Network

```
apiVersion: v1
kind: Service
metadata:
 name: my-load-balancer
spec:
 type: LoadBalancer
 ports:
 - port: 80
   targetPort: 8888
   protocol: TCP
   name: http
 selector:
   app: notebook-pod
```

Storage

```
apiVersion: v1
kind: PersistentVolumeClaim
metadata:
 name: my-volume-claim
spec:
 resources:
  requests:
   storage: 10Gi
   storageClassName: ebs
```

Application

```
apiVersion: apps/v1
kind: Deployment
metadata:
 name: jupyter-notebook
spec:
 replicas: 1
 selector:
  matchLabels:
   app: notebook-pod
 template:
  metadata:
   labels:
    app: notebook-pod
  spec:
   containers:
   - name: notebook
     image: jupyter/scipy-notebook
     ports:
     - containerPort: 8888
     volumeMounts:
     - mountPath: "/home/jovyan"
       name: my-volume
   volumes:
   - name: my-volume
     persistentVolumeClaim:
       claimName: my-volume-claim
```