

Ashwani Singh Mann

101494701

```
akira@ashwani:~$ minikube start --nodes 2 -p multinode-demo
[multinode-demo] minikube v1.32.0 on Debian bookworm/sid
Automatically selected the docker driver
Using Docker driver with root privileges
Starting control plane node multinode-demo in cluster multinode-demo
Pulling base image ...
Creating docker container (CPUs=2, Memory=4950MB) ...
Preparing Kubernetes v1.28.3 on Docker 24.0.7 ...
  Generating certificates and keys ...
  Booting up control plane ...
  Configuring RBAC rules ...
Configuring CNI (Container Networking Interface) ...
  Using image gcr.io/k8s-minikube/storage-provisioner:v5
Verifying Kubernetes components...
Enabled addons: storage-provisioner, default-storageclass

Starting worker node multinode-demo-m02 in cluster multinode-demo
Pulling base image ...
Creating docker container (CPUs=2, Memory=4950MB) ...
Found network options:
  NO_PROXY=192.168.58.2
Preparing Kubernetes v1.28.3 on Docker 24.0.7 ...
  env NO_PROXY=192.168.58.2
Verifying Kubernetes components...
Done! kubectrl is now configured to use "multinode-demo" cluster and "default" namespace by default
akira@ashwani:~$
```

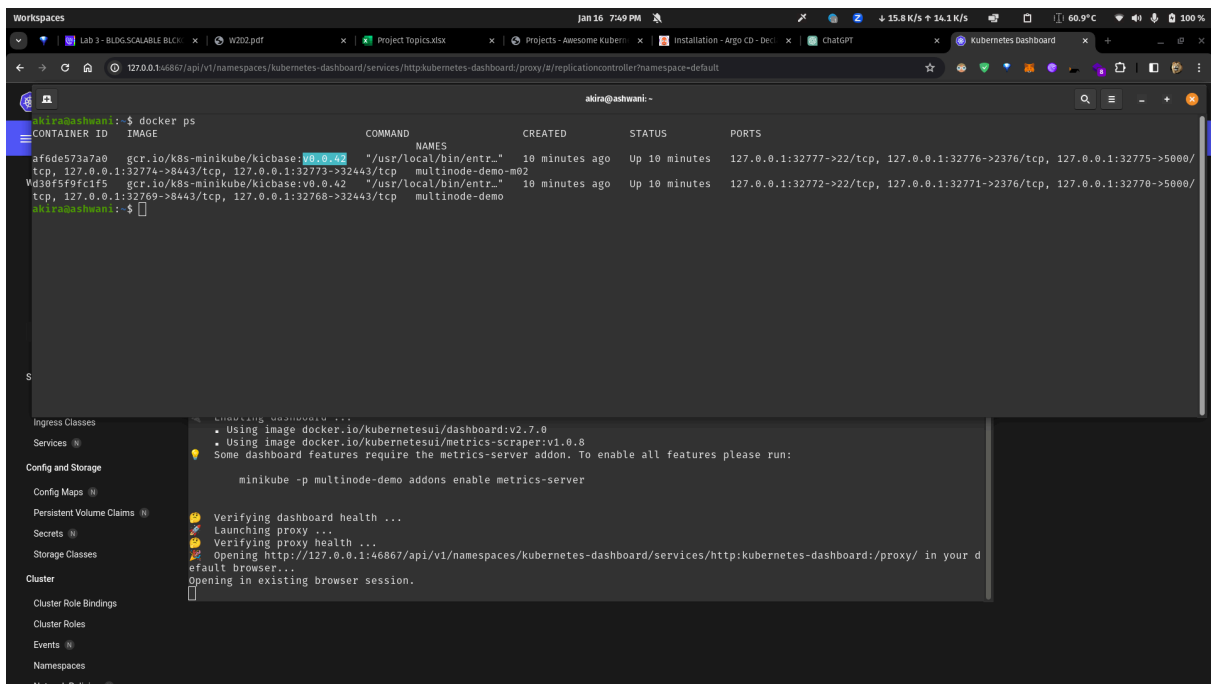
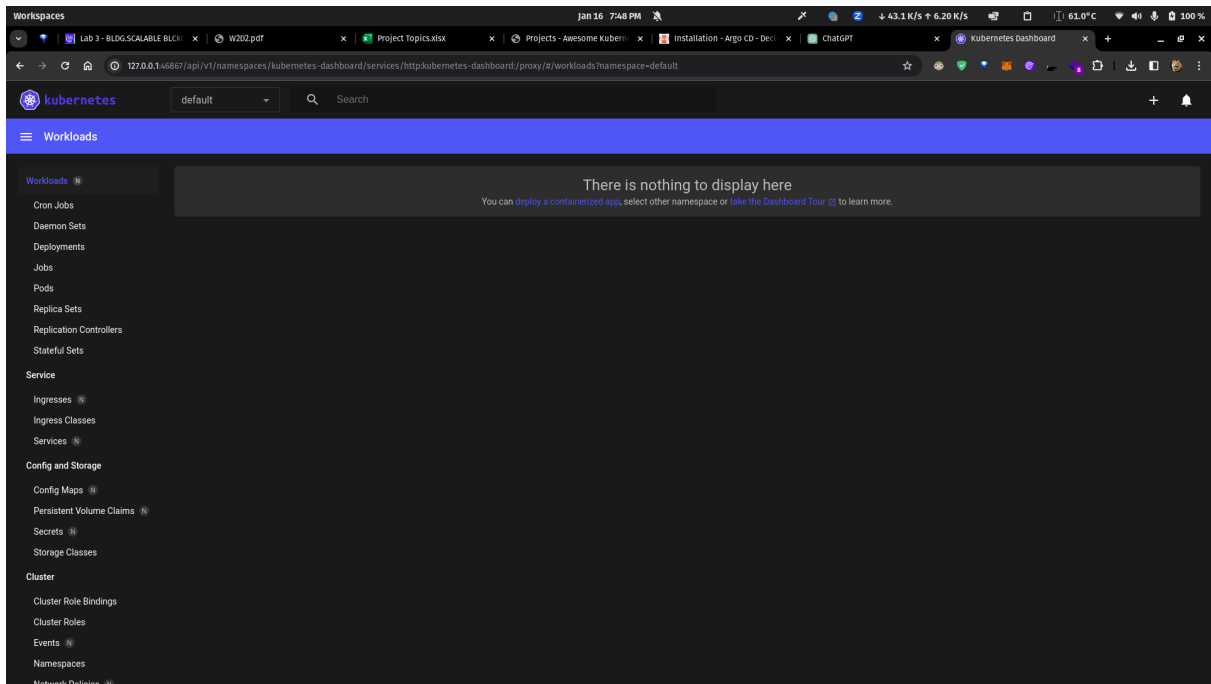
```
akira@ashwani:~$ kubectl get nodes~
error: the server doesn't have a resource type "nodes~"
akira@ashwani:~$ kubectl get nodes
NAME                STATUS    ROLES    AGE   VERSION
multinode-demo      Ready    control-plane   4m17s   v1.28.3
multinode-demo-m02  Ready    <none>        3m58s   v1.28.3
akira@ashwani:~$ minikube status -p multinode-demo
multinode-demo
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
kubeconfig: Configured

multinode-demo-m02
type: Worker
host: Running
kubelet: Running

akira@ashwani:~$ minikube dashboard -p multinode-demo
Enabling dashboard ...
  Using image docker.io/kubernetesui/dashboard:v2.7.0
  Using image docker.io/kubernetesui/metrics-scraper:v1.0.8
Some dashboard features require the metrics-server addon. To enable all features please run:

    minikube -p multinode-demo addons enable metrics-server

Verifying dashboard health ...
Launching proxy ...
Verifying proxy health ...
Opening http://127.0.0.1:46867/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/ in your default browser...
Opening in existing browser session.
```



