

Working with Nodeport Service

With Nodeport inspite of having a cluster-internal IP, it expose the service on a port on each node of the cluster (the same port on each node). We can access the service on any <NodeIP>:NodePort. If you set the type field to “NodePort”, the Kubernetes master will allocate a random port from a range (default range is 30000-32767), and each Node will proxy that port (the same port number on every Node) into your Service. You can specify the particular nodeport also.

Create A deployment from following configuration.

apiVersion: apps/v1

kind: Deployment

metadata:

name: nginx-deployment

labels:

app: nginx

spec:

replicas: 1

selector:

matchLabels:

app: nginx

template:

metadata:

labels:

app: nginx

spec:

containers:

- name: nginx-ctr

image: nginx:1.15.4

ports:

- containerPort: 80

Deploy

kubectl -f apply deploy.yaml

Create a Nodeport service by using following yaml file -nodeport.yaml

apiVersion: v1

kind: Service

metadata:

name: nginx-nodesvc

labels:

app: nginx

spec:

type: NodePort

ports:

- port: 80

nodePort: 31009

protocol: TCP

selector:

app: nginx

Deploy Nodeport service.

kubectl -f nodeport.yaml

Get the information of of the services present and their ports.

kubectl get svc

NAME	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
kubernetes	10.0.0.1	<none>	443/TCP	1h
nginx-nodesvc	10.0.0.55	<nodes>	80:31009/TCP	1m

Get the Node IP.

```
kubect! get node -o wide
```

NAME	STATUS	ROLES	AGE	VERSION	EXTERNAL-IP	OS-IMAGE	KERNEL-VERSION	CONTAINER-RUNTIME
ip-172-20-42-226.us-west-2.compute.internal	Ready	master	1d	v1.10.3	54.201.214.249	Debian GNU/Linux 8 (jessie)	4.4.121-k8s	docker://17.3.2
ip-172-20-46-21.us-west-2.compute.internal	Ready	node	1d	v1.10.3	34.217.40.145	Debian GNU/Linux 8 (jessie)	4.4.121-k8s	docker://17.3.2
ip-172-20-61-64.us-west-2.compute.internal	Ready	node	1d	v1.10.3	35.162.251.247	Debian GNU/Linux 8 (jessie)	4.4.121-k8s	docker://17.3.2

Access the nginx pod via Nodeport and Node IP.

```
curl http://34.217.40.145:31009/
```

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>Welcome to nginx!</title>
```

```
<style>
```

```
  body {
```

```
    width: 35em;
```

```
    margin: 0 auto;
```

```
    font-family: Tahoma, Verdana, Arial, sans-serif;
```

```
  }
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h1>Welcome to nginx!</h1>
```

```
<p>If you see this page, the nginx web server is successfully installed and  
working. Further configuration is required.</p>
```

<p>For online documentation and support please refer to

nginx.org.

Commercial support is available at

nginx.com.</p>

<p>Thank you for using nginx.</p>

</body>

</html>

Delete the service and Pod