# Lab 5: Using Kubernetes IDE: Lens

## Objectives

* Use Kubernetes IDE Lens to deploy opendatacam resources in previous Lab 4.

## Deliverables

**Compulsory (10%)**

* Screenshot of K8s resources in [opendatacam] namespace:
  + Workload > Pods
  + Workload > Deployment
  + Configuration > ConfigMaps
  + Network > Services
  + Storage > Persistent Volume Claims
  + Storage > Persistent Volumes

**Task 1: Download Lens**

1. Download Lens from <https://docs.k8slens.dev/main/>

**Task 2: Connect Lens with Kubernetes Cluster**

1. Get cluster config settings.

kubectl config view --minify --raw

1. Copy and paste the cluster config settings to K8s Lens.
2. Connect to Cluster.

**Tasks 3: Delete existing K8s resources for opendatacam in default namespace from Lens.**

1. From Workload > Deployments, delete [opendatacam] and [opendatacam-mongo].
2. From Configuration > ConfigMaps, delete [opendatacam].
3. From Network > Services, delete [opendatacam] and [opendatacam-mongo].
4. From Storage > Persistent Volume Claims, delete [mongodb-pv-claim].
5. From Storage > Persistent Volume, delete [pvc....].

**Task 4: Deploy the K8s resources in Lab 4 in Lab 5**

1. Copy and paste all the YAML files for resources in Lab 4, e.g. opendatacam-deployment.yaml, opendatacam-mongo-deployment.yaml, opendatacam-mongo-pvc.yaml, opendatacam-mongo-service.yaml, opendatacam-service.yaml
2. Create a [opendatacam] namespace via Lens.
3. Deploy all the YAML files via Lens IDE using the [+] button.

**References**

<https://docs.k8slens.dev/main/>