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# Kubernetes - Create two containers in one pod

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I'm developing an application that consists of two containers. I want to deploy them in Kubernetes into one Pod, since I want the two services to be behind one IP address. However, I'm having a hard time trying to connect the kubernetes Services with the containers. How could I write a `deployment.yml` file, so that when the user calls a `x.x.x.x:port1`, the request is forwarded to the first container, and when the `x.x.x.x:port2` is called, the request is forwarded to the second container. How could I specify the Services?

Here's what I have until now:

```
apiVersion:v1
kind: Pod
metadata:
  name: my_app
spec:
  containers:
  - name: first_container
    image: first_image

  - name: second_container
    image: second_image
---
apiVersion: v1
kind: Service
...
```

Thank you in advance!

docker    deployment    kubernetes

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asked Oct 8, 2018 at 14:53

UrmLmn
**989**  1  12  26

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In your containers section you need to define a containerPort for each:

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```
containers:
- name: first_container
  image: first_image
  ports:
  - containerPort: port1
- name: second_container
  image: second_image
  ports:
  - containerPort: port2
```

And then in the ports section of the service definition you need to point the targetPorts of the service at those ports like in https://stackoverflow.com/a/42272547/9705485

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answered Oct 8, 2018 at 15:21

Ryan Dawson
**10.9k**   5   36   59

3    According to the K8S documentation here for the container ports -
     kubernetes.io/docs/reference/generated/kubernetes-api/v1.12/... - `Exposing a port here gives the`
     `system additional information about the network connections a container uses, but is`
     `primarily informational. Not specifying a port here DOES NOT prevent that port from`
     `being exposed. Any port which is listening on the default "0.0.0.0" address inside a`
     `container will be accessible from the network.` – Praveen Sripati Oct 8, 2018 at 16:38