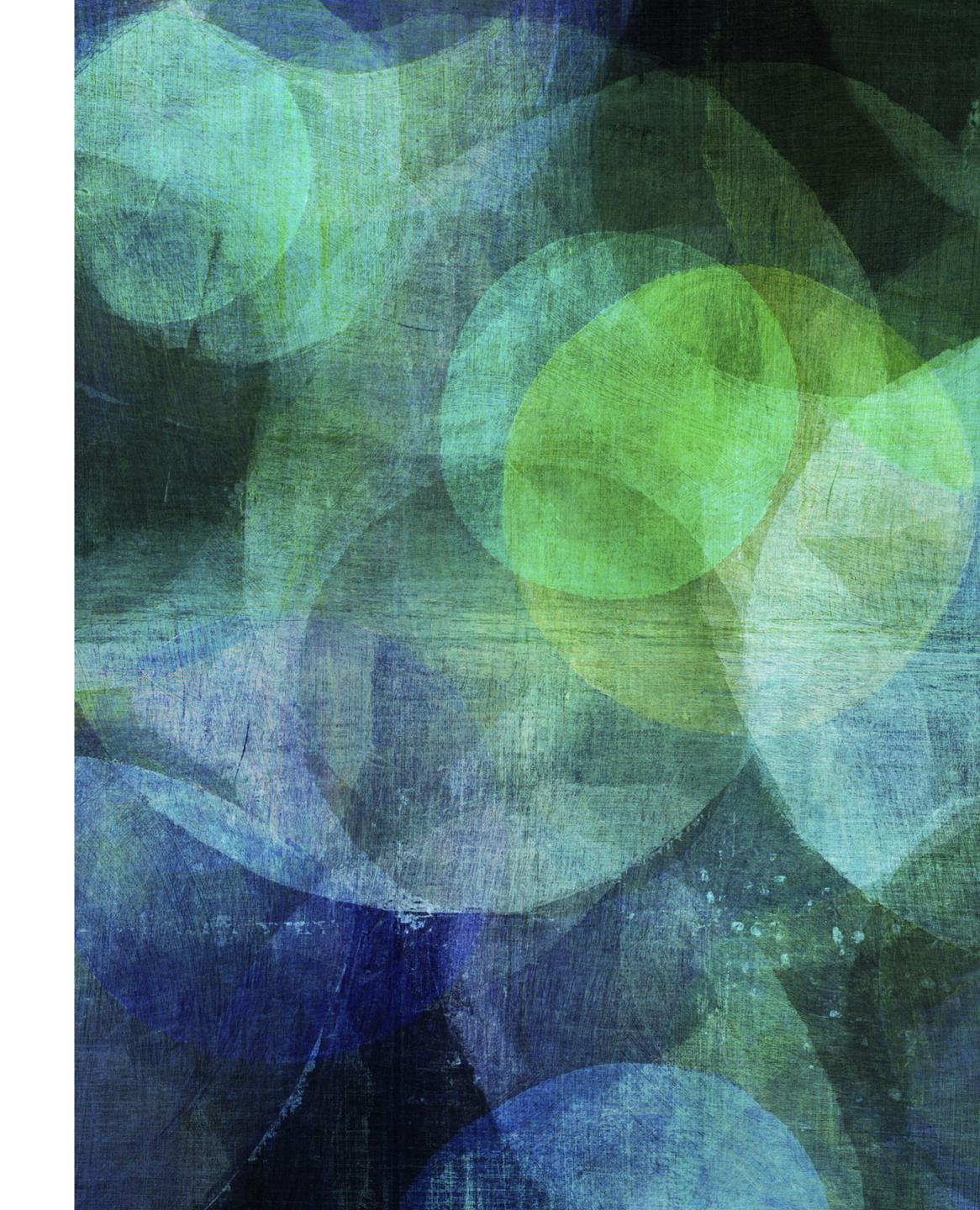
INTRODUCTION TO KUBERNETES

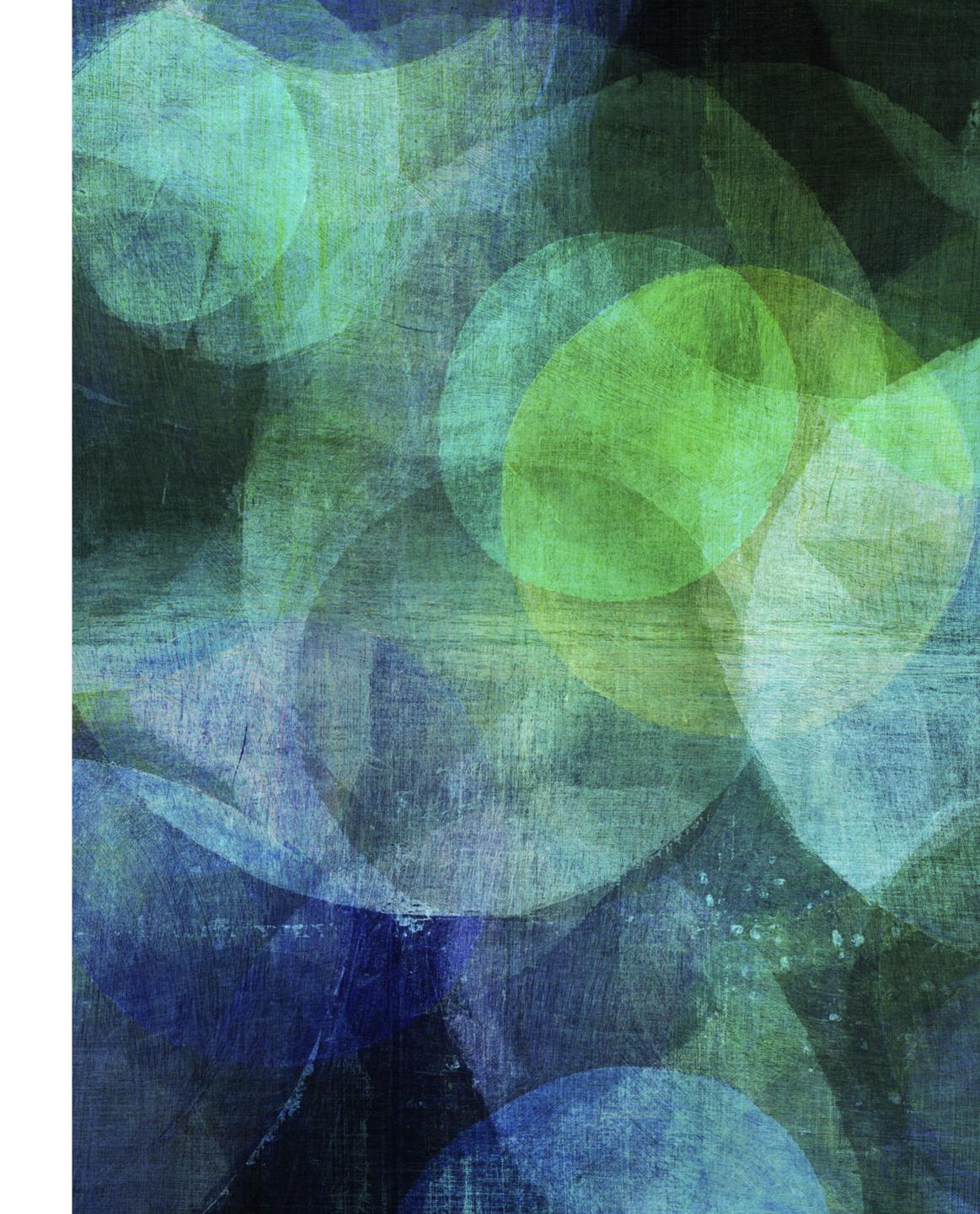


INTRODUCTION TO KUBERNETES

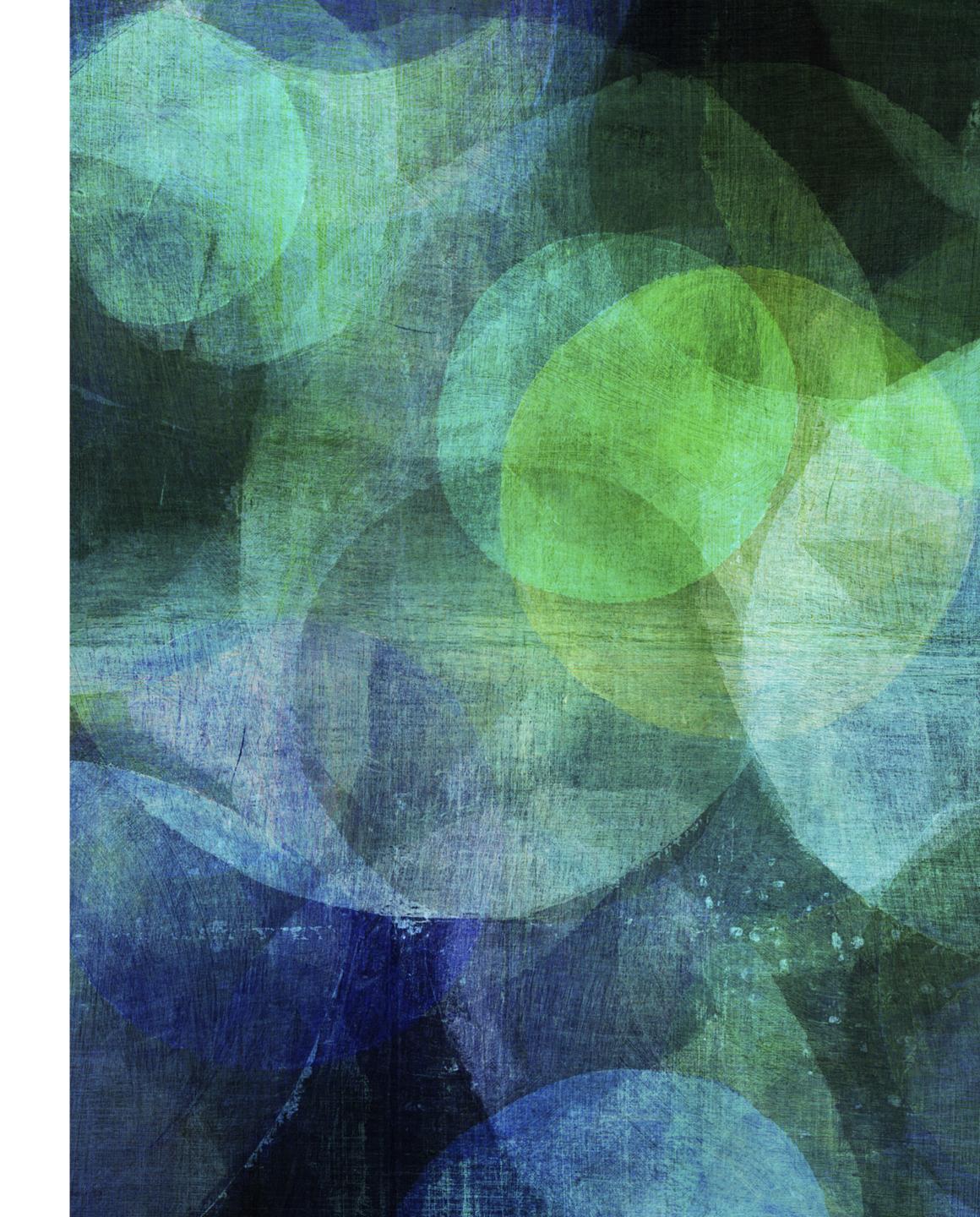
External Service



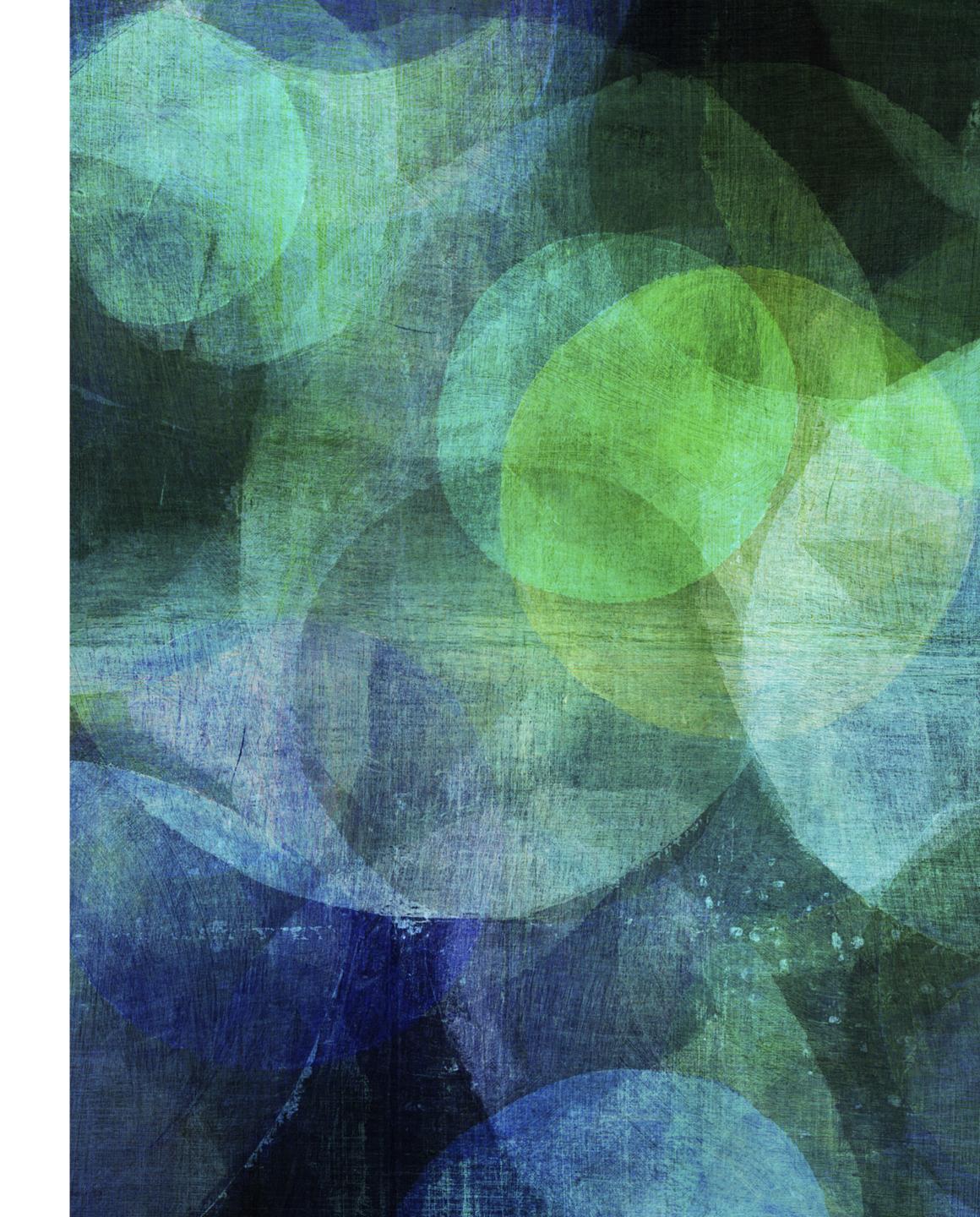
- Service Types



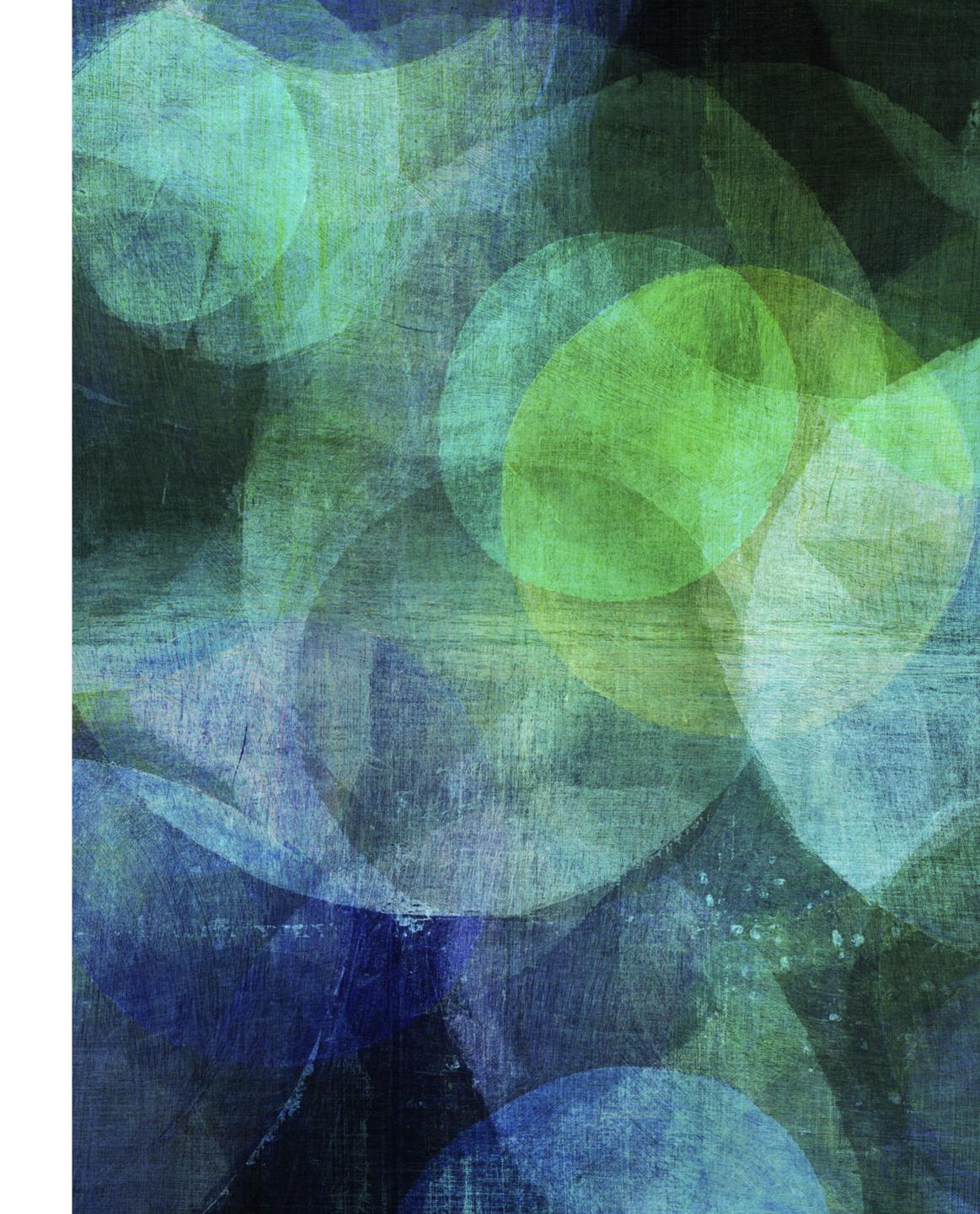
- Service Types
 - Node Port



- Service Types
 - Node Port
- Load Balancer



- Service Types
 - Node Port
- Load Balancer
- ExternalName/IP



PUBLISHING SERVICES (SERVICES)

TYPE OF SERVICES

ClusterIP

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

NodePort

```
apiVersion: v1
kind: Service
metadata:
   name: my-web-service
spec:
   type: NodePort
   selector:
     app: my-web
   ports:
     - protocol: TCP
        port: 80
        targetPort: 80
        nodePort: 30080
```

LoadBalancer

```
apiVersion: v1
kind: Service
metadata:
   name: my-web-service
spec:
   type: LoadBalancer
   selector:
    app: my-web
   ports:
    - protocol: TCP
        port: 80
        targetPort: 80
        nodePort: 30080
```

TYPE OF SERVICES



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



```
apiVersion: v1
kind: Service
metadata:
   name: my-web-service
spec:
   type: NodePort
   selector:
    app: my-web
   ports:
    - protocol: TCP
        port: 80
        targetPort: 80
        nodePort: 30080
```

LoadBalancer External Service

```
apiVersion: v1
kind: Service
metadata:
   name: my-web-service
spec:
   type: LoadBalancer
   selector:
    app: my-web
   ports:
    - protocol: TCP
        port: 80
        targetPort: 80
        nodePort: 30080
```

