

## 쿠버네티스 배포 실습 과제

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(1)

노드들 상황과 pod들 상황

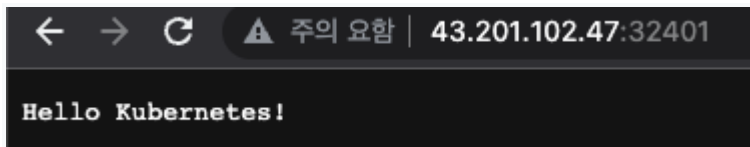
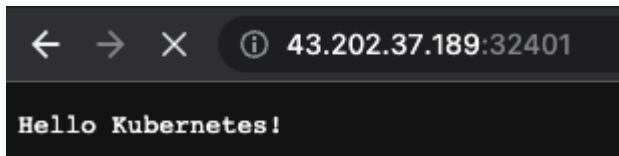
```
ubuntu@ip-172-31-14-219:~$ kubectl get deployments hello-world
kubectl describe deployments hello-world
NAME          READY    UP-TO-DATE    AVAILABLE    AGE
hello-world   0/2      2             0            5s
Name:          hello-world
Namespace:     default
CreationTimestamp: Wed, 17 May 2023 10:40:49 +0000
Labels:        <none>
Annotations:   deployment.kubernetes.io/revision: 1
Selector:      run=load-balancer-example
Replicas:      2 desired | 2 updated | 2 total | 0 available | 2 unavailable
StrategyType:  RollingUpdate
MinReadySeconds: 0
RollingUpdateStrategy: 25% max unavailable, 25% max surge
Pod Template:
  Labels:  run=load-balancer-example
  Containers:
    hello-world:
      Image:      gcr.io/google-samples/node-hello:1.0
      Port:       8080/TCP
      Host Port:  0/TCP
      Environment: <none>
      Mounts:      <none>
      Volumes:     <none>
Conditions:
  Type           Status  Reason
  ----           -
  Available      False   MinimumReplicasUnavailable
  Progressing    True    ReplicaSetUpdated
OldReplicaSets: <none>
NewReplicaSet:  hello-world-7dc9558f6d (2/2 replicas created)
Events:
  Type     Reason              Age   From                  Message
  ----     -
  Normal   ScalingReplicaSet   5s    deployment-controller Scaled up replica set hello-world-7dc9558f6d to 2
```

```
ubuntu@ip-172-31-14-219:~$ kubectl get replicaset
kubectl describe replicaset
NAME          DESIRED    CURRENT    READY    AGE
hello-world-7dc9558f6d 2          2          2        43s
Name:          hello-world-7dc9558f6d
Namespace:     default
Selector:      pod-template-hash=7dc9558f6d,run=load-balancer-example
Labels:        pod-template-hash=7dc9558f6d
               run=load-balancer-example
Annotations:   deployment.kubernetes.io/desired-replicas: 2
               deployment.kubernetes.io/max-replicas: 3
               deployment.kubernetes.io/revision: 1
Controlled By: Deployment/hello-world
Replicas:      2 current / 2 desired
Pods Status:   2 Running / 0 Waiting / 0 Succeeded / 0 Failed
Pod Template:
  Labels:  pod-template-hash=7dc9558f6d
           run=load-balancer-example
  Containers:
    hello-world:
      Image:      gcr.io/google-samples/node-hello:1.0
      Port:       8080/TCP
      Host Port:  0/TCP
      Environment: <none>
      Mounts:      <none>
      Volumes:     <none>
Events:
  Type     Reason              Age   From                  Message
  ----     -
  Normal   SuccessfulCreate    44s   replicaset-controller Created pod: hello-world-7dc9558f6d-vrl6h
  Normal   SuccessfulCreate    44s   replicaset-controller Created pod: hello-world-7dc9558f6d-jrrv6
```

```
ubuntu@ip-172-31-14-219:~$ kubectl describe services example-service
Name: example-service
Namespace: default
Labels: <none>
Annotations: <none>
Selector: run=load-balancer-example
Type: NodePort
IP Family Policy: SingleStack
IP Families: IPv4
IP: 10.98.127.46
IPs: 10.98.127.46
Port: <unset> 8080/TCP
TargetPort: 8080/TCP
NodePort: <unset> 32401/TCP
Endpoints: 10.244.1.2:8080,10.244.2.2:8080
Session Affinity: None
External Traffic Policy: Cluster
Events: <none>
```

```
ubuntu@ip-172-31-14-219:~$ kubectl get pods --selector="run=load-balancer-example" --output=wide
NAME                                READY   STATUS    RESTARTS   AGE   IP            NODE              NOMINATED NODE   READINESS GATES
hello-world-7dc9558f6d-jrrv6       1/1     Running   0          89s   10.244.1.2    ip-172-31-5-117   <none>           <none>
hello-world-7dc9558f6d-vrl6h       1/1     Running   0          89s   10.244.2.2    ip-172-31-2-240   <none>           <none>
```

