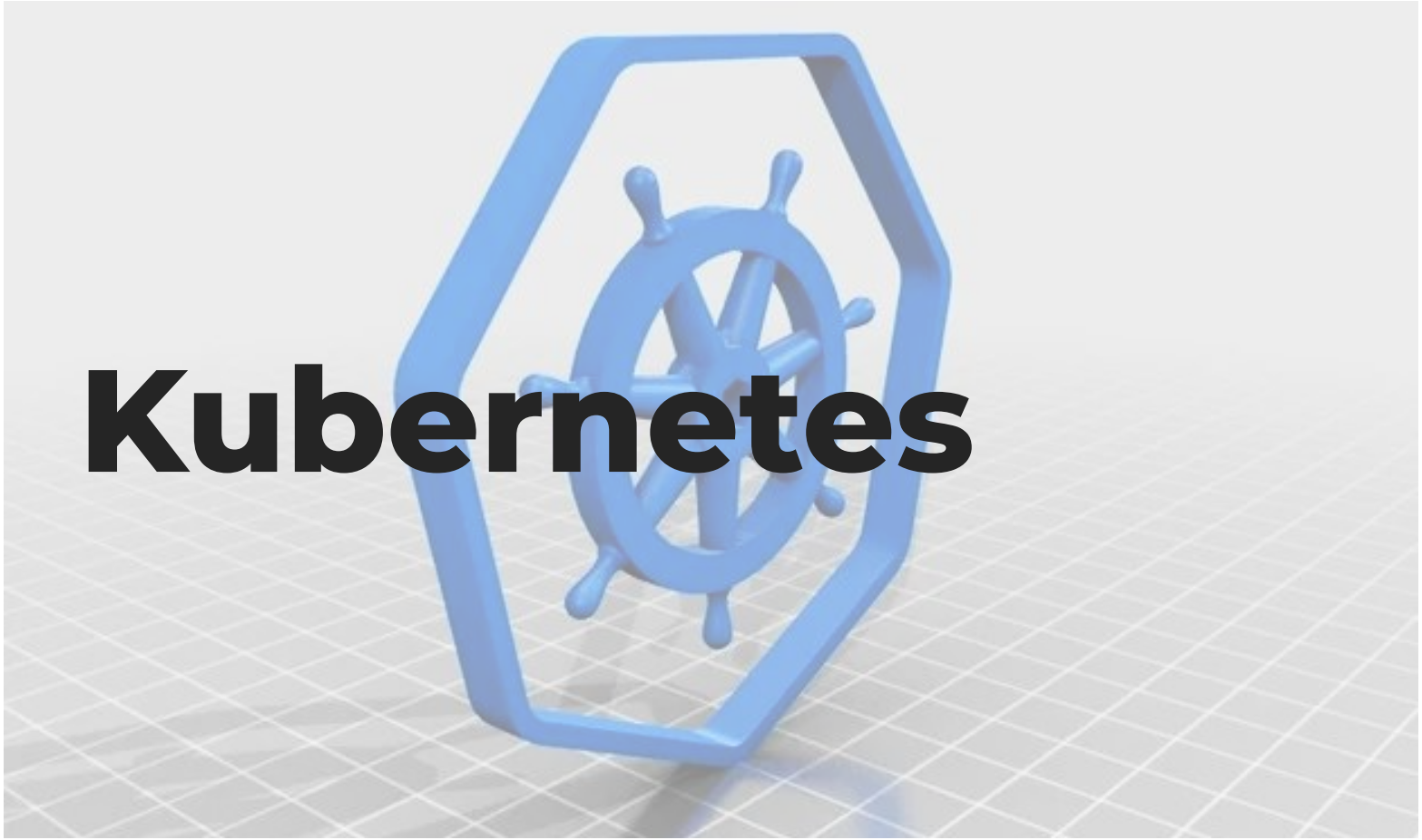
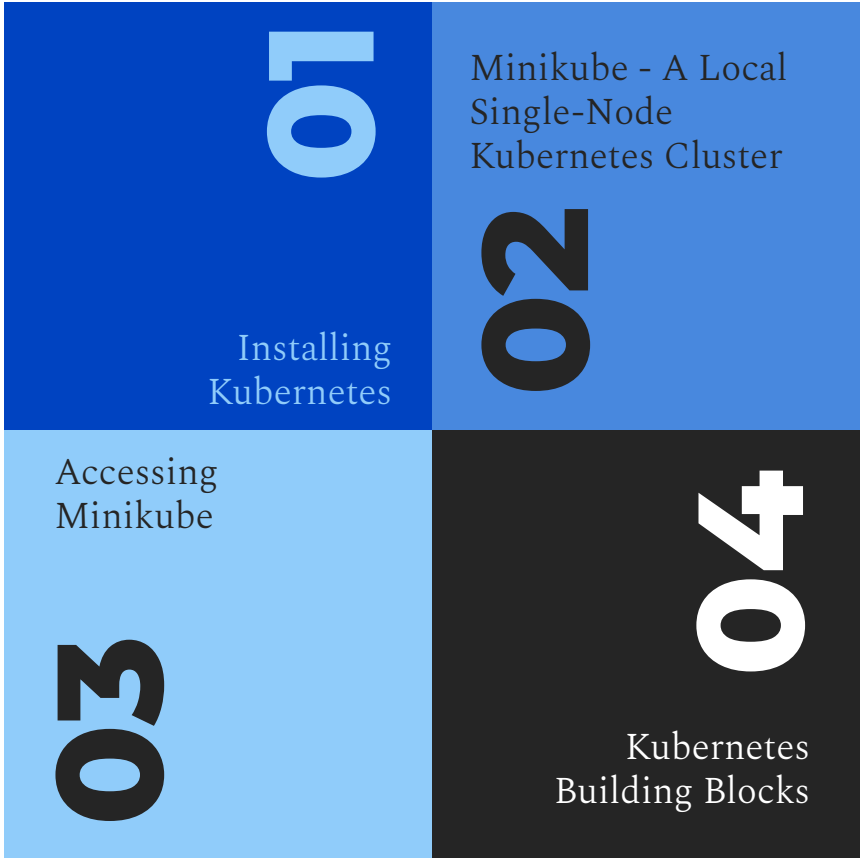