TYPE OF SERVICES



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



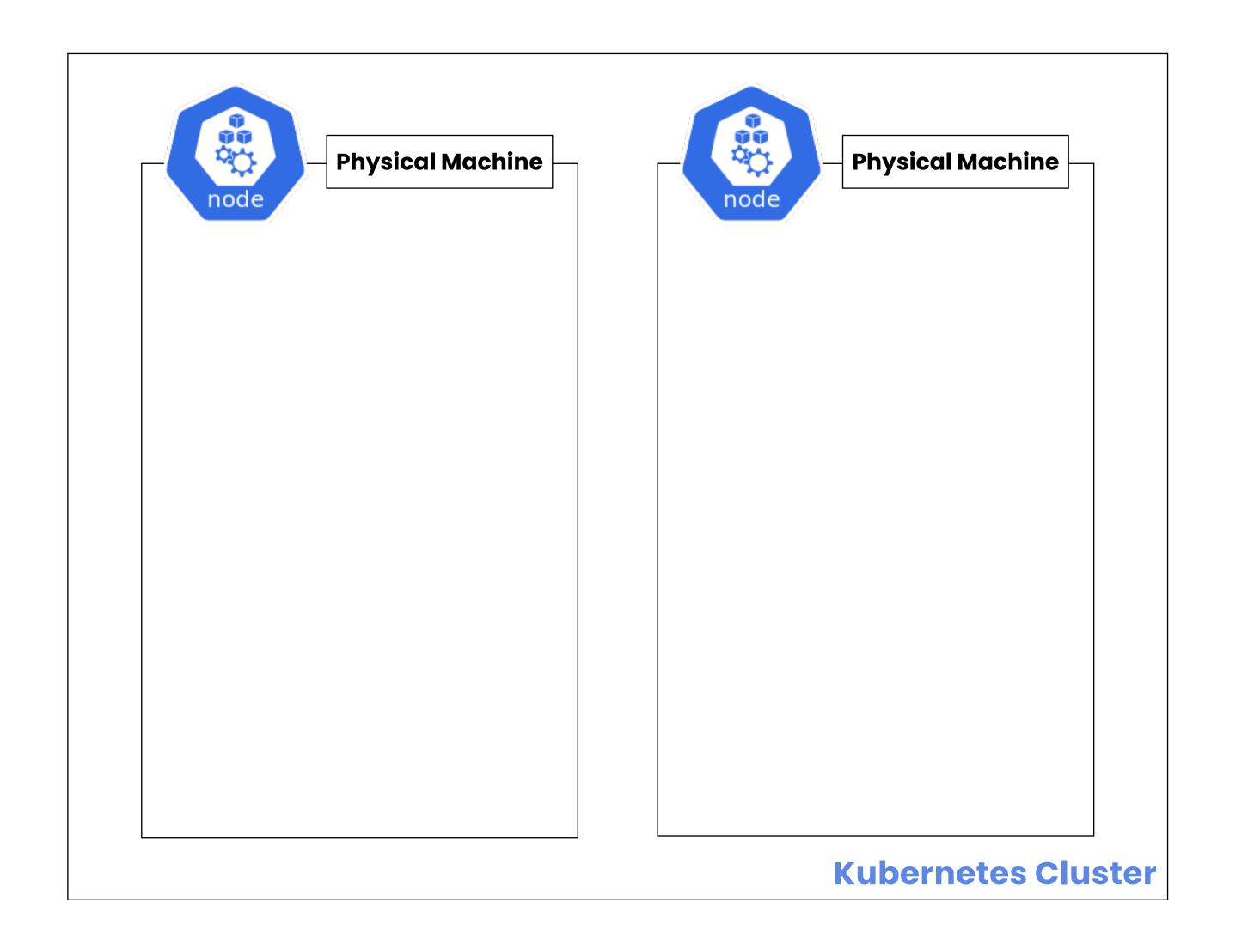
```
apiVersion: v1
kind: Service
metadata:
   name: my-web-service
spec:
   type: NodePort
   selector:
    app: my-web
   ports:
    - protocol: TCP
        port: 80
        targetPort: 80
        nodePort: 30080
```

```
LoadBalancer

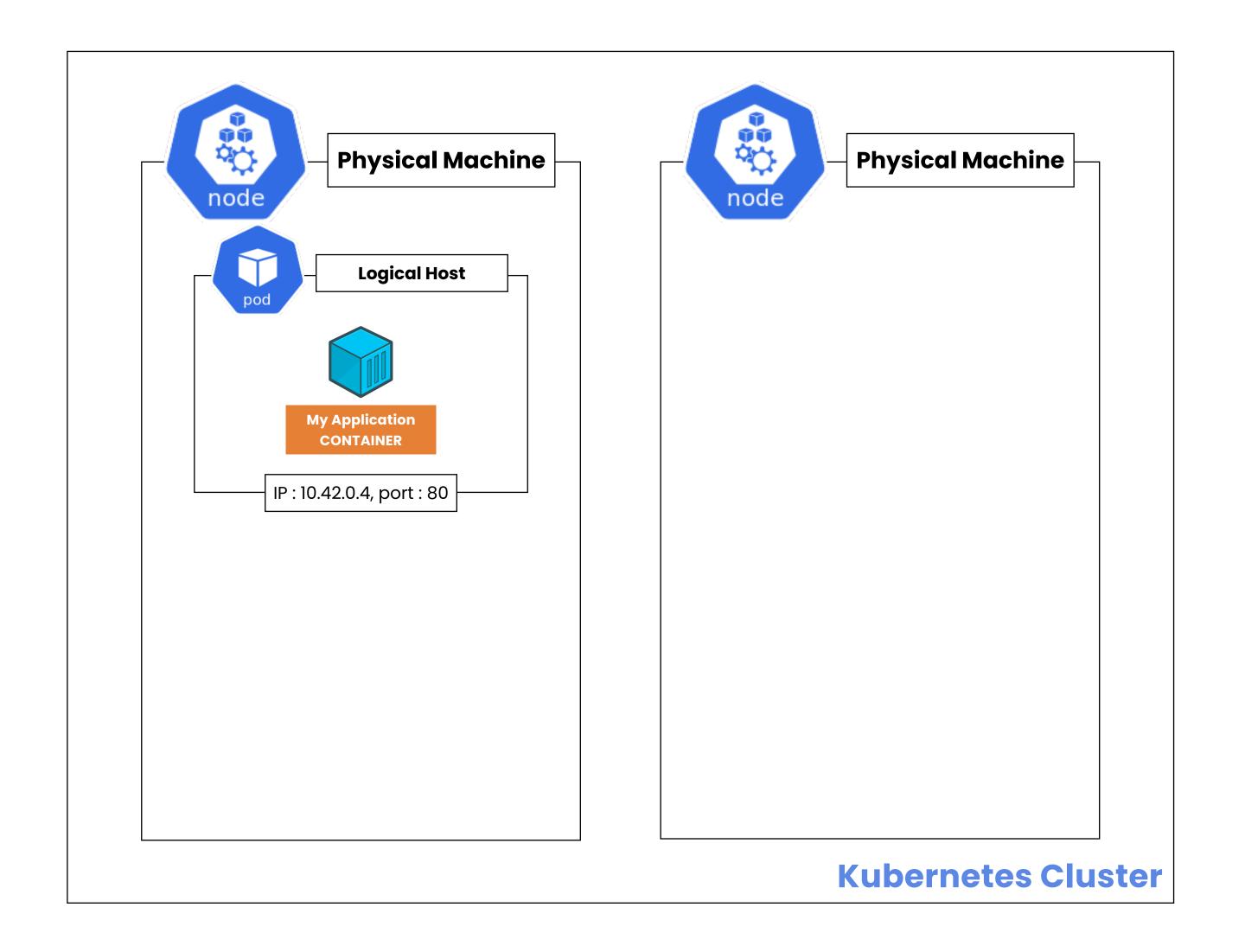
External Service
```

```
apiVersion: v1
kind: Service
metadata:
   name: my-web-service
spec:
   type: LoadBalancer
   selector:
    app: my-web
   ports:
    - protocol: TCP
        port: 80
        targetPort: 80
        nodePort: 30080
```