matchLabels:

```
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl apply -f replicaset.yaml
replicaset.apps/nginx created
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$
```

```
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl get pods
No resources found in default namespace.
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl apply -f replicaset.yaml
replicaset.apps/nginx created
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl get pods
NAME          READY   STATUS             RESTARTS   AGE
nginx-494vp   0/1     ContainerCreating   0           5s
nginx-drfdk   0/1     ContainerCreating   0           5s
nginx-qnl1l   0/1     ContainerCreating   0           5s
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$
kubectl apply -f replicaset.yaml
```

```
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl get pods
NAME          READY   STATUS             RESTARTS   AGE
nginx-494vp   0/1     ContainerCreating   0           5s
nginx-drfdk   0/1     ContainerCreating   0           5s
nginx-qnl1l   0/1     ContainerCreating   0           5s
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl delete pod nginx-494vp
pod "nginx-494vp" deleted
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
nginx-drfdk   1/1     Running   0           98s
nginx-qjxkk   1/1     Running   0           12s
nginx-qnl1l   1/1     Running   0           98s
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$
kubectl apply -f replicaset.yaml
```

```
nginx-drfdk   0/1     ContainerCreating   0           5s
nginx-qnl1l   0/1     ContainerCreating   0           5s
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl delete pod nginx-494vp
pod "nginx-494vp" deleted
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
nginx-drfdk   1/1     Running   0           98s
nginx-qjxkk   1/1     Running   0           12s
nginx-qnl1l   1/1     Running   0           98s
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl get replicaset
NAME   DESIRED   CURRENT   READY   AGE
nginx   3         3         3       115s
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$
kubectl apply -f replicaset.yaml
```

```
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl get deployment
NAME          READY   UP-TO-DATE   AVAILABLE   AGE
nginx-deployment 3/3     3             3           18s
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$
```

```
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl get deployment
NAME          READY   UP-TO-DATE   AVAILABLE   AGE
nginx-deployment 3/3     3             3           18s
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl rollout status deployment nginx
Error from server (NotFound): deployments.apps "nginx" not found
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl rollout status deployment nginx-deployment
deployment "nginx-deployment" successfully rolled out
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$
```

```
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ touch statefulsets.yaml
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl apply -f statefulsets.yaml
service/nginx created
statefulset.apps/web created
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl get statefulsets
NAME   READY   AGE
web    0/3     19s
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$
```

```
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ ls
daemonset.yaml deployment.yaml replicaset.yaml statefulsets.yaml
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl apply -f daemonset.yaml
daemonset.apps/nginx created
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl get pods
NAME          READY   STATUS             RESTARTS   AGE
nginx-9xpkb   0/1     ContainerCreating   0           5s
nginx-kqdxs   0/1     ContainerCreating   0           5s
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$ kubectl get daemonset
NAME   DESIRED   CURRENT   READY   UP-TO-DATE   AVAILABLE   NODE SELECTOR   AGE
nginx   2         2         2         2             2           <none>          17s
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN.APPS/lab3$
```

```
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE_BLKCHAIN.APPS/lab3$ kubectl apply -f statefulsets.yaml
service/nginx created
statefulset.apps/web created
