Slide 1

Kubernetes (K8s)
Container Orchestration Tool

Slide 2

Introduction
Kubernetes is an open-source container orchestration system for automating software deployment, scaling, and management.
Kubernetes orchestration allows you to build application services that span multiple containers, schedule containers across a cluster, scale those containers, and manage their health over time.
Google originally designed Kubernetes

Slide 3

Introduction
Kubernetes allows us to host the applications in the form of containers in an automated way.
Dockers will only run containers, if in any case the container fails/stopped/killed, the docker will not help us, here is where Kubernetes plays an important role, Kubernetes cluster will be responsible in creating a new container and managing various containers.

Slide 4

Slide 5

Slide 6

Slide 7

Slide 8

Slide 9

Cloud native computing foundation

Slide 10

Slide 11

Slide 12

Slide 13

Slide 14
kubernetes Vs Docker

Slide 15

Slide 16

Slide 17

Slide 18

Slide 19
docker+kubernetes

Slide 20

Minikube installation (Note: Check Docker has been installed before the minikube installtion)

Slide 21

Search for Minikube Install in Google, Click on the highlighted link as shown

Slide 22

Slide 23

WHAT IS MINIKUBE
Minikube is a lightweight Kubernetes implementation that creates a VM on your local machine and deploys a simple cluster containing only one node. Minikube is available for Linux, macOS, and Windows systems

Slide 24

Make sure the following options are highlighted and click on latest release to download the executable file

Slide 25

The minikube-installer is downloaded successfully

Slide 26

Select the language preferable English

Slide 27

Click on Next

Slide 28

Agree the license

Slide 29

Installation is successfully completed, Click on Next

Slide 30

For learning purpose, Minikube version is sufficient, click on Finish

Slide 31

we need to set the path in environmental variables, firstly copy the minikube path as shown

Slide 32

Open Environmental variables->DoubleClick path in System variables and paste the copied path as shown->click Ok