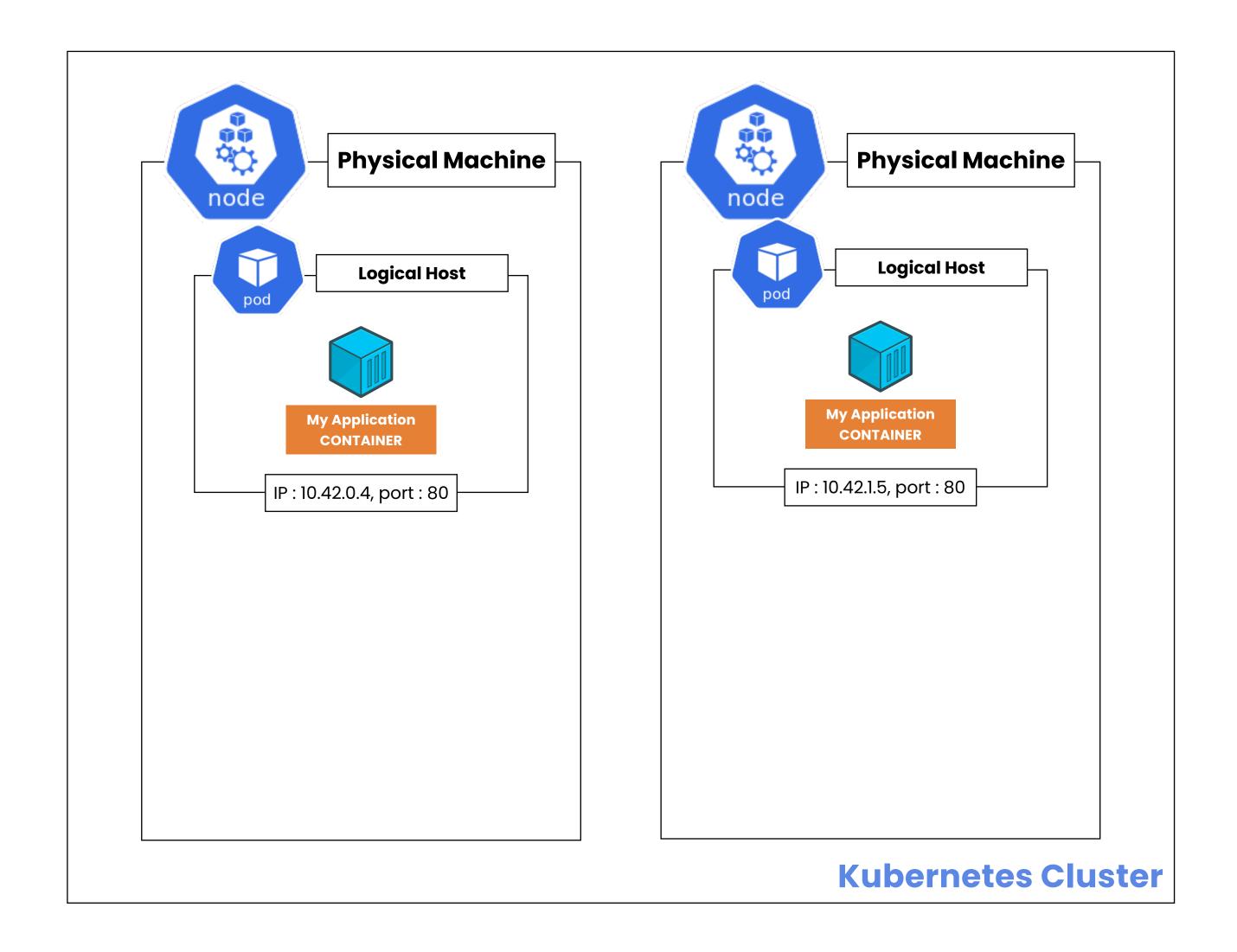




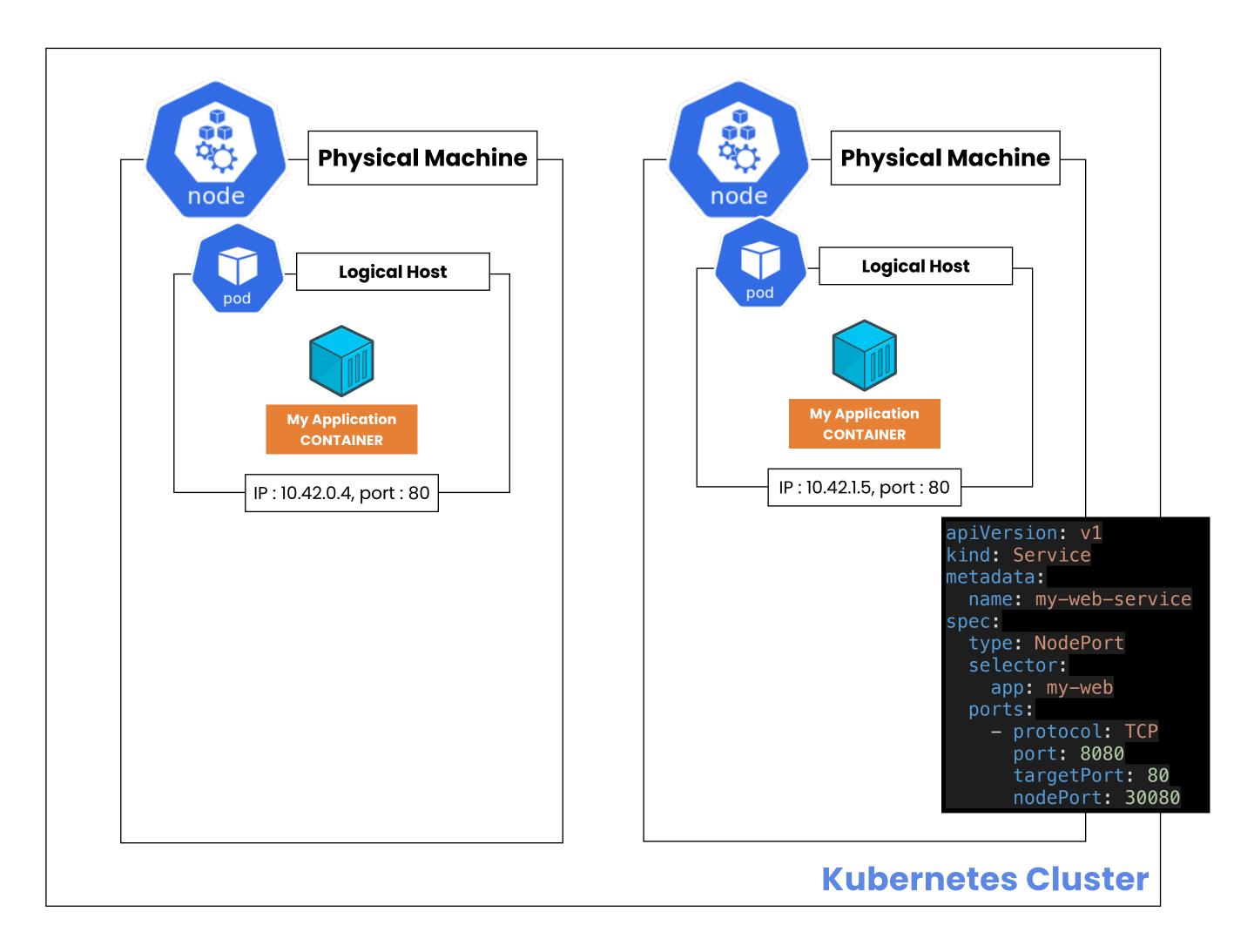
NodePort: Exposes the Service on each Node's IP at a static port (the *NodePort*).



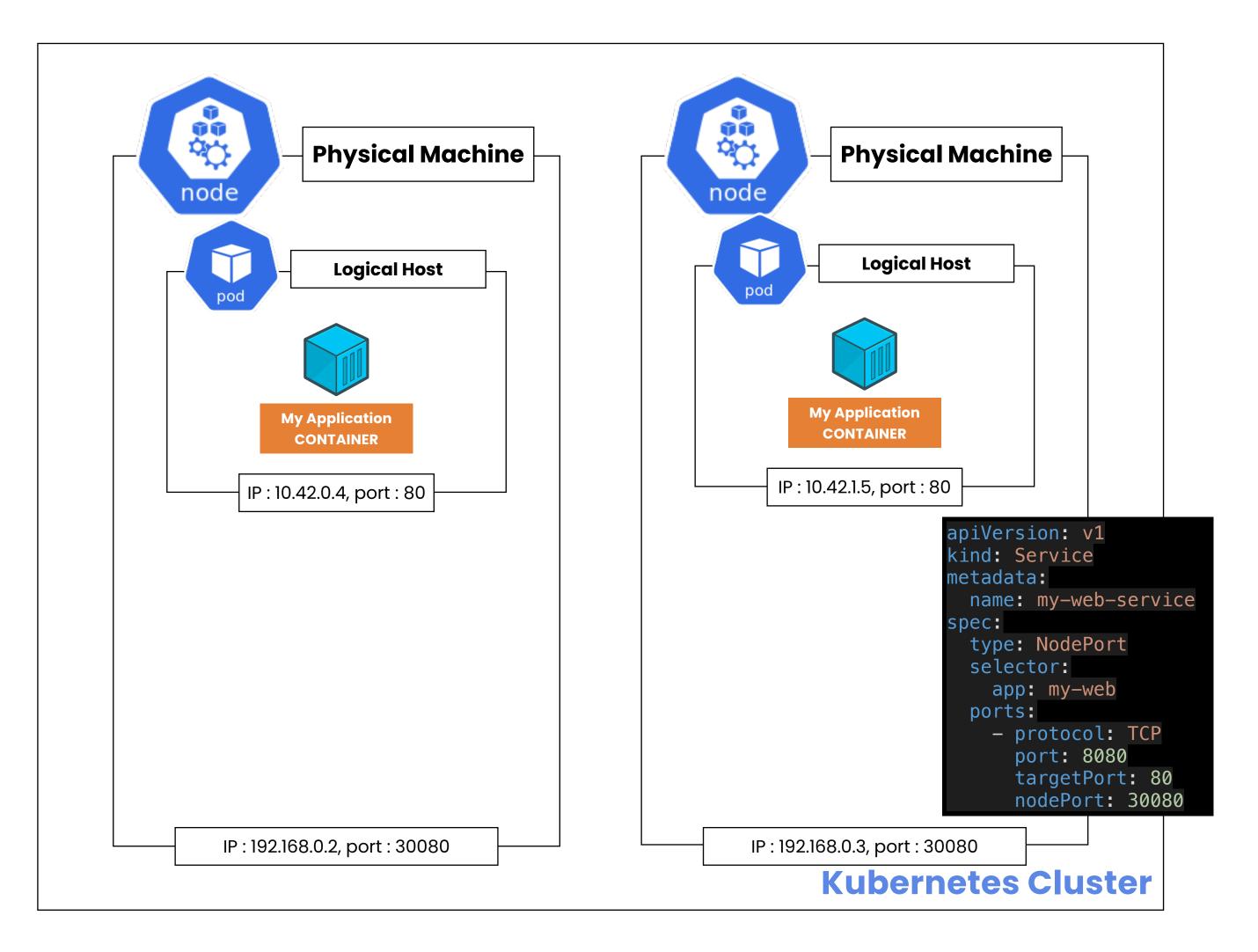
NodePort: Exposes the Service on each Node's IP at a static port (the *NodePort*).



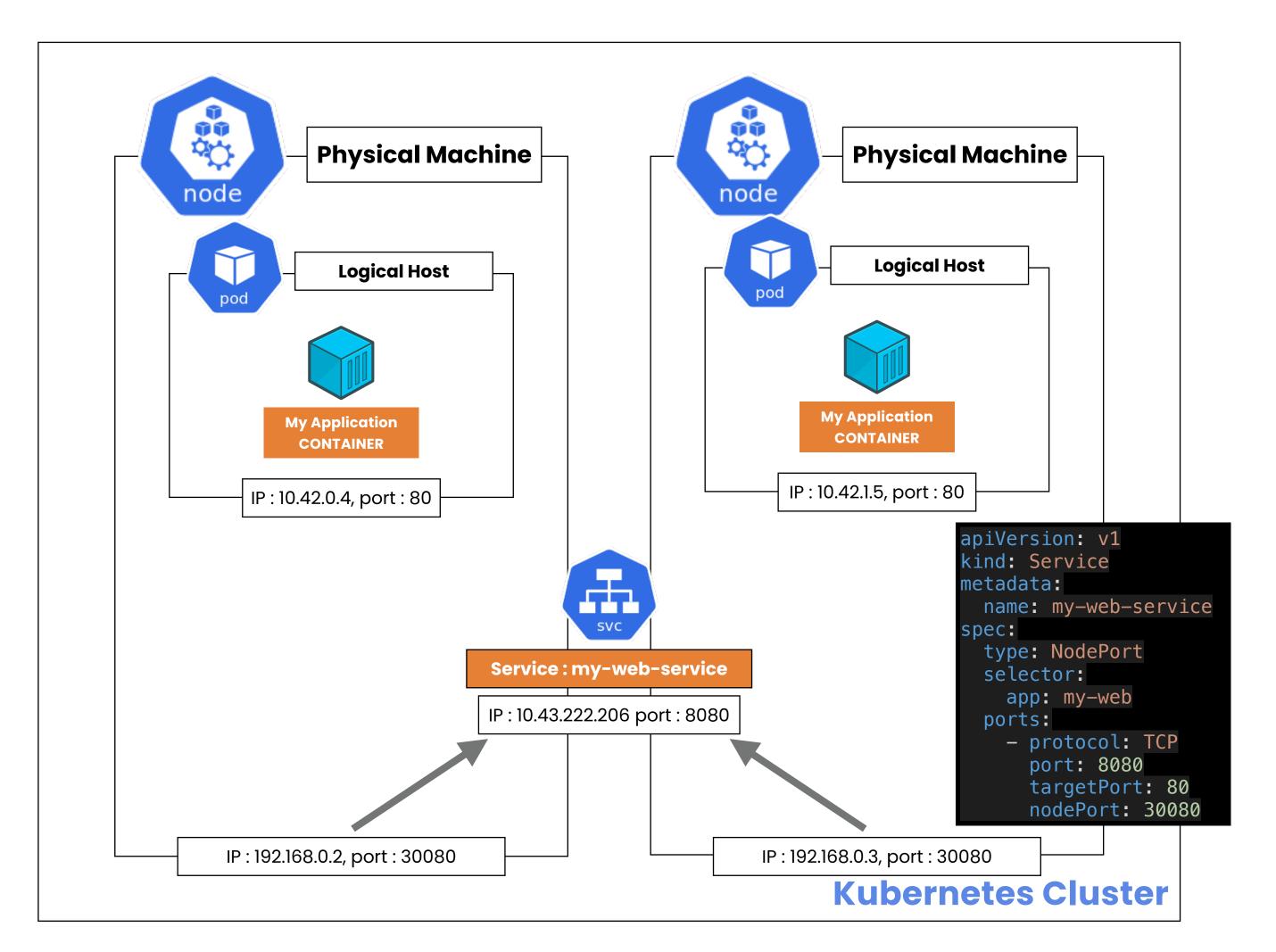
NodePort: Exposes the Service on each Node's IP at a static port (the *NodePort*).