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE_BLKCHAIN.APPS/lab3$ kubectl get statefulsets
NAME      READY   AGE
web       0/3     84s
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE_BLKCHAIN.APPS/lab3$
```

```
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE_BLKCHAIN.APPS/lab3$ gedit deploymentwhc.yaml
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE_BLKCHAIN.APPS/lab3$ kubectl apply -f deployment.yaml
deployment.apps/nginx-deployment created
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE_BLKCHAIN.APPS/lab3$ kubectl get deployment
NAME      READY   UP-TO-DATE   AVAILABLE   AGE
nginx-deployment  3/3     3             3           17s
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE_BLKCHAIN.APPS/lab3$
```

```
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE_BLKCHAIN.APPS/lab3$ kubectl apply -f deploymentwhc.yaml
error: no objects passed to apply
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE_BLKCHAIN.APPS/lab3$ kubectl get deployment
deploymentwhc.yaml  deployment.yaml
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE_BLKCHAIN.APPS/lab3$ kubectl get deployment
deploymentwhc.yaml  deployment.yaml
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE_BLKCHAIN.APPS/lab3$ kubectl get deploymentwhc
error: the server doesn't have a resource type "deploymentwhc"
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE_BLKCHAIN.APPS/lab3$
```

```
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE_BLKCHAIN.APPS/lab3$ kubectl apply -f deploymentwhc.yaml
deployment.apps/nginx-deployment unchanged
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE_BLKCHAIN.APPS/lab3$ kubectl get deployment
NAME      READY   UP-TO-DATE   AVAILABLE   AGE
nginx-deployment  3/3     3             3           4m22s
akira@ashwani:~/Documents/GBC-Classes/Winter/1SCALABLE_BLKCHAIN.APPS/lab3$
```

```
Workspaces
akira@ashwani: -
Jan 17 8:46 PM
akira@ashwani:~$ curl -fsSL https://downloads.k8slens.dev/keys/gpg | gpg --dearmor | sudo tee /usr/share/keyrings/lens-archive-keyring.gpg > /dev/null
[sudo] password for akira:
akira@ashwani:~$ echo "deb [arch=amd64 signed-by=/usr/share/keyrings/lens-archive-keyring.gpg] https://downloads.k8slens.dev/apt/debian stable main" | sudo tee /etc/apt/sources.list.d/lens.l
ist > /dev/null
akira@ashwani:~$ sudo apt update
Get:1 http://packages.microsoft.com/repos/code stable InRelease [3,589 B]
Get:2 http://apt.pop-os.org/proprietary jammy InRelease [11.5 kB]
Get:3 https://downloads.k8slens.dev/apt/debian stable InRelease [4,019 B]
Hit:4 https://download.sublimetext.com apt/dev/ InRelease
Hit:5 http://apt.pop-os.org/release jammy InRelease
Get:6 http://packages.microsoft.com/repos/code stable/main amd64 Packages [18.0 kB]
Hit:7 https://dl.google.com/linux/chrome/deb stable InRelease
Get:9 http://packages.microsoft.com/repos/code stable/main armhf Packages [19.0 kB]
Hit:10 http://apt.pop-os.org/ubuntu jammy InRelease
Get:11 http://packages.microsoft.com/repos/code stable/main arm64 Packages [18.7 kB]
Get:12 http://apt.pop-os.org/ubuntu jammy-security InRelease [119 kB]
Get:13 https://downloads.k8slens.dev/apt/debian stable/main amd64 Packages [648 B]
Hit:8 https://packages.cloud.google.com/apt/kubernetes-xenial InRelease
Get:14 http://apt.pop-os.org/ubuntu jammy-updates InRelease [119 kB]
Get:15 http://apt.pop-os.org/ubuntu jammy-backports InRelease [109 kB]
Get:16 http://apt.pop-os.org/proprietary jammy/main all Packages [604 B]
Get:17 http://apt.pop-os.org/proprietary jammy/main amd64 Packages [4,892 B]
Get:18 http://apt.pop-os.org/ubuntu jammy-security/main Sources [243 kB]
Get:19 http://apt.pop-os.org/ubuntu jammy-security/restricted Sources [52.1 kB]
Get:20 http://apt.pop-os.org/ubuntu jammy-security/universe Sources [173 kB]
Get:21 http://apt.pop-os.org/ubuntu jammy-security/main amd64 Packages [1,065 kB]
Get:22 http://apt.pop-os.org/ubuntu jammy-security/main i386 Packages [386 kB]
Get:23 http://apt.pop-os.org/ubuntu jammy-security/main Translation-en [201 kB]
Get:24 http://apt.pop-os.org/ubuntu jammy-security/restricted amd64 Packages [1,248 kB]
Get:25 http://apt.pop-os.org/ubuntu jammy-security/restricted Translation-en [204 kB]
Get:26 http://apt.pop-os.org/ubuntu jammy-security/universe amd64 Packages [829 kB]
