■ OpenLens Installation and Kubeconfig Setup Notes

Purpose: To install OpenLens (the open-source Lens IDE) and connect it to a Kubernetes cluster using the kubeconfig file.

1. System Requirements

• OS: Windows / macOS / Linux
• Minimum RAM: 4 GB
• Internet connection
• Existing kubeconfig file

2. Download and Install OpenLens

Option 1: Using Prebuilt Installer
1. Visit: https://github.com/MuhammedKalkan/OpenLens/releases
2. Download package for your OS
3. Run installer and complete setup.

Option 2: Using Command Line (Linux)

```
wget https://github.com/MuhammedKalkan/OpenLens/releases/latest/download/OpenLens.deb
sudo dpkg -i OpenLens.deb
sudo apt-get -f install -y
```

3. Obtain kubeconfig File

If using AWS EKS:
1. Configure AWS CLI:
`aws configure`
2. Get kubeconfig:
`aws eks update-kubeconfig --region <region> --name <cluster>`
3. Verify:
`kubectl get nodes`
4. File location: ~/.kube/config

4. Add kubeconfig in OpenLens

1. Open OpenLens
2. Click '+ Add Cluster'
3. Choose 'Browse Kubeconfig'
4. Select ~/.kube/config
5. Click 'Add Cluster' → 'Connect'
■ Cluster appears in sidebar

5. Optional Configurations

• Switch Contexts
• Namespace Filtering
• View Pods, ConfigMaps, Secrets, and Logs

6. Troubleshooting Notes

Issue	Possible Fix
Cluster not connecting	Verify kubeconfig path
Cannot connect	Run 'kubectl get nodes'
Wrong cluster info	Delete and re-add kubeconfig
Permissions denied	Check IAM role or kubeconfig user

7. Verification

• Dashboard shows cluster info
• Nodes and namespaces visible
• Pod logs available under Workloads → Pods

8. Summary

Step	Description
1	Download OpenLens
2	Install on your OS
3	Get kubeconfig file
4	Add cluster in OpenLens
5	Connect and monitor