

Experiment Optional: NodePort with k3d

Create a cluster, mapping the port 30080 from agent-0 to localhost:8082

```
$ k3d cluster create mycluster -p 8082:30080@agent[0] --agents 2
```

Note: Kubernetes' default NodePort range is [30000-32767](#)

Note: You may as well expose the whole NodePort range from the very beginning, e.g. via `k3d cluster create mycluster --agents 3 -p 30000-32767:30000-32767@server[0]` (See [this video from @portainer](#))

Create the nginx deployment

```
$ kubectl create deployment nginx --image=nginx
```

Create a ClusterIP service for it

```
$ kubectl create service clusterip nginx --tcp=80:80
```

Create a NodePort service for it with `kubectl apply -f simple-nodeport.yaml` file provided in the Zoom chat

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

Curl it via localhost

```
$ curl localhost:8082/
```