Get:27 http://apt.pop-os.org/ubuntu jammy-security/universe i386 Packages [584 kB]
Get:28 https://apt.pop-os.org/ubuntu jammy-security/universe Translation-en [150 kB]
Get:29 http://apt.pop-os.org/ubuntu jammy-updates/universe Sources [296 kB]
Get:30 http://apt.pop-os.org/ubuntu jammy-updates/main Sources [465 kB]
Get:31 http://apt.pop-os.org/ubuntu jammy-updates/main i386 Packages [550 kB]
Get:32 http://apt.pop-os.org/ubuntu jammy-updates/main amd64 Packages [1,280 kB]
Get:33 https://apt.pop-os.org/ubuntu jammy-updates/universe amd64 Packages [1,020 kB]
Get:34 http://apt.pop-os.org/ubuntu jammy-updates/universe i386 Packages [601 kB]
Get:35 https://apt.pop-os.org/ubuntu jammy-updates/universe Translation-en [229 kB]
Get:36 http://apt.pop-os.org/ubuntu jammy-updates/multiverse amd64 Packages [42.1 kB]
Get:37 https://apt.pop-os.org/ubuntu jammy-updates/multiverse i386 Packages [4,184 B]
Get:38 http://apt.pop-os.org/ubuntu jammy-backports/main Sources [8,216 B]
Get:39 http://apt.pop-os.org/ubuntu jammy-backports/universe Sources [9,564 B]
Get:40 http://apt.pop-os.org/ubuntu jammy-backports/universe i386 Packages [14.5 kB]
Get:41 http://apt.pop-os.org/ubuntu jammy-backports/universe amd64 Packages [25.4 kB]
Fetched 10.2 MB in 2s (5,612 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
```

```
Workspaces
jan 17 8:46 PM
akira@ashwani: ~

22 packages can be upgraded. Run 'apt list --upgradable' to see them.
W: https://apt.kubernetes.io/dists/kubernetes-xenial/InRelease: Key is stored in legacy trusted.gpg keyring (/etc/apt/trusted.gpg), see the DEPRECATION section in apt-key(8) for details.
akira@ashwani:~$ sudo apt install lens
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  lens
0 upgraded, 1 newly installed, 0 to remove and 22 not upgraded.
Need to get 302 MB of archives.
After this operation, 1,493 MB of additional disk space will be used.
Get:1 https://downloads.k8slens.dev/apt/debian stable/main amd64 lens amd64 2024.1.170738-latest [302 MB]
Fetched 302 MB in 8s (39.9 MB/s)
Selecting previously unselected package lens.
(Reading database ... 258935 files and directories currently installed.)
Preparing to unpack .../lens_2024.1.170738-latest_amd64.deb ...
Unpacking lens (2024.1.170738-latest) ...
Setting up lens (2024.1.170738-latest) ...
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu3) ...
Processing triggers for mailcap (3.70-nmubuntu1) ...
Processing triggers for desktop-file-utils (0.26-1ubuntu3) ...
akira@ashwani:~$ lens-desktop
INFO: [LENS-EXTENSIONS]: LOADING ... +0ms
INFO: Running 6.5.0 migration for /home/akira/.config/Lens/lens-extensions.json +2ms
INFO: [LENS-EXTENSIONS]: LOADED from /home/akira/.config/Lens/lens-extensions.json +6ms
INFO: Starting v2024.1.170738-latest of Lens... +1ms
INFO: Starting LensProxy +1ms
INFO: [LENS-PROXY]: Proxy server has started at 127.0.0.1:37395 +3ms
INFO: Testing LensProxy connection ... +0ms
INFO: [LENS-USER-STORE]: LOADING ... +1ms
INFO: Running 6.0.0-alpha.3 migration for /home/akira/.config/Lens/lens-user-store.json +0ms
INFO: Running 6.0.3-beta.1 migration for /home/akira/.config/Lens/lens-user-store.json +2ms
INFO: Running 6.5.1 migration for /home/akira/.config/Lens/lens-user-store.json +2ms
INFO: [LENS-USER-STORE]: LOADED from /home/akira/.config/Lens/lens-user-store.json +2ms
INFO: [LENS-CLUSTER-STORE]: LOADING ... +3ms
INFO: Running 3.6.0-beta.1 migration for /home/akira/.config/Lens/lens-cluster-store.json +0ms
INFO: Number of clusters to migrate: +0ms
INFO: Running 6.0.0-beta.10 migration for /home/akira/.config/Lens/lens-cluster-store.json +3ms
INFO: Running 6.0.0-beta.13 migration for /home/akira/.config/Lens/lens-cluster-store.json +1ms
INFO: [LENS-CLUSTER-STORE]: LOADED from /home/akira/.config/Lens/lens-cluster-store.json +3ms
INFO: LensProxy connection OK +10ms
APPIMAGE env is not defined, current application is not an AppImage
INFO: Setting protocol client for lens:// +5ms
INFO: Protocol client register failed | +0ms
INFO: [LENS-FILESYSTEM-PROVISIONER-STORE]: LOADING ... +2ms
INFO: [LENS-FILESYSTEM-PROVISIONER-STORE]: LOADED from /home/akira/.config/Lens/lens-filesystem-provisioner-store.json +0ms
INFO: Syncing shell environment +1ms
INFO: [UNIX-SHELL-ENV]: running against /bin/bash +1ms
INFO: {}
```