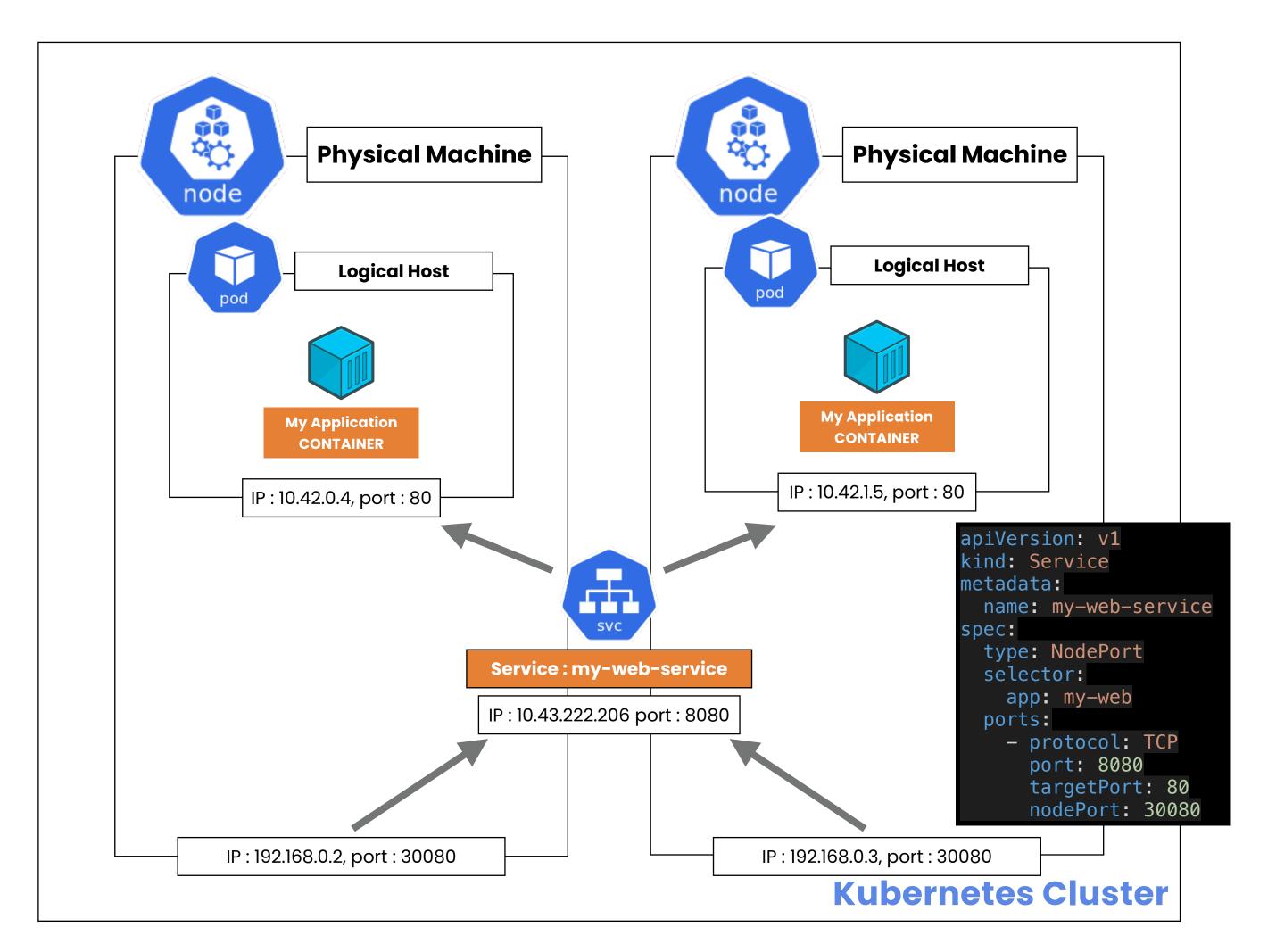
NodePort: Exposes the Service on each Node's IP at a static port (the *NodePort*).



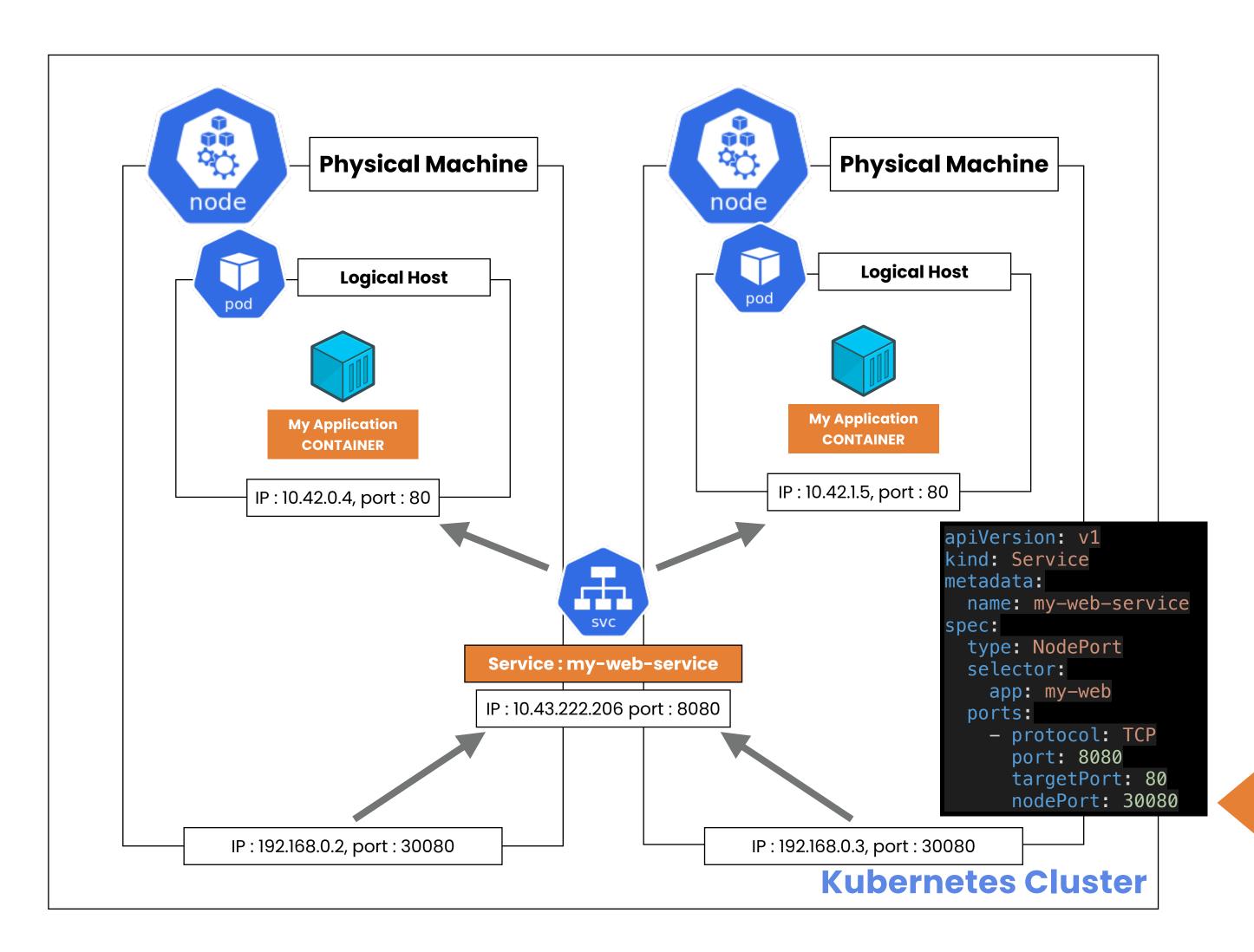
NodePort: Exposes the Service on each Node's IP at a static port (the *NodePort*).



