

Ports in Kubernetes

Service ports list

The service's `service.spec.ports` list configures which requests to a service port get forwarded to which ports on its pods. A successful request can be made from outside the cluster to the node's IP address and service's `nodePort`, forwarded to the service's `port`, and received on the `targetPort` by the pod.

```
kind: Service
apiVersion: v1
metadata:
  name: port-example-svc
spec:
  # Make the service externally visible via the node
  type: NodePort

  ports:
    # Which port on the node is the service available through?
    - nodePort: 31234

    # Inside the cluster, what port does the service expose?
    - port: 8080

    # Which port do pods selected by this service expose?
    - targetPort:

  selector:
    # ...
```

nodePort

This setting makes the service visible *outside* the Kubernetes cluster by the node's IP address and the port number declared in this property. The service also has to be of type `NodePort` (if this field isn't specified, Kubernetes will allocate a node port automatically).

port

Expose the *service* on the specified port internally within the cluster. That is, the service becomes visible on this port, and will send requests made to this port to the pods selected by the service.

targetPort

This is the port on the *pod* that the request gets sent to. Your application needs to be listening for network requests on this port for the service to work

- `nodePort` : The port on the node where external traffic will come in on

`port` : The port **of this service**

`targetPort` The target port on the pod(s) to forward traffic to