

## Defining a Kubernetes deployment

Let's create a deployment file to define how to create the pods for our Identity microservice.

In [Play.Identity](#) repo

1. Install the Kubernetes VS Code extension
2. Add a Kubernetes directory
3. Add a new identity.yaml file
4. Type **Kubernetes Deployment** in the file to generate a new deployment spec.
5. Explain:

metadata.name:	name of the deployment
spec.selector.matchLabels.app:	which pods to manage
spec.template.metadata.labels.app:	the label of the pods to create
spec.template.spec.containers[0].name:	name of the container

memory: 128Mi: 128 mebibyte / 1Mi = 1024 kibibytes  
1MB=1000KB  
1MiB = 1024KB  
cpu: 500m: Five hundred millicpu = 0.5 CPU = half CPU

6. Update the spec:

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: identity-deployment
spec:
  selector:
    matchLabels:
      app: identity
  template:
    metadata:
      labels:
        app: identity
    spec:
      containers:
        - name: identity
          image: playeconomy.azurecr.io/play.identity:1.0.4
          env:
```

```
- name: ServiceSettings__MessageBroker
  value: SERVICEBUS
resources:
  limits:
    memory: "128Mi"
    cpu: "150m"
  ports:
    - containerPort: 5002
```

7. Commit and push.

In the next lesson you will define the secrets needed by your K8s deployment.