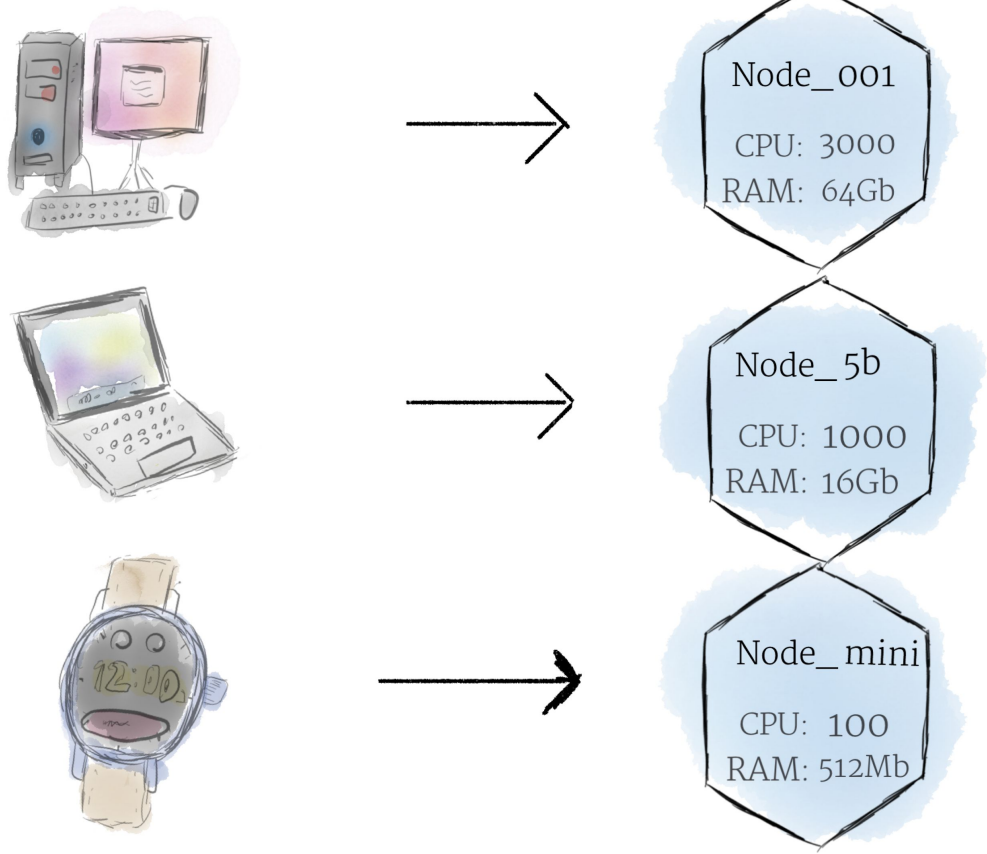