243261/login?state=ult_8W9qqb5E0cC4hLTNRKIV_1Lf25a9x3fVAyrbPaA&code=09331651-da35-f421-aa23-2c9a421a25b5.1f53b92a-81a4-46c3-bb04-ab56cb5f296d.04aeb11e-f107-4e1e-a7b5-...

MD

multinode-demo

Cluster

Applications

Nodes

Workloads

Config

Network

Storage

Namespaces

Events

Helm

Access Control

Custom Resources

Security Center **NEW**

Cluster Overview

Worker Nodes

1h

⚙️

🔍

0.8

0.6

0.4

0.2

19:46

19:53

20:00

20:07

20:14

20:21

20:28

20:35

20:42

⚠️ Warnings: 3

Message	Object	Type	Age
Readiness probe failed: Get "http://8181/ready": dial tcp:8181: conn...	coredns-5dd5756b68-7tjnt	Event	23h
0/2 nodes are available: pod has unbound immediate PersistentVolu...	web-0	Event	23h
storageclass.storage.k8s.io "my-storage-class" not found	www-web-0	Event	23h

Terminal

+

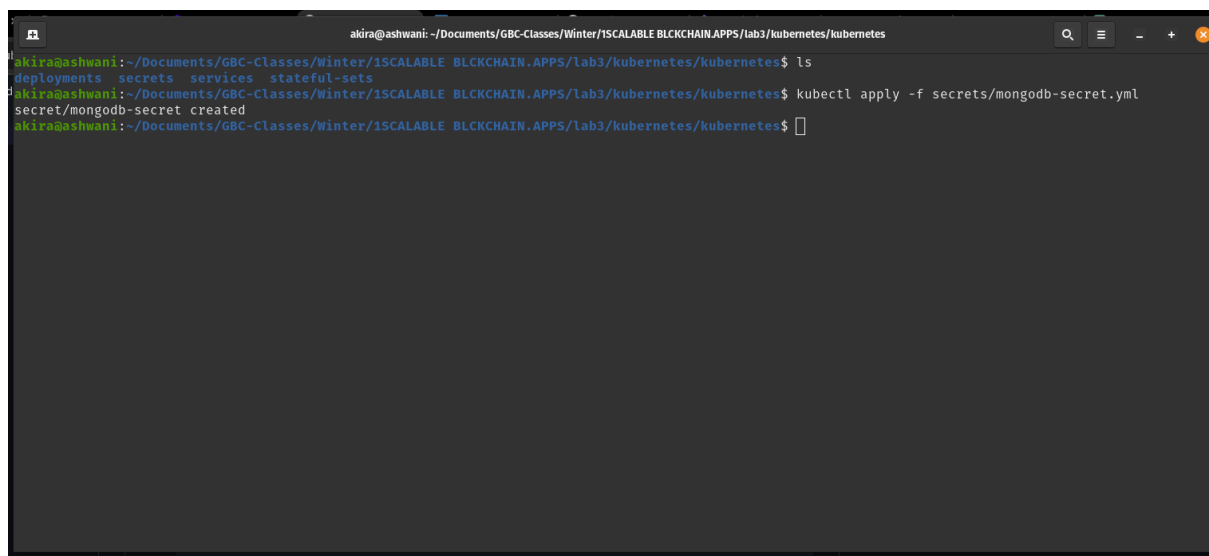
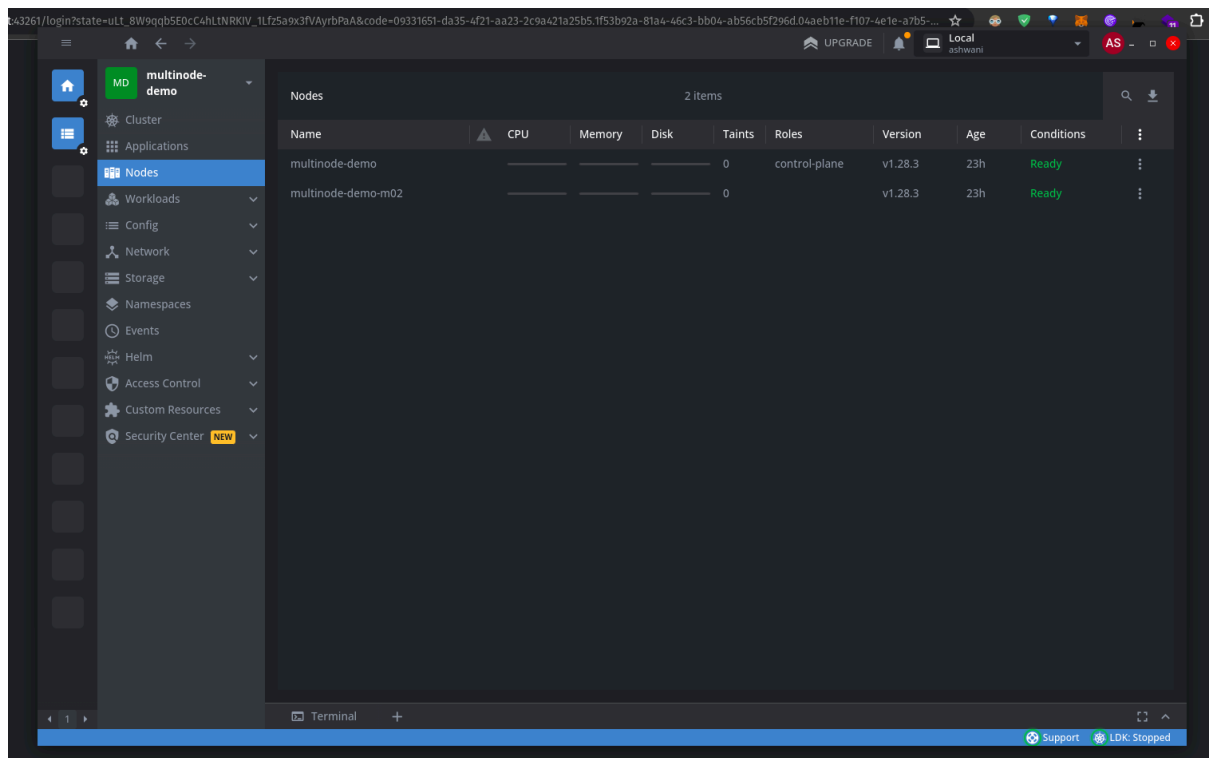
Support

