Controlling Network Access with NetworkPolicies - Part 2

Relevant Documentation

- NetworkPolicies
- · Cluster Networking

Exam Tips

Even if a NetworkPolicy allows outgoing traffic from the source Pod, NetworkPolicies could still block the same traffic when
it is incoming to the destination Pod.

Lesson Reference

Log in to the control plane node.

Now let's create a NetworkPolicy to allow traffic coming from the client Pod.

```
vi np-test-client-allow.yml
```

```
apiVersion: networking.k8s.io/v1
kind: NetworkPolicy
metadata:
 name: np-test-client-allow
 namespace: np-test-a
spec:
 podSelector:
   matchLabels:
     app: np-test-server
 policyTypes:
  - Ingress
 ingress:
   - namespaceSelector:
       matchLabels:
         team: bteam
     podSelector:
       matchLabels:
        app: np-test-client
   ports:
    protocol: TCP
     port: 80
```

```
kubectl apply -f np-test-client-allow.yml
```

Check the client Pod's log again. The traffic should be allowed now.

```
kubectl logs client-pod -n np-test-b
```

Let's create a setup to restrict outgoing traffic for the client Pod.

Create a default deny Egress policy for the np-test-b Namespace.

```
vi np-test-b-default-deny-egress.yml
```

```
kubectl apply -f np-test-b-default-deny-egress.yml
```

Check the client Pod's log. Traffic should now be denied.

```
kubectl logs client-pod -n np-test-b
```

Create a Policy to allow the Egress traffic from the client Pod. This time, we'll allow traffic to any Pod in the np-test-a Namespace.

```
vi np-test-client-allow-egress.yml
```

```
apiVersion: networking.k8s.io/v1
kind: NetworkPolicy
metadata:
 name: np-test-client-allow-egress
 namespace: np-test-b
spec:
 podSelector:
   matchLabels:
     app: np-test-client
 policyTypes:
  - Egress
 egress:
   - namespaceSelector:
       matchLabels:
         team: ateam
    ports:
    - protocol: TCP
     port: 80
```

```
kubectl apply -f np-test-client-allow-egress.yml
```

Check the client Pod's log. Traffic should be allowed once more.

```
kubectl logs client-pod -n np-test-b
```