Kubernetes


01
Installing Kubernetes
02
Minikube - A Local Single-Node Kubernetes Cluster
03
Accessing Minikube
04
Kubernetes Building Blocks

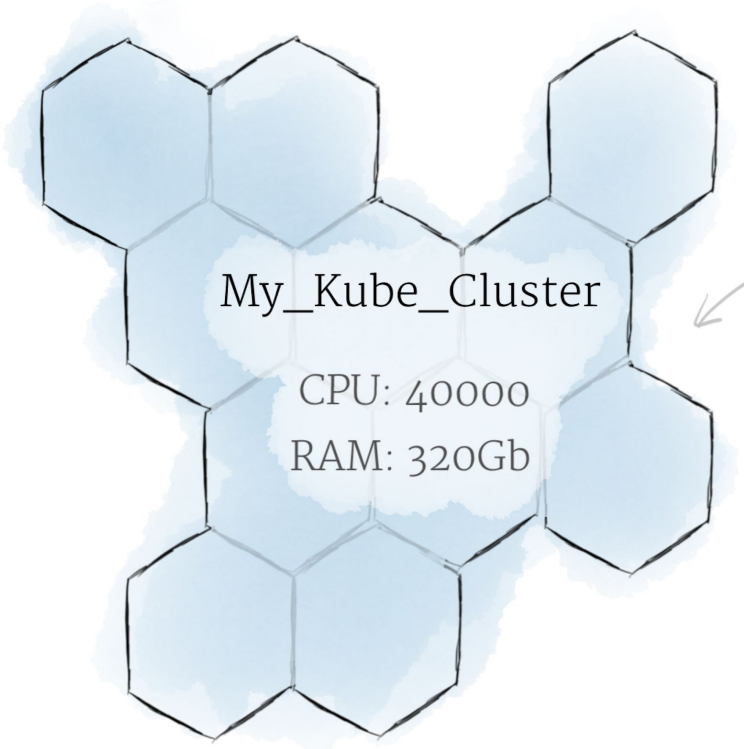
Agenda

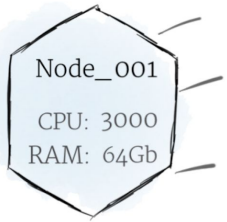
1. Installing Kubernetes

The different Kubernetes configuration options