worker 노드들의 public IP 주소로 접근한 결과



(2)

replicas가 5일 때 노드들 상황과 pod들 상황 (다음페이지에 사진 존재)

```

generation: 1
name: hello-world
namespace: default
resourceVersion: "1831"
uid: da9fe926-0a14-43cf-9804-40225ff7b7d0
spec:
  progressDeadlineSeconds: 600
  replicas: 5
  revisionHistoryLimit: 10
  selector:
    matchLabels:

```

```

ubuntu@ip-172-31-14-219:~$ kubectl describe services example-service
Name: example-service
Namespace: default
Labels: <none>
Annotations: <none>
Selector: run=load-balancer-example
Type: NodePort
IP Family Policy: SingleStack
IP Families: IPv4
IP: 10.98.127.46
IPs: 10.98.127.46
Port: <unset> 8080/TCP
TargetPort: 8080/TCP
NodePort: <unset> 32401/TCP
Endpoints: 10.244.1.2:8080,10.244.1.3:8080,10.244.1.4:8080 + 2 more...
Session Affinity: None
External Traffic Policy: Cluster
Events: <none>

```

```

ubuntu@ip-172-31-14-219:~$ kubectl get replicaset
kubectl describe replicaset
NAME DESIRED CURRENT READY AGE
hello-world-7dc9558f6d 5 5 5 63m
Name: hello-world-7dc9558f6d
Namespace: default
Selector: pod-template-hash=7dc9558f6d,run=load-balancer-example
Labels: pod-template-hash=7dc9558f6d
run=load-balancer-example
Annotations: deployment.kubernetes.io/desired-replicas: 5
deployment.kubernetes.io/max-replicas: 7
deployment.kubernetes.io/revision: 1
Controlled By: Deployment/hello-world
Replicas: 5 current / 5 desired
Pods Status: 5 Running / 0 Waiting / 0 Succeeded / 0 Failed

```

```

ubuntu@ip-172-31-14-219:~$ kubectl get pods --selector="run=load-balancer-example" --output=wide
NAME READY STATUS RESTARTS AGE IP NODE NOMINATED NODE READINESS GATES
hello-world-7dc9558f6d-bprg9 1/1 Running 0 118s 10.244.1.3 ip-172-31-5-117 <none> <none>
hello-world-7dc9558f6d-gs2l2 1/1 Running 0 85s 10.244.2.6 ip-172-31-2-240 <none> <none>
hello-world-7dc9558f6d-jrrv6 1/1 Running 0 64m 10.244.1.2 ip-172-31-5-117 <none> <none>
hello-world-7dc9558f6d-r6dxt 1/1 Running 0 85s 10.244.1.4 ip-172-31-5-117 <none> <none>
hello-world-7dc9558f6d-xb7wc 1/1 Running 0 85s 10.244.2.5 ip-172-31-2-240 <none> <none>

```

worker 노드들의 public IP 주소로 접근한 결과