LDK: Stopped

UPGRADE

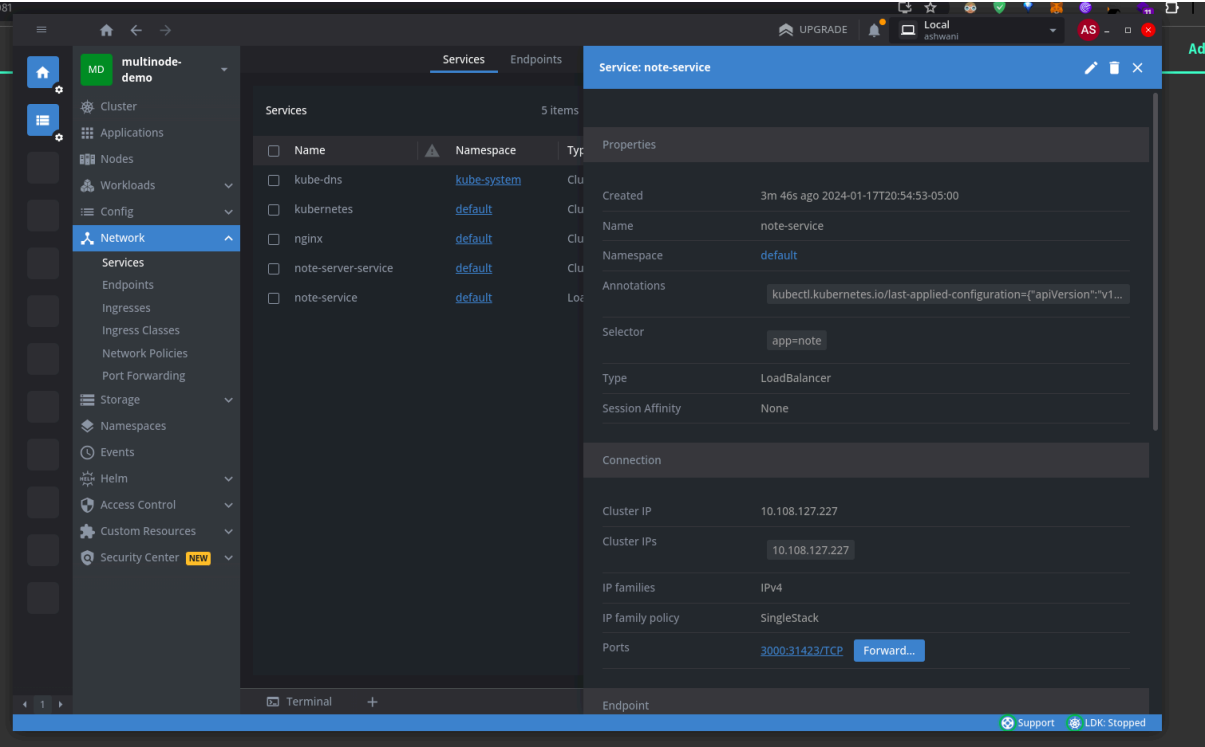
Local ashwani

AS



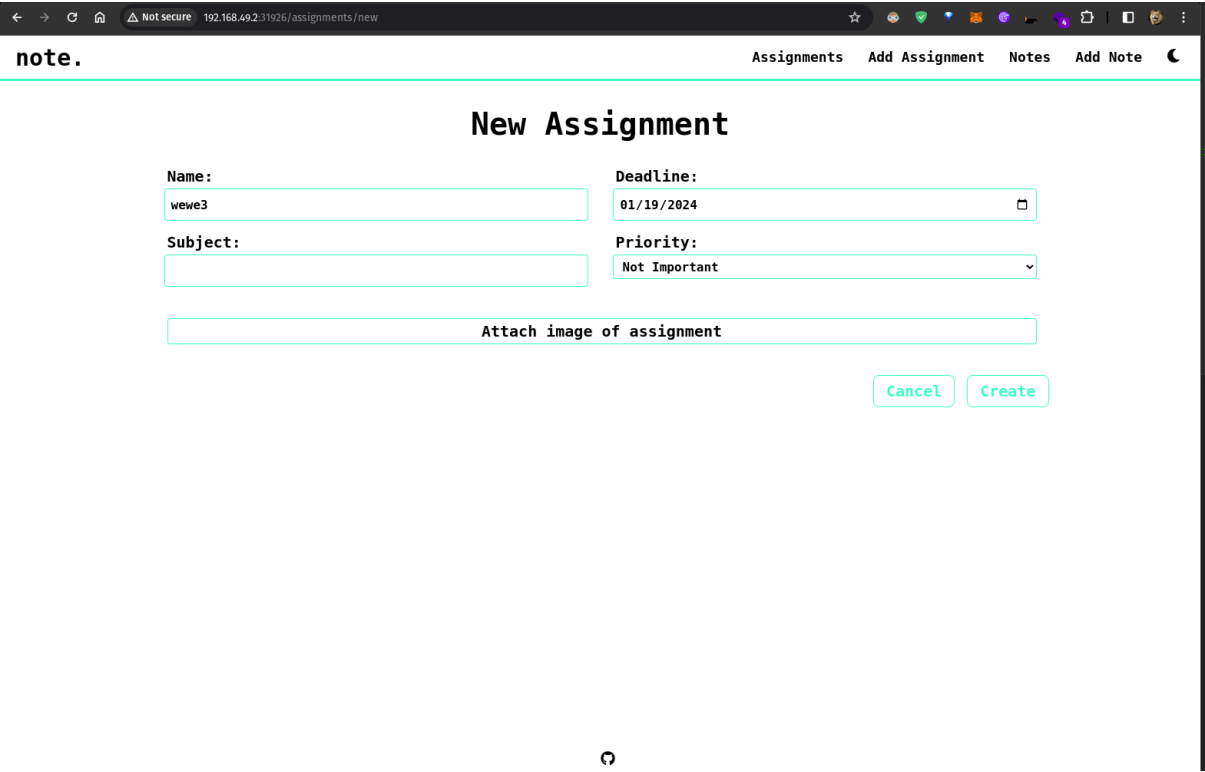
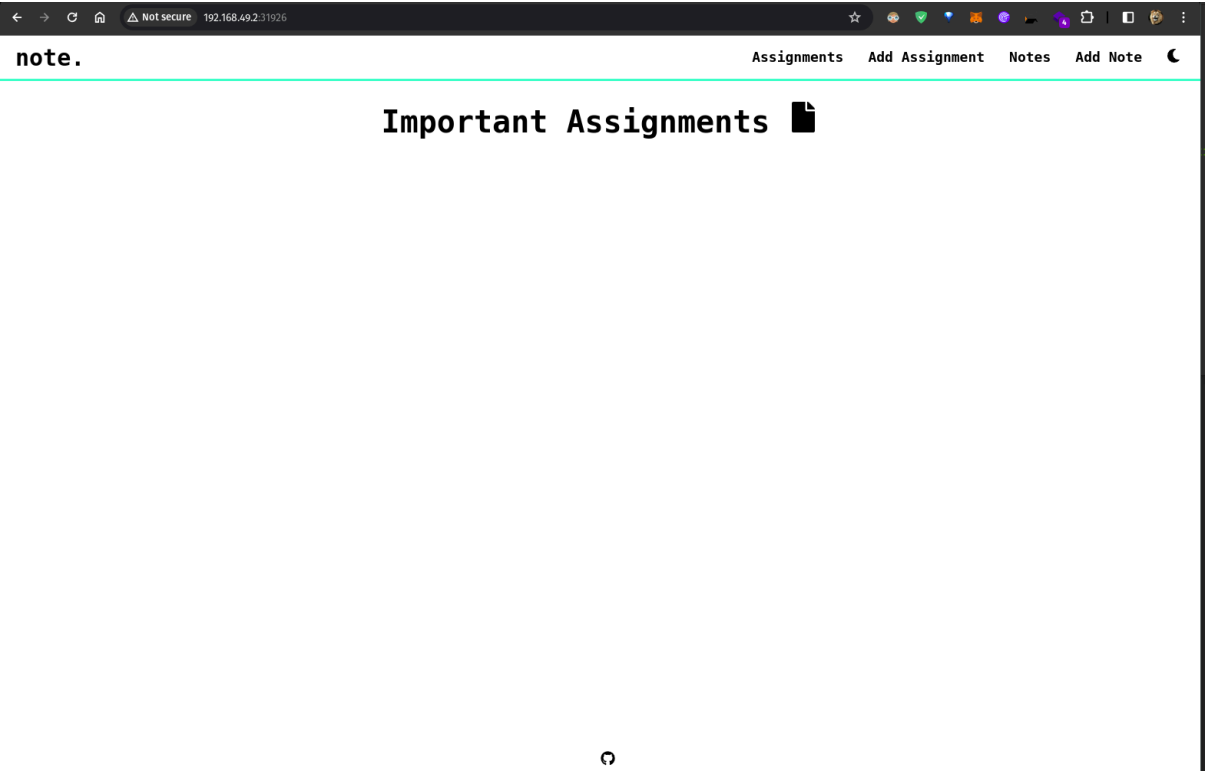
```
akira@ashwani: ~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN APPS/lab3/kubernetes/kubernetes$ ls
deployments secrets services stateful-sets
akira@ashwani: ~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN APPS/lab3/kubernetes/kubernetes$ kubectl apply -f secrets/mongodb-secret.yml
secret/mongodb-secret created
akira@ashwani: ~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN APPS/lab3/kubernetes/kubernetes$ kubectl apply -f stateful-sets/mongodb-stateful-set.yml
statefulset.apps/mongodb-stateful-set created
akira@ashwani: ~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN APPS/lab3/kubernetes/kubernetes$ kubectl apply -f deployments/note-server-depl.yml
deployment.apps/note-server-deployment created
akira@ashwani: ~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN APPS/lab3/kubernetes/kubernetes$
```

```
akira@ashwani: ~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN APPS/lab3/kubernetes/kubernetes$ ls
deployments secrets services stateful-sets
akira@ashwani: ~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN APPS/lab3/kubernetes/kubernetes$ kubectl apply -f secrets/mongodb-secret.yml
secret/mongodb-secret created
akira@ashwani: ~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN APPS/lab3/kubernetes/kubernetes$ kubectl apply -f stateful-sets/mongodb-stateful-set.yml
statefulset.apps/mongodb-stateful-set created
akira@ashwani: ~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN APPS/lab3/kubernetes/kubernetes$ kubectl apply -f deployments/note-server-depl.yml
deployment.apps/note-server-deployment created