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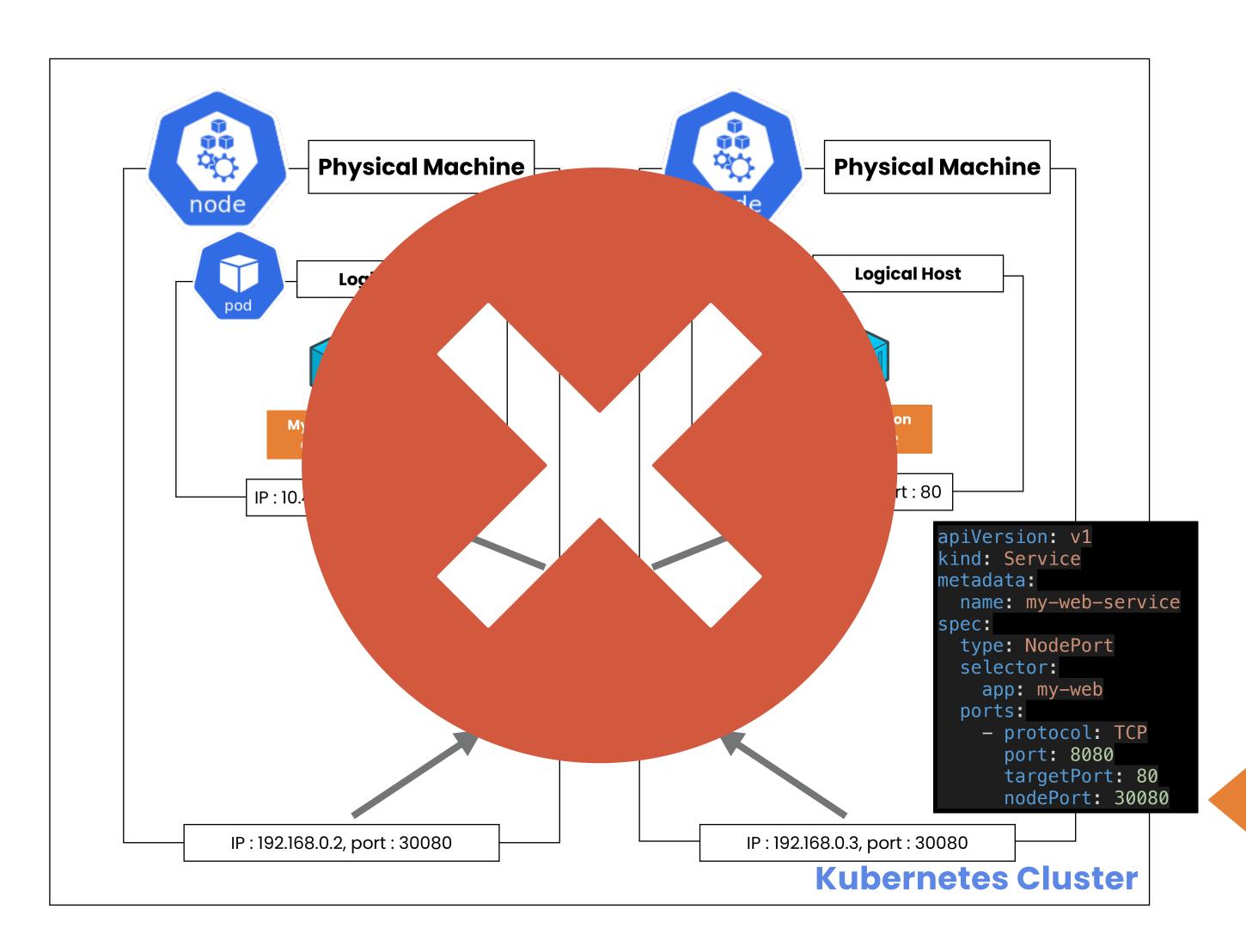
NodePort: Exposes the Service on each Node's IP at a static port (the *NodePort*).



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A ClusterIP Service, to which the NodePort Service routes, is automatically created. You'll be able to contact the NodePort Service, from outside the cluster, by requesting <NodeIP>:<NodePort>.

ALLOWED 30,000 - 32767

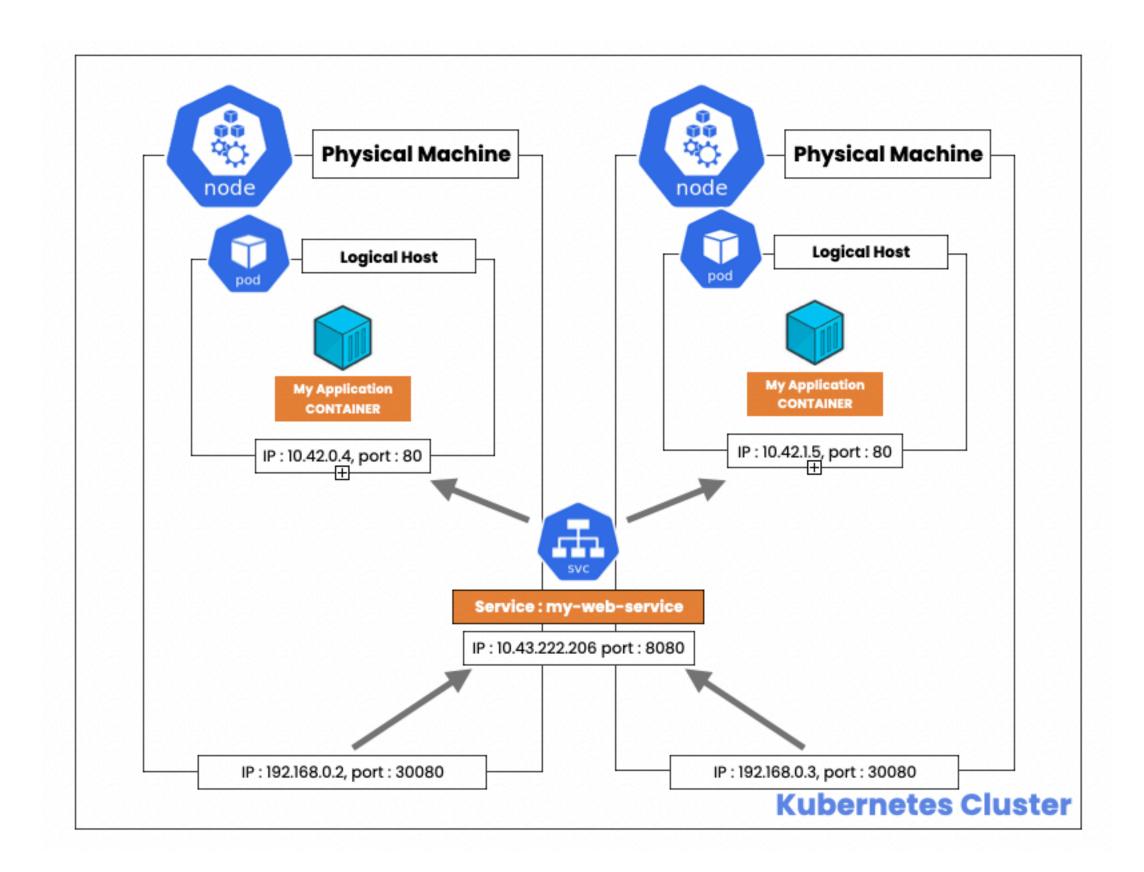


NodePort: Exposes the Service on each Node's IP at a static port (the *NodePort*).

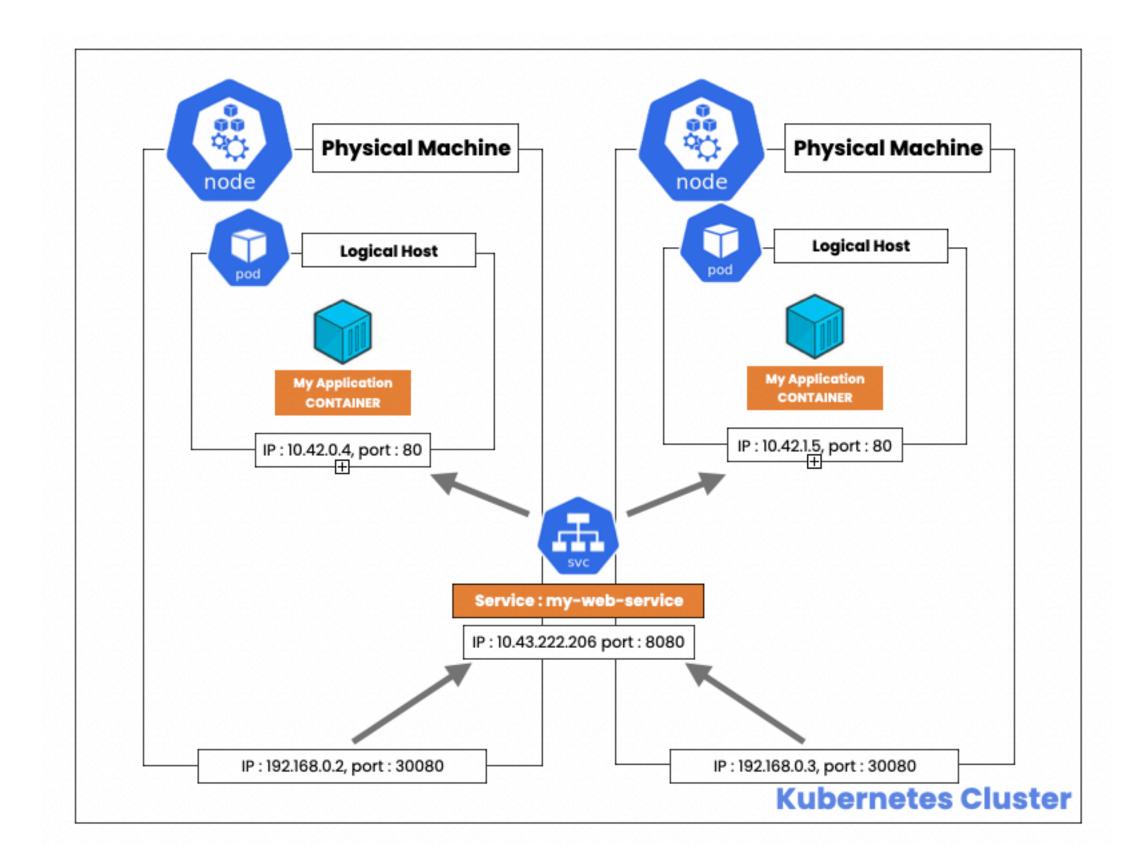
A ClusterIP Service, to which the NodePort Service routes, is automatically created. You'll be able to contact the NodePort Service, from outside the cluster, by requesting <NodeIP>:<NodePort>.

ALLOWED 30,000 - 32767

LoadBalancer: Exposes the Service externally using a cloud provider's load balancer.

