44.0.1 | grep title
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           %                               Dload  Upload  Total    Spent    Left  Speed
100    612    100    612     0     0   119k      0  --:--:-- --:--:-- --:--:-- 149k
<title>Welcome to nginx!</title>
```

curl 10.44.0.2 | grep title

```
[root@node1 ~]# curl 10.44.0.2 | grep title
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           %                               Dload  Upload  Total    Spent    Left  Speed
100    612    100    612     0     0   597k      0  --:--:-- --:--:-- --:--:-- 597k
<title>Welcome to nginx!</title>
```

curl 10.44.0.3 | grep title

```
[root@node1 ~]# curl 10.44.0.3 | grep title
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           %                               Dload  Upload  Total    Spent    Left  Speed
100    612    100    612     0     0  68000      0  --:--:-- --:--:-- --:--:-- 87428
<title>Welcome to nginx!</title>
```

## <service>

### (Master)

cat -n nginx-svc.yaml

```
[root@master /allnew/docker/k8s]# cat -n nginx-svc.yaml
 1  apiVersion: v1
 2  kind: Service
 3  metadata:
 4    name: my-nginx
 5    labels:
 6      run: my-nginx
 7  spec:
 8    type: NodePort
 9    ports:
10    - nodePort: 31001
11      port: 8080
12      targetPort: 80
13      protocol: TCP
14      name: http
15    selector:
16      app: nginx
```

kubectl apply -f nginx-svc.yaml

```
[root@master /allnew/docker/k8s]# kubectl apply -f nginx-svc.yaml
service/my-nginx created
```

kubectl get svc

```
[root@master /allnew/docker/k8s]# kubectl get svc
```

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
kubernetes	ClusterIP	10.96.0.1	<none>	443/TCP	23h
my-nginx	NodePort	10.110.173.107	<none>	8080:31001/TCP	6s

kubectl get svc | grep my-nginx

```
[root@master /allnew/docker/k8s]# kubectl get svc | grep my-nginx
my-nginx      NodePort      10.110.173.107  <none>      8080:31001/TCP  21s
```

## <service 확인>

### (Master)

curl 192.168.1.74:31001 | grep title

```
[root@master /allnew/docker/k8s]# curl 192.168.1.74:31001 | grep title
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           %             0         0              0             0             0
           Dload  Upload   Total   Spent    Left     Speed
100    612    100    612     0     0  76500      0 --:--:-- --:--:-- --:--:--  87428
<title>Welcome to nginx!</title>
```

curl 192.168.1.76:31001 | grep title

```
[root@master /allnew/docker/k8s]# curl 192.168.1.76:31001 | grep title
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           %             0         0              0             0             0
           Dload  Upload   Total   Spent    Left     Speed
100    612    100    612     0     0   199k      0 --:--:-- --:--:-- --:--:--  298k
<title>Welcome to nginx!</title>
```

### (Node1)

curl 192.168.1.74:31001 | grep title

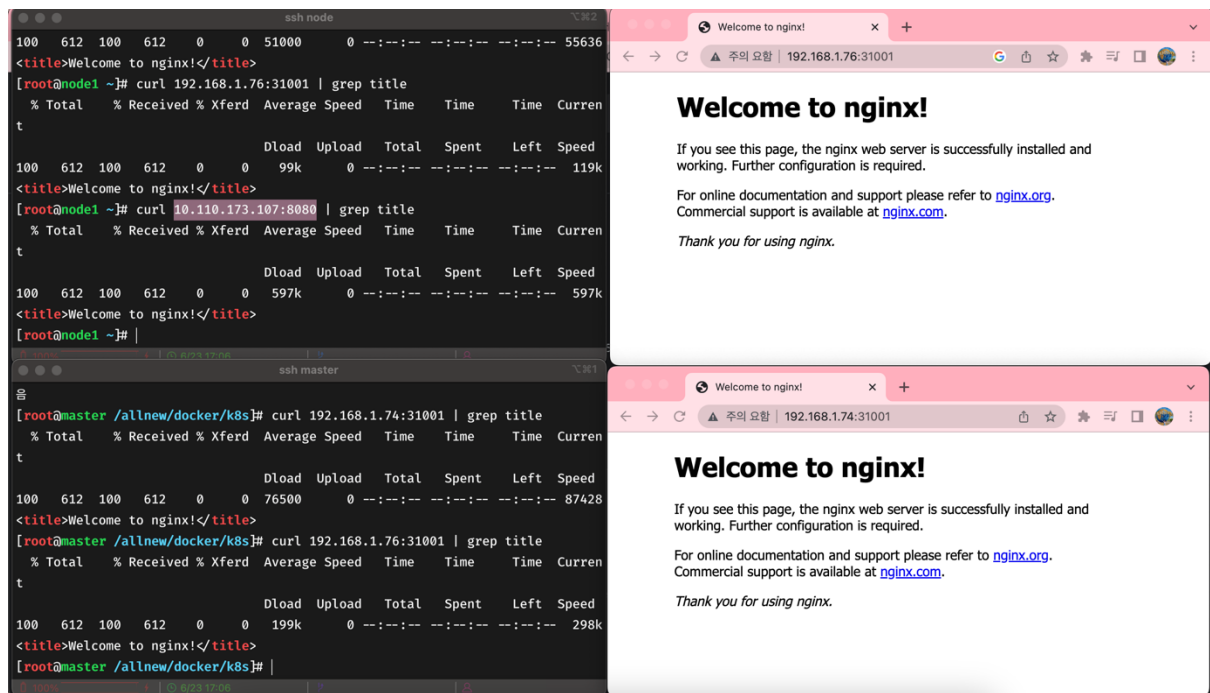
```
[root@node1 ~]# curl 192.168.1.74:31001 | grep title
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           %             0         0              0             0             0
           Dload  Upload   Total   Spent    Left     Speed
100    612    100    612     0     0   51000      0 --:--:-- --:--:-- --:--:--  55636
```

curl 192.168.1.76:31001 | grep title

```
[root@node1 ~]# curl 192.168.1.76:31001 | grep title
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           %             0         0              0             0             0
           Dload  Upload   Total   Spent    Left     Speed
100    612    100    612     0     0    99k      0 --:--:-- --:--:-- --:--:--  119k
<title>Welcome to nginx!</title>
```

curl 10.110.173.107:8080 | grep title

```
[root@node1 ~]# curl 10.110.173.107:8080 | grep title
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           %             0         0              0             0             0
           Dload  Upload   Total   Spent    Left     Speed
100    612    100    612     0     0   597k      0 --:--:-- --:--:-- --:--:--  597k
<title>Welcome to nginx!</title>
```



## <service & deployment 삭제>

### (Master)

kubectl delete -n default service my-nginx

```
[root@master /allnew/docker/k8s]# kubectl delete -n default service my-nginx
service "my-nginx" deleted
```

kubectl get deployments.apps

```
[root@master /allnew/docker/k8s]# kubectl get deployments.apps
NAME                READY   UP-TO-DATE   AVAILABLE   AGE
nginx-deployment    3/3     3             3           26m
```

kubectl delete deployments nginx-deployment

```
[root@master /allnew/docker/k8s]# kubectl delete deployments nginx-deployment
deployment.apps "nginx-deployment" deleted
```

kubectl get deployments

```
[root@master /allnew/docker/k8s]# kubectl get deployments
No resources found in default namespace.
```