akira@ashwani: ~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN APPS/lab3/kubernetes/kubernetes$ kubectl apply -f services/note-server-service.yml
service/note-server-service created
akira@ashwani: ~/Documents/GBC-Classes/Winter/1SCALABLE BLCKCHAIN APPS/lab3/kubernetes/kubernetes$
```



```
kiraaashwani:~/Documents/GBC-Classes/Winter/ISCALABLE BLOCKCHAIN.APPS/lab3/kubernetes/kubernetes$ minikube start
minikube v1.32.0 on Debian bookworm/sid
Using the docker driver based on existing profile
Starting control plane node minikube in cluster minikube
Pulling base image ...
Restarting existing docker container for "minikube" ...
Preparing Kubernetes v1.28.3 on Docker 24.0.7 ...
Configuring bridge CNI (Container Networking Interface) ...
Verifying Kubernetes components...
  - Using image gcr.io/k8s-minikube/storage-provisioner:v5
Enabled addons: storage-provisioner, default-storageclass
Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
kiraaashwani:~/Documents/GBC-Classes/Winter/ISCALABLE BLOCKCHAIN.APPS/lab3/kubernetes/kubernetes$
```

```
kiraaashwani:~/Documents/GBC-Classes/Winter/ISCALABLE BLOCKCHAIN.APPS/lab3/kuakakirakira@ashwakira@ashwakira@ashwaakira@akira@ashwani:~/Documents/GBC-Classes/Winter/ISCALABLE BLOCKCHAIN.APPS/lab3/kubernetes/kubernetes$ minikube service note-service
|-----|-----|-----|
| NAMESPACE | NAME | TARGET PORT | URL |
|-----|-----|-----|
| default | note-service | 3000 | http://192.168.49.2:31926 |
|-----|-----|-----|
Opening service default/note-service in default browser...
kiraaashwani:~/Documents/GBC-Classes/Winter/ISCALABLE BLOCKCHAIN.APPS/lab3/kubernetes/kubernetes$ Opening in existing browser session.
kubectl get pods
NAME READY STATUS RESTARTS AGE
mongodb-stateful-set-0 1/1 Running 1 (3m16s ago) 5m30s
```