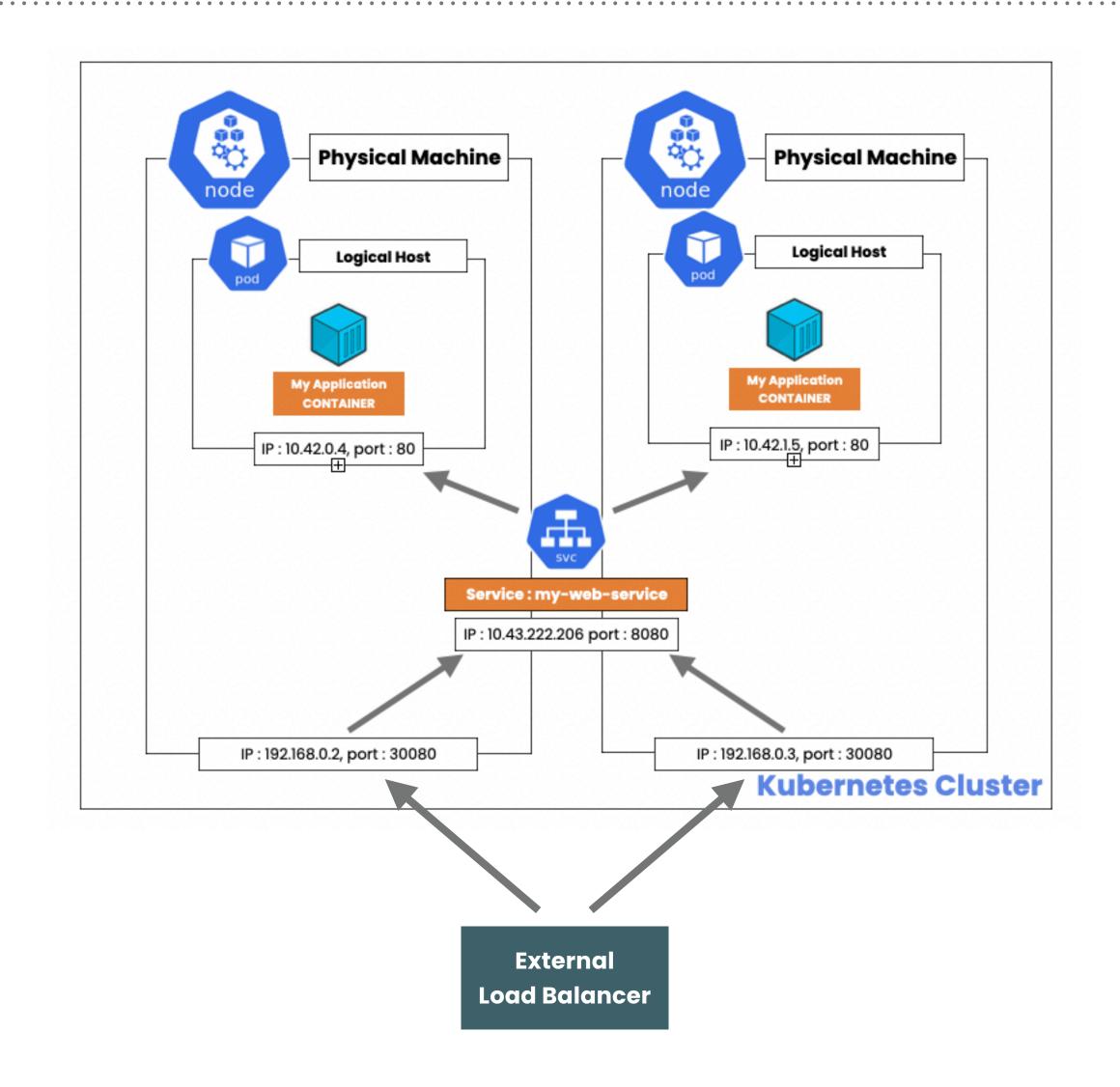


LoadBalancer: Exposes the Service externally using a cloud provider's load balancer.



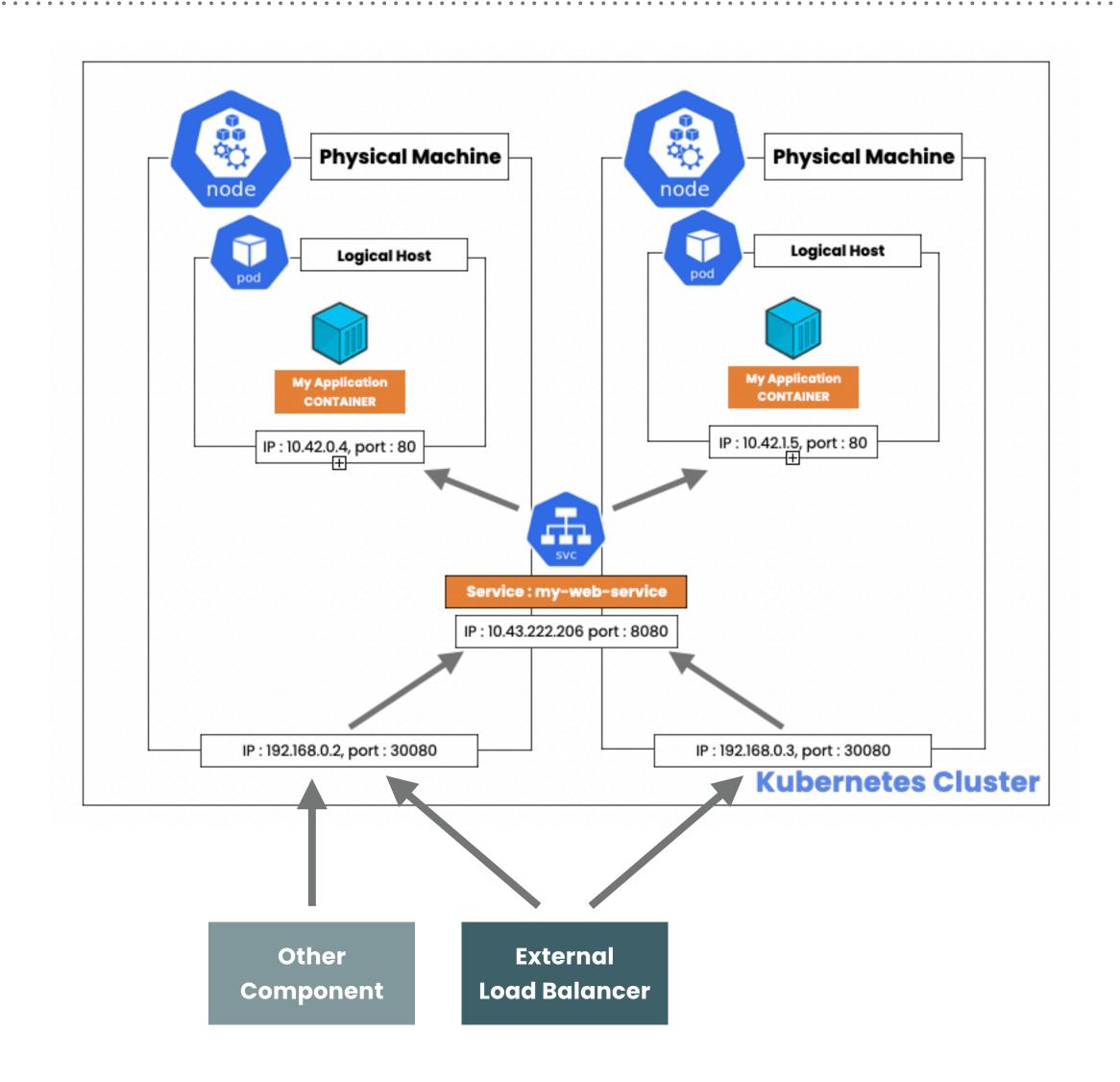
LoadBalancer: Exposes the Service externally using a cloud provider's load balancer.

```
apiVersion: v1
kind: Service
metadata:
   name: my-web-service
spec:
   type: LoadBalancer
   selector:
      app: my-web
   ports:
      - protocol: TCP
      port: 80
      targetPort: 80
      nodePort: 30080
```



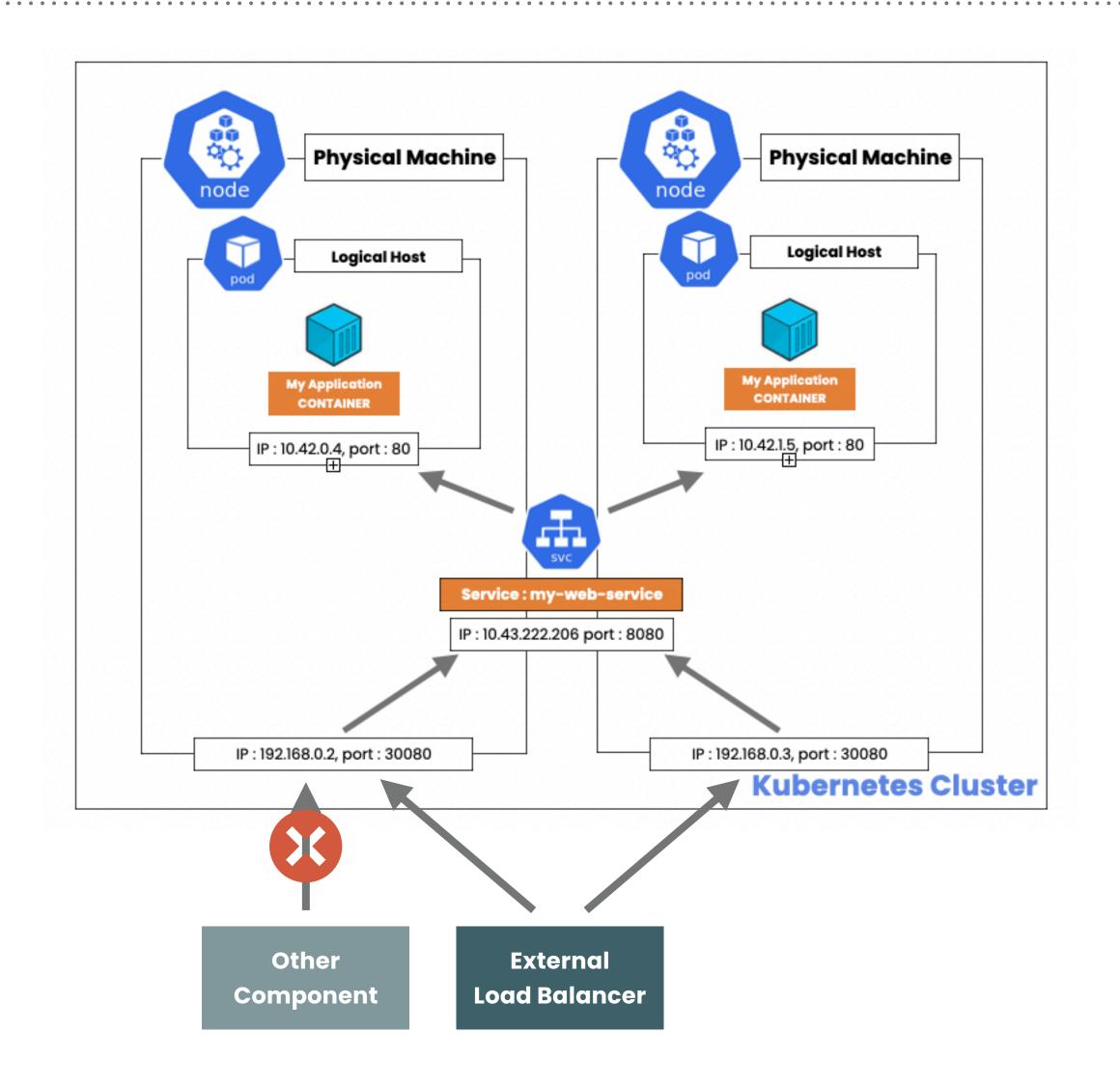
LoadBalancer: Exposes the Service externally using a cloud provider's load balancer.

```
apiVersion: v1
kind: Service
metadata:
   name: my-web-service
spec:
   type: LoadBalancer
   selector:
     app: my-web
   ports:
     - protocol: TCP
     port: 80
     targetPort: 80
     nodePort: 30080
```



