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# Manage Services in Kubernetes

Manage Access via Ingress Controller



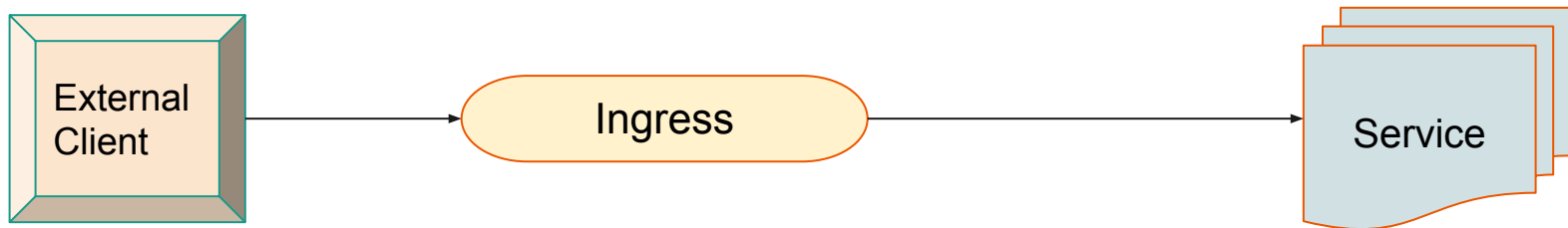


# K8s Network Policies

- What is an Ingress
- Ingress Controllers
- Routing to a Service
- Routing to Service with Named Port

# What is an Ingress

- Ingress in Kubernetes Manage the External Access to Service.



- Apart from NodePort Service, Ingress is capable of many more.
- Provide the SSL Termination, Load Balancing, NameBase Virtual Hosting.

# Ingress Controllers

- In order for the Ingress resource to work, the cluster must have an ingress controller running.
- Variety of Ingress Controller available in K8s to provide the multiple mechanism for external access of Service.
- You can deploy any number of Ingress Controller.

# Ingress Controllers

- Ingress define a set of Routing Rules.
- Each Rule has a set of Paths, each with a Backend. Request matching a path will be routed to associated Backend.

```
apiVersion: networking.k8s.io/v1
kind: Ingress
metadata:
  name: sample-ingress
spec:
  rules:
  - http:
    paths:
    - path: /testpath
      pathType: Prefix
      backend:
        service:
          name: test
          port:
            number: 80
```

# NamedPort

- If Service Use **NamedPort**, ingress can also use the port's name to choose to which port it will route.

```
apiVersion: v1
kind: Service
metadata:
  name: nginx-service
spec:
  selector:
    app: frontend
  ports:
    - name: nginx-port
      protocol: TCP
      port: 80
      targetPort: 80
```

```
apiVersion: networking.k8s.io/v1
kind: Ingress
metadata:
  name: sample-ingress
spec:
  rules:
    - http:
        paths:
          - path: /testpath
            pathType: Prefix
            backend:
              service:
                name: test
                port:
                  name: nginx-port
```

# Hands On Demonstration

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# Thank You...

Don't be the Same! Be Better!!!

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