# LSC

## Lab 6 Hieronim Koc

HELM

```
hiro@Hiro:~/studia/semestr_8/LSC/lab6$ helm repo add nfs-ganesha-server-and-external-provisioner https://kubernetes-sigs.github.io/nfs-ganesha-server-and-external-provisioner/
helm repo update
"nfs-ganesha-server-and-external-provisioner" already exists with the same configuration, skipping
Hang tight while we grab the latest from your chart repositories...
...Successfully got an update from the "nfs-ganesha-server-and-external-provisioner" chart repository
...Successfully got an update from the "kvaps" chart repository
Update Complete. ⎈Happy Helming!⎈
hiro@Hiro:~/studia/semestr_8/LSC/lab6$ helm install my-nfs nfs-ganesha-server-and-external-provisioner/nfs-server-provisioner
NAME: my-nfs
LAST DEPLOYED: Thu Apr 17 00:00:24 2025
NAMESPACE: default
STATUS: deployed
REVISION: 1
TEST SUITE: None
NOTES:
The NFS Provisioner service has now been installed.

A storage class named 'nfs' has now been created
and is available to provision dynamic volumes.

You can use this storageclass by creating a `PersistentVolumeClaim` with the
correct storageClassName attribute. For example:

    ---
    kind: PersistentVolumeClaim
    apiVersion: v1
    metadata:
      name: test-dynamic-volume-claim
    spec:
      storageClassName: "nfs"
      accessModes:
        - ReadWriteOnce
      resources:
        requests:
          storage: 100Mi
```

(without name is standard nfs storageClassName)

PVC

```
hiro@Hiro:~/studia/semestr_8/LSC/lab6$ kubectl get pvc
NAME      STATUS   VOLUME                                     CAPACITY   ACCESS MODES   STORAGECLASS   VOLUMEATTRIBUTESCLASS   AGE
nfs-pvc   Bound    pvc-e6a13931-d953-475c-9108-fbdd6714371c   1Gi        RWX            nfs            <unset>                 38s
```

DEMPLOYEMENT

```
hiro@Hiro:~/studia/semestr_8/LSC/lab6$ kubectl apply -f nginx-deployment.yaml
deployment.apps/nginx-deployment created
hiro@Hiro:~/studia/semestr_8/LSC/lab6$ kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
my-nfs-nfs-server-provisioner-0     1/1     Running   0          3m33s
nginx-deployment-765d599b8f-658rl   1/1     Running   0          13s
```

SERVICE (LB)

There has to be Security Group allow TCP traffic

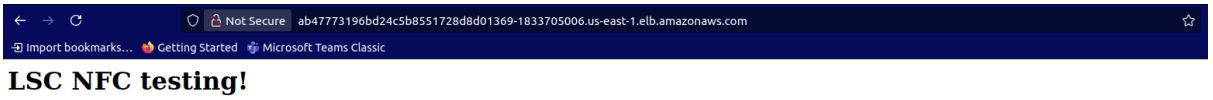
```
hiro@Hiro:~/studia/semestr_8/LSC/lab6$ kubectl get svc nginx-service
NAME            TYPE       CLUSTER-IP       EXTERNAL-IP   PORT(S)        AGE
nginx-service   NodePort   10.100.205.145   <none>        80:30080/TCP   5m7s
```

```
hiro@Hiro:~/studia/semestr_8/LSC/lab6$ kubectl get svc nginx-service
NAME            TYPE           CLUSTER-IP       EXTERNAL-IP                                                               PORT(S)        AGE
nginx-service   LoadBalancer   10.100.205.145   ab47773196bd24c5b8551728d8d01369-1833705006.us-east-1.elb.amazonaws.com   80:30080/TCP   8m26s
```

JOB

```
hiro@Hiro:~/studia/semestr_8/LSC/lab6$ kubectl apply -f populate-job.yaml
job.batch/populate-web-content created
hiro@Hiro:~/studia/semestr_8/LSC/lab6$ kubectl get jobs
NAME                   STATUS     COMPLETIONS   DURATION   AGE
populate-web-content   Complete   1/1           4s         6s
```

HTTP WEBSITE




PODS

```
hiro@Hiro:~/studia/semestr_8/LSC/lab6$ kubectl get pods
NAME                                READY   STATUS      RESTARTS   AGE
my-nfs-nfs-server-provisioner-0     1/1     Running     0          8m18s
nginx-deployment-765d599b8f-658rl   1/1     Running     0          4m58s
populate-web-content-pz4sw          0/1     Completed   0          3m11s
```

DIAGRAM