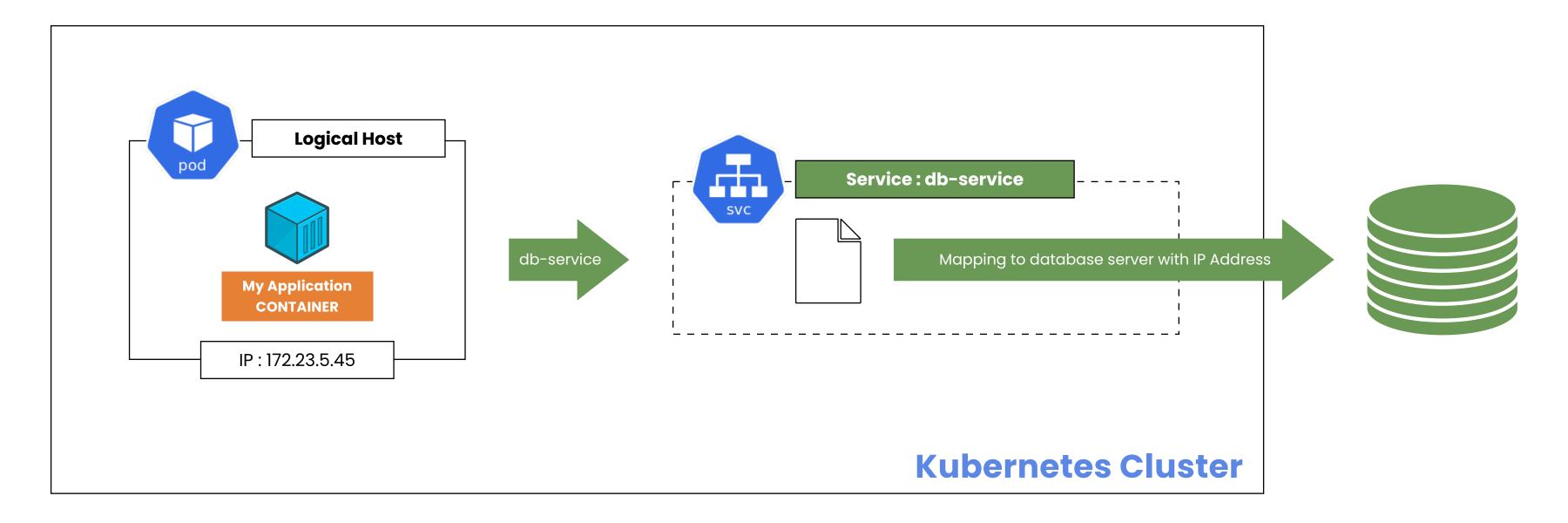
LoadBalancer: Exposes the Service externally using a cloud provider's load balancer.

```
apiVersion: v1
kind: Service
metadata:
   name: my-web-service
spec:
   type: LoadBalancer
   selector:
     app: my-web
   ports:
     - protocol: TCP
     port: 80
     targetPort: 80
     nodePort: 30080
```

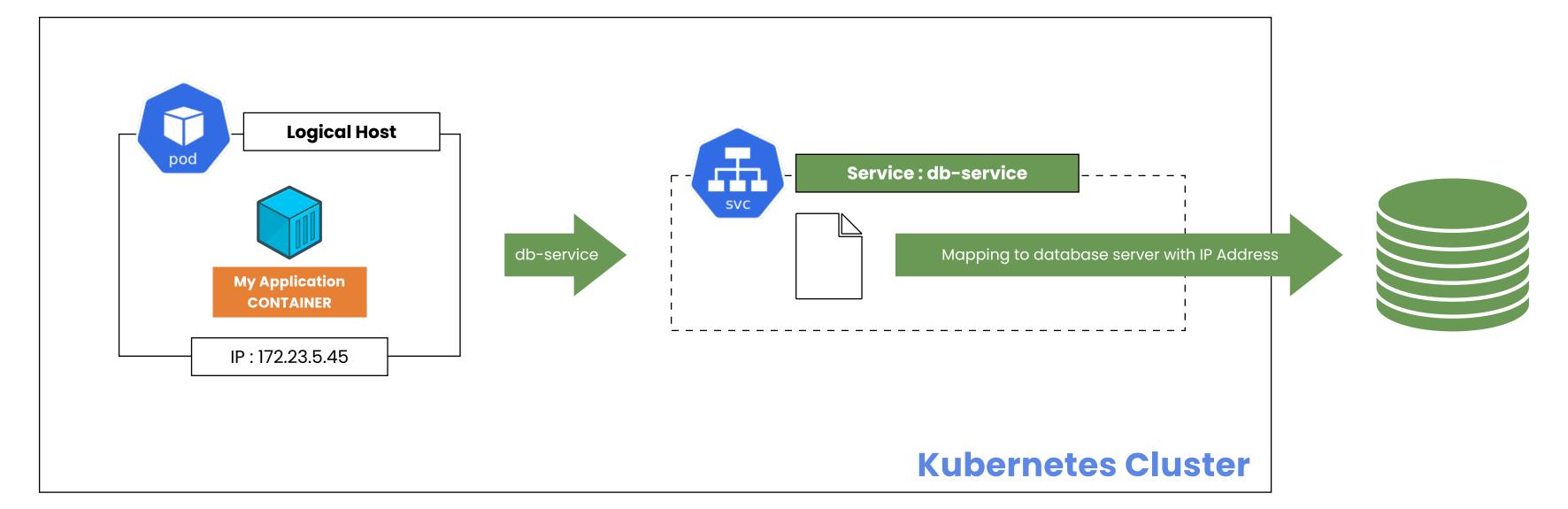


LoadBalancer: Exposes the Service externally using a cloud provider's load balancer.

```
apiVersion: v1
kind: Service
metadata:
   name: my-web-service
spec:
   type: LoadBalancer
   selector:
     app: my-web
   ports:
     - protocol: TCP
     port: 80
     targetPort: 80
     nodePort: 30080
```

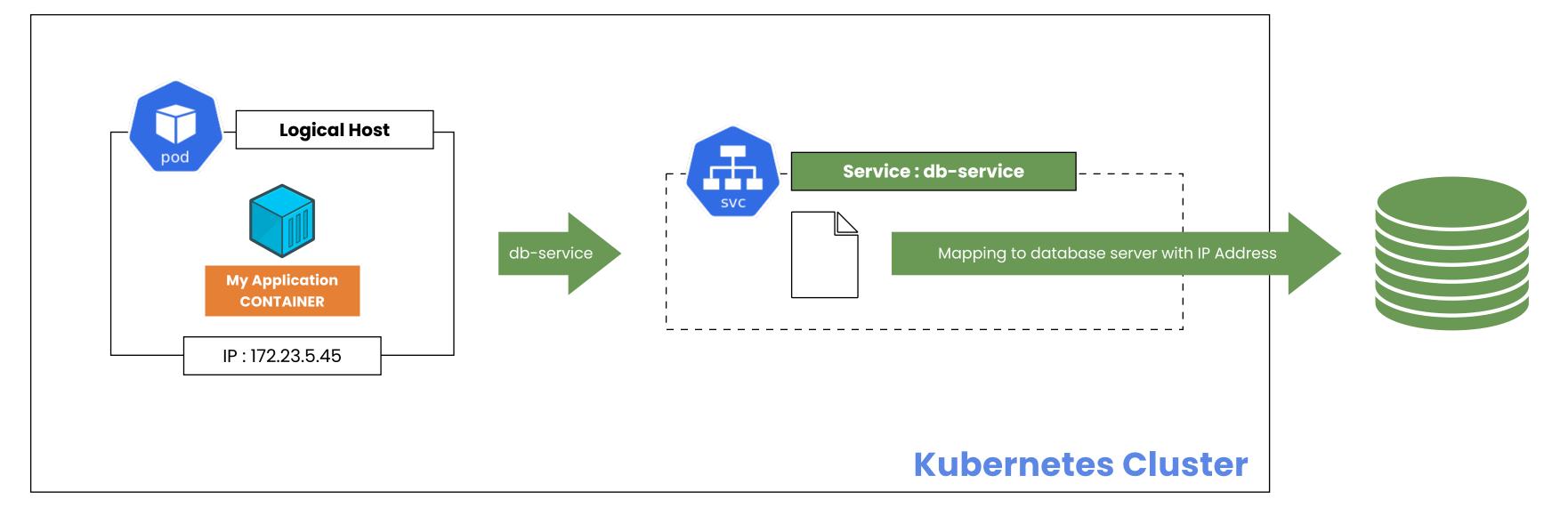


ExternalName: Maps the Service to the contents of the externalName field (e.g. foo.bar.example.c om), by returning a CNAME record with its value. No proxying of any kind is set up.



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```
apiVersion: v1
kind: Service
metadata:
   name: ex-json-service
   namespace: prod
spec:
   type: ExternalName
   externalName: jsonplaceholder.typicode.com
```



```
apiVersion: v1
kind: Service
metadata:
   name: ex-json-service
   namespace: prod
spec:
   type: ExternalName
   externalName: jsonplaceholder.typicode.com
```

```
apiVersion: v1
kind: Service
metadata:
   name: my-service
spec:
   ports:
        - name: http
        protocol: TCP
        port: 80
        targetPort: 9376
externalIPs:
        - 80.11.12.10
```

the Service to the contents of the externalName field (e.g. foo.bar.example.c om), by returning a CNAME record with its value. No proxying of any kind is set up.

THANK YOU