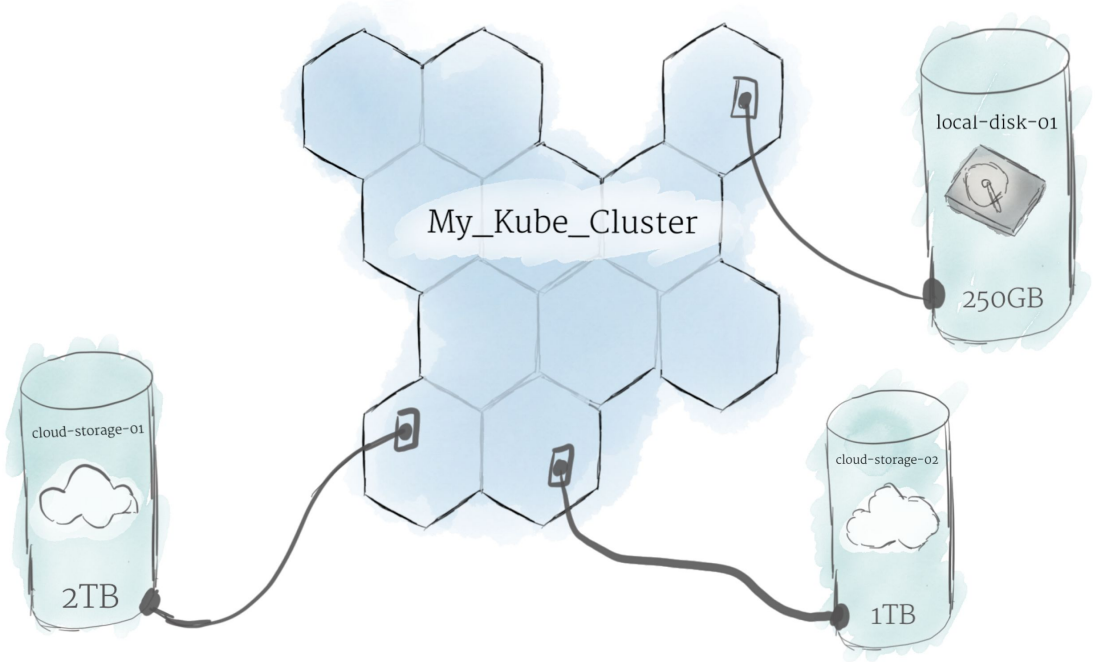


Nodes is the smallest unit of computing hardware in Kubernetes.

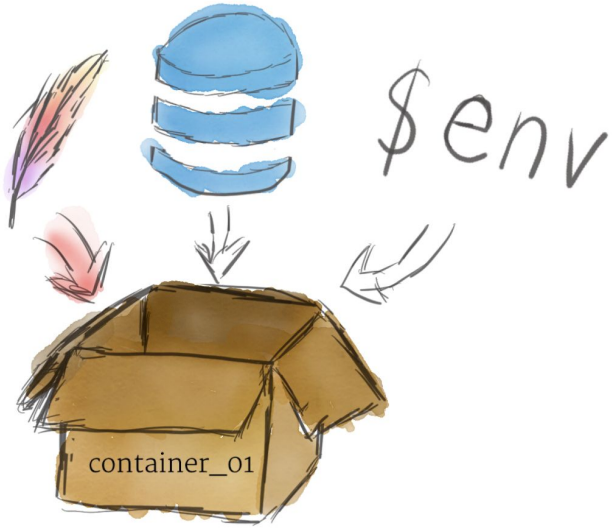




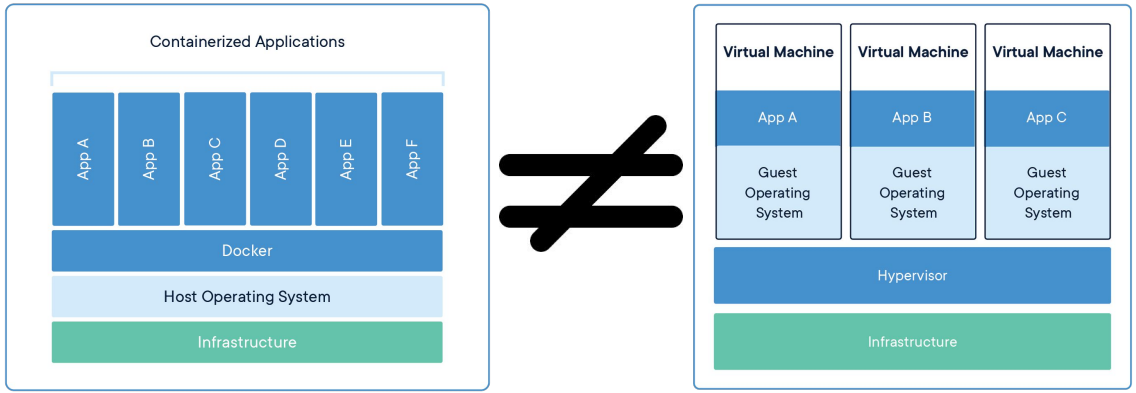
In Kubernates nodes pool together their resources to form a more powerful machine.