Search Assignments

Name :

Search

ssd

**ssd**

Deadline: 2024-01-19

Subject: sd

****Important****

Edit

Delete



```
akira@ashwani: ~/Documents/GBC-Classes/Winter/ISCALABLE BLCKCHAIN.APPS/lab3/kubernetes/kubernetes
|-----|-----|-----|-----|
| default | note-service | 3000 | http://192.168.49.2:31926 |
|-----|-----|-----|-----|
Opening service default/note-service in default browser...
akira@ashwani:~/Documents/GBC-Classes/Winter/ISCALABLE BLCKCHAIN.APPS/lab3/kubernetes/kubernetes$ Opening in existing browser session.
kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
mongodb-stateful-set-0              1/1     Running   1 (3m16s ago)    5m30s
mongodb-stateful-set-1              1/1     Running   1 (3m16s ago)    5m16s
note-deployment-74cc946cd8-r7j6x    1/1     Running   2 (2m53s ago)    5m11s
note-deployment-74cc946cd8-tj9gh    1/1     Running   2 (2m55s ago)    5m11s
note-server-deployment-6fb5fcb67f-gqnzz 1/1     Running   1 (3m6s ago)     5m20s
note-server-deployment-6fb5fcb67f-tnjdl 1/1     Running   1 (3m6s ago)     5m20s
akira@ashwani:~/Documents/GBC-Classes/Winter/ISCALABLE BLCKCHAIN.APPS/lab3/kubernetes/kubernetes$ kubectl delete pod note-deployment-74cc946cd8-tj9gh
pod "note-deployment-74cc946cd8-tj9gh" deleted
akira@ashwani:~/Documents/GBC-Classes/Winter/ISCALABLE BLCKCHAIN.APPS/lab3/kubernetes/kubernetes$ kubectl get pods --watch
NAME                                READY   STATUS    RESTARTS   AGE
mongodb-stateful-set-0              1/1     Running   1 (9m31s ago)    11m
mongodb-stateful-set-1              1/1     Running   1 (9m31s ago)    11m
note-deployment-74cc946cd8-r7j6x    1/1     Running   2 (9m8s ago)     11m
note-deployment-74cc946cd8-vkqkx    1/1     Running   0           5s
note-server-deployment-6fb5fcb67f-gqnzz 1/1     Running   1 (9m21s ago)    11m
note-server-deployment-6fb5fcb67f-tnjdl 1/1     Running   1 (9m21s ago)    11m
```

```
note-server-deployment-6fb5fcb67f-tnjdl 1/1     Running   1 (9m21s ago)    11m
akira@ashwani:~/Documents/GBC-Classes/Winter/ISCALABLE BLCKCHAIN.APPS/lab3/kubernetes/kubernetes$ kubectl get nodes
NAME        STATUS    ROLES    AGE   VERSION
minikube    Ready    control-plane  22m   v1.28.3
akira@ashwani:~/Documents/GBC-Classes/Winter/ISCALABLE BLCKCHAIN.APPS/lab3/kubernetes/kubernetes$
```