1/4/25

# Kubernetes Architecture

Worker node 1

UI

Control plane

| API Server |
| Scheduler |
| Controller-Manager |
| etcd |

UT →

CLI →

kubectl

Pod1 | Pod2 | Pod3

| Container1 | | Container1 |
| Container2 | Container | Container2 |
| Container3 | | |

Docker

Kubelet     Kube-proxy

Worker node 2

Pod1      Pod2      Pod3

Container1 | Container1
Container3 | Container2    Container3
Container3 | Container3
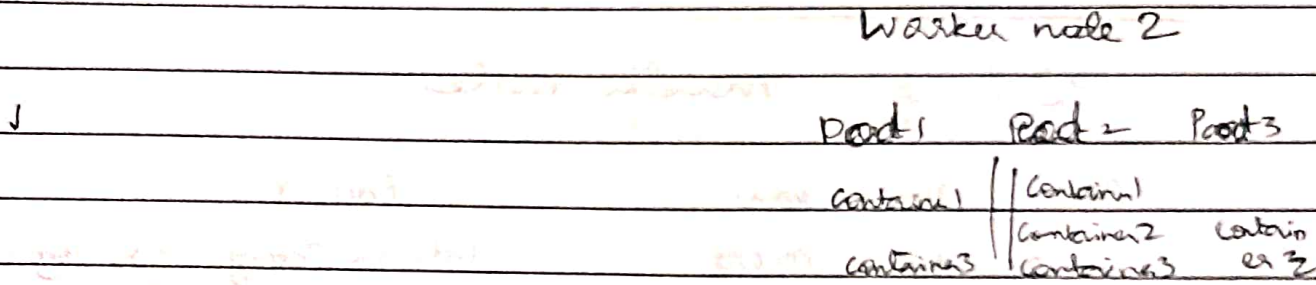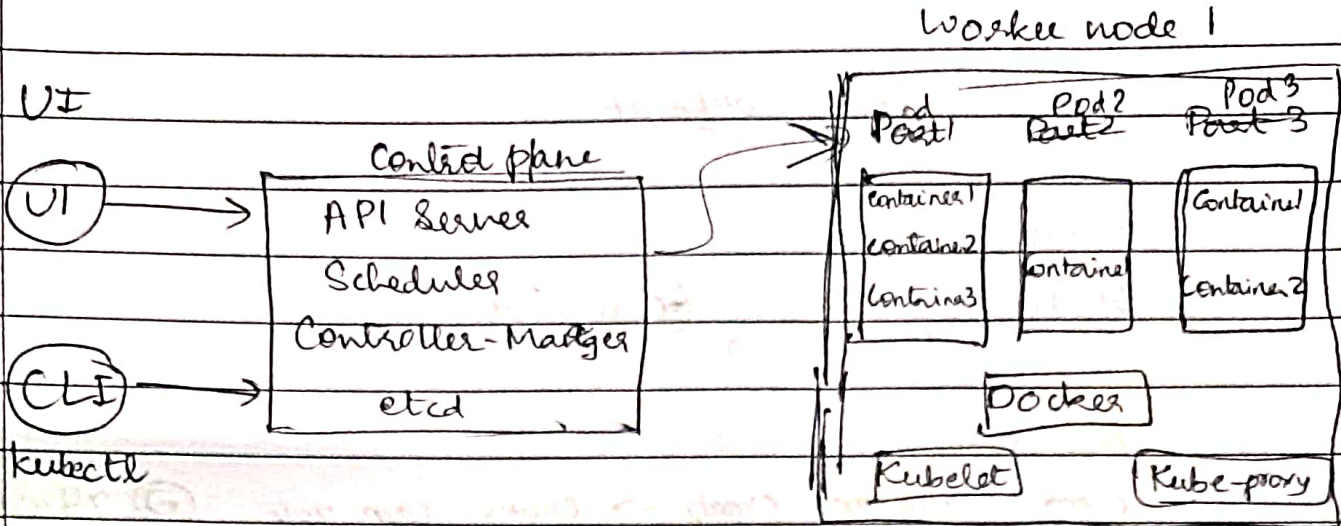
EKS → Elastic Kubernetes Service → create cluster

Quick-configuration : Select custom

Cluster configuration

Name : Shobhitha-Cluster

⊙ Standard ⟶ Create recommended role
                              : next
Kubernetes v 1.32                    Add permissions
      next                                      next
                                    xyz-Rolename
Cluster End point access                        -name
                                           Create role
  ⊙ Public → next           kubernetes
                          Again for another

Amazon EBS CSI Driver

next

Configure selected .. default

. . . .

Create.

Status - Creating (Cluster Info)
(5 minutes)

Add Permissions: Cross check.

Name, review and create → Cluster Iam role ⟳ refresh.

_____

EC2 for master node

AMI - Amazone linux.                                    Fail x

instance type: micro:                    Network Settings → Existing → default
                                                                    Security group
key pair - login.

network settings.

    Public - enabled

                                          Copy instance id of unnamed
Advanced details                          In Security copy id
→ iam instance profile:                   & paste
→ Select name: shobhitha                  u will get ur worker nodes.
→ Launch instance.                        u can rename

aws configure

aws access key ID : delete

create access key → CLI → continue → create

Access key best practices : download.

Copy and Parte access key and secret key.

Copy and parte aws-labenet config --- name... shobhitha cluster ·· region·

2/4/25

# Linux File Permissions

User — Owner of the file

Group — collect^n of user with same file permiss^n

Others — not an owner & not in grp.

| | | Values |
|---|---|---|
| r | Read | 4 |
| w | Write | 2 |
| x | execute | 1 |

7 numeric values

# File Types

directory: starts with d

Regular file : -

docker desktop PERSONAL

Search | Ctrl+K

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Docker Engine stopped

You're now signed in as
sbbhat2004@gmail.com

Engine stopped | RAM 0.00 GB  CPU 0.00%  Disk: --.-- GB used (limit --.-- GB) | Terminal | New version available

29°C
Mostly clear

Search

ENG
IN

09:23 PM
11-04-2025

# Docker Desktop - Unexpected WSL error

An unexpected error occurred while executing a WSL command.

Either shut down WSL down with `wsl --shutdown` , and/or reboot your machine. You can also try reinstalling WSL and/or Docker Desktop. If the issue persists, collect diagnostics and submit an issue ↗.

```
deploying WSL2 distributions
ensuring main distro is deployed: deploying "docker-
desktop": importing WSL distro "WSL2 is not supported with
```

Read our policy for uploaded diagnostic data ↗

Gather diagnostics

Quit