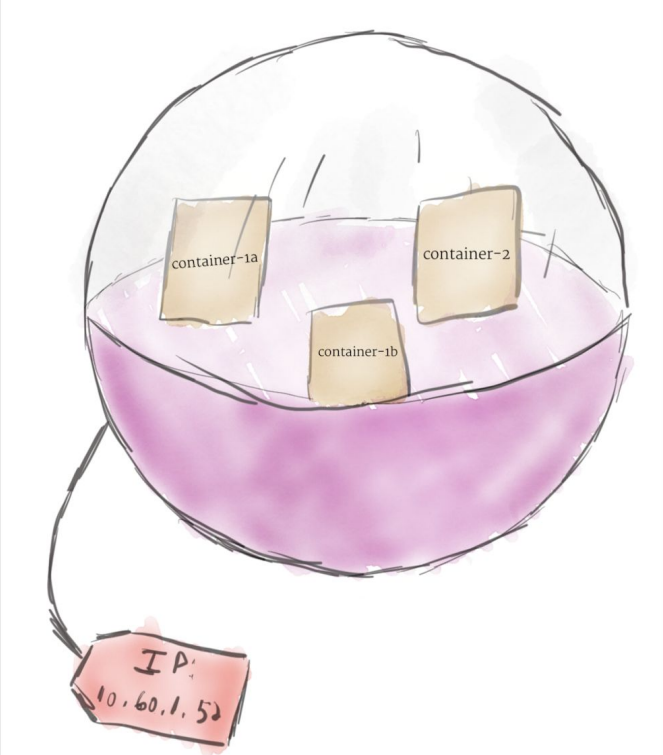


To store data permanently, Kubernetes uses Persistent Volumes.

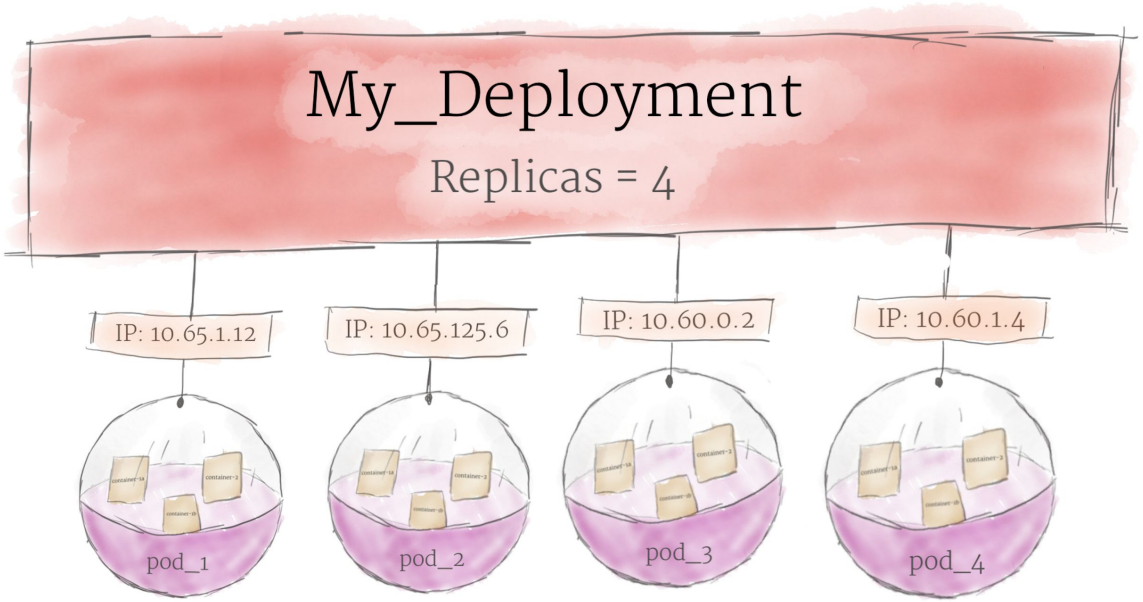


Programs running on Kubernetes are packaged as Linux containers.



