

Hands on 1  
2 2

to deploy a multi-tier application  
over Kubernetes networking, to show pod to  
pod communications, with service.



Deployment file

pod 1:

Container

image 1

Deployment file

pod 2:

container

image 1

Commands:-

= =

→ ~~cd~~ mkdir DEMO

→ cd DEMO

→ ~~git~~ webapplication.yml

webapplication.yml

apiVersion: apps/v1

kind: Deployment

Metadata:

name: webapp1

Labels :

app: webapp.sql

tier: frontend

spec :

Replicas : 1

Selector :

matchLabels :

app: webapp.sql

tier: frontend

Template :

metadata :

labels :

app: webapp.sql

tier: frontend

spec :

containers :

- name: webapp4

image: hshari/webapp

ports :

- containerport: 8081

→ gedit mysqldatabase.yml

mysqldatabase.yml

apiVersion: apps/v1

kind: Deployment

metadata:

name: sqldb

labels:

app: webapp-sql

tier: backend

spec:

replicas: 1

selector:

matchLabels:

app: webapp-sql

tier: backend

template:

metadata:

labels:

app: webapp-sql

tier: backend

spec:

containers:

- name: mysql

image: hshay/mysql:5.5

ports:

- containerPort: 3306

→ kubectl apply -f webapplication.yml

→ kubectl apply -f mysql database.yml

output :- deployment.apps/sqlldb Created.

→ Kubectl get deployment.

output :-

<u>name</u>	<u>desired</u>	<u>current</u>	<u>update</u>	<u>available</u>	<u>age</u>
sqlldb	1	1	1	1	10s
webapp1	1	1	1	1	26s

→ gedit web service.yml

web service.yml

apiVersion: v1

kind: service

metadata:

(name: webapp.sql)

Spec:

Selectors:

app: webapp.sql

tier: frontend

ports:

- port: 80

type: NodePort.