kubernetes

Kubernetes: Volumes

➤ Volumes in Kubernetes is a directory which is accessible to the **containers in a pod**.

➤ Volumes in Kubernetes allow user to **Store Data Outside the Container**.

➤ Volumes that are created through Kubernetes is not limited to any container. It supports any or all the containers deployed inside the **pod of Kubernetes**.

➤ A key advantage of Kubernetes volume is, it supports different kind of storage wherein the pod can use multiple of them