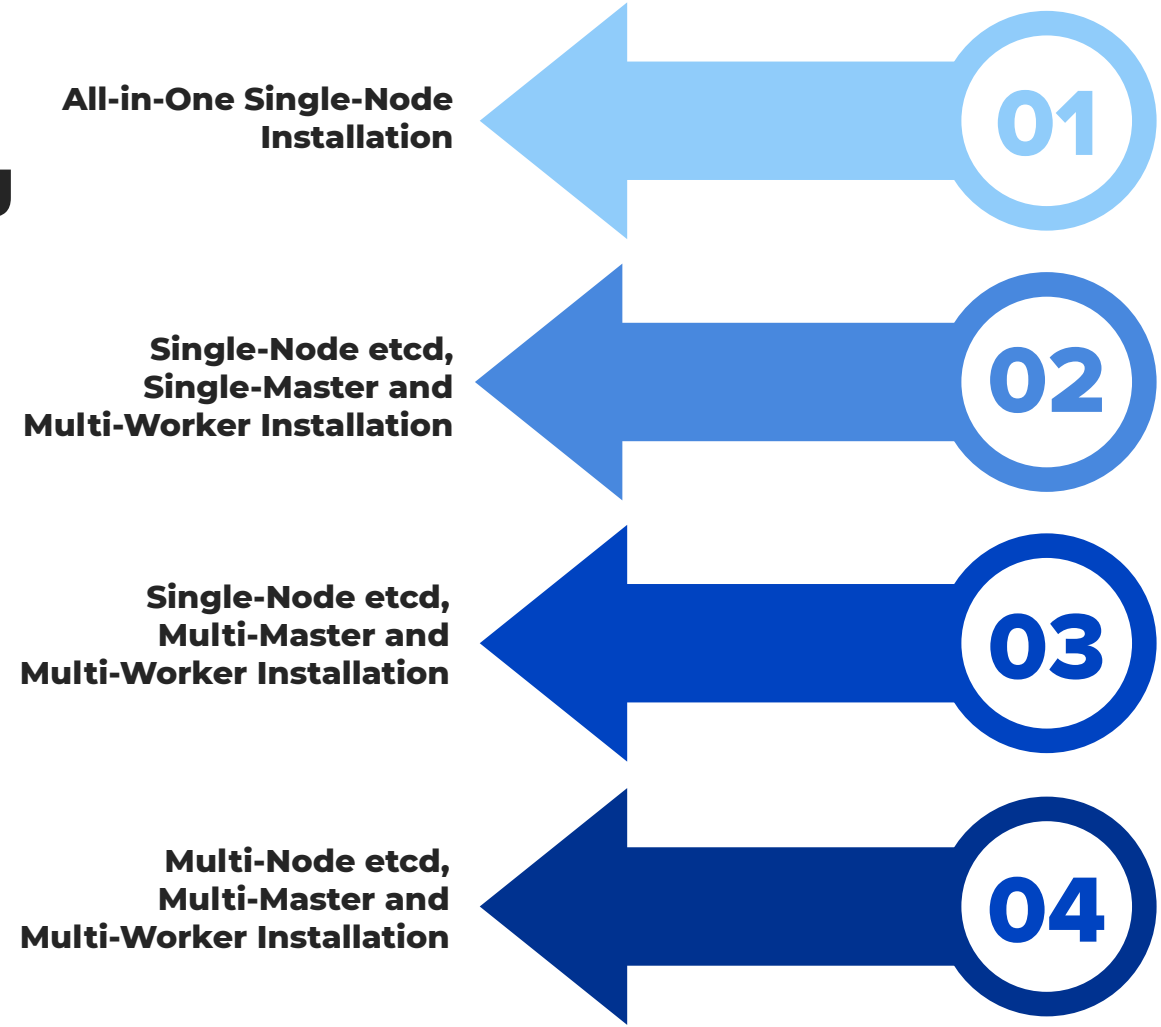


Kubernetes doesn't run containers directly; instead it wraps one or more containers into a higher-level structure called a pod.



A deployment's primary purpose is to declare how many replicas of a pod should be running at a time.

Kubernetes can be installed using different configurations.



2. Minikube

Install Minikube on local Linux, macOS, and Windows workstation.

Minikube, single-node local Kubernetes cluster
(Hands-on)

3. Accessing Minikube

Configure kubectl for Linux, macOS, and Windows.

Kubernetes cluster can be accessed via any one of the following methods:

1. Command Line Interface (CLI) tools and scripts
2. Web-based User Interface (Web UI) from a web browser
3. APIs from CLI or programmatically (Hands-on)

4. Kubernetes Building Blocks

fundamental building blocks, such as Pods, ReplicaSets, Deployments, Namespaces, etc

Discuss **Kubernetes** building blocks, e.g. Pods, ReplicaSets, Deployments, Namespaces.
(Hands-on)


Thanks!