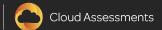


Certified Kubernetes Administrator Prep

Configure Network Policies

Kubernetes Network Policies

- Specification of how groups of pods may communicate
- Use labels to select pods and define rules
- Implemented by the network plugin
- Pods are non-isolated by default
- Pods are isolated when a Network Policy selects them



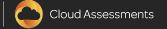


Kubernetes Network Policies Example

```
kind: NetworkPolicy
  namespace: default
    matchLabels:
  policyTypes:
  - Ingress
```

```
ingress:
- from:
      except:
  - podSelector:
      matchLabels:
        role: frontend
```

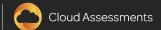
```
ports:
  - protocol: TCP
    port: 6379
egress:
  ports:
  - protocol: TCP
    port: 5978
```





Example Default Isolation Policy

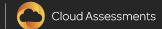
```
apiVersion: networking.k8s.io/v1
kind: NetworkPolicy
metadata:
  name: default-deny
spec:
  podSelector: {}
  policyTypes:
   Ingress
```





Explicitly Allow All Traffic Sample YAML

```
apiVersion: networking.k8s.io/v1
kind: NetworkPolicy
metadata:
  name: allow-all
spec:
  podSelector: {}
  ingress:
```

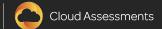


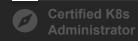


Explicitly Deny Outgoing Traffic Sample YAML

```
apiVersion: networking.k8s.io/v1
kind: NetworkPolicy
metadata:
  name: default-deny
spec:
  podSelector: {}
  policyTypes:
  - Egress
```

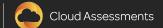






Explicitly Allow All Outgoing Traffic Sample YAML

```
apiVersion: networking.k8s.io/v1
kind: NetworkPolicy
metadata:
  name: allow-all
spec:
  podSelector: {}
  egress:
```





Explicitly Stop ALL Traffic Sample YAML

```
apiVersion: networking.k8s.io/v1
kind: NetworkPolicy
metadata:
  name: default-deny
spec:
  podSelector: {}
  policyTypes:
   Ingress
    Egress
```







Conclusion

- Specification of how groups of pods may communicate
- Use labels to select pods and define rules
- Implemented by the network plugin
- Pods are non-isolated by default
- Pods are isolated when a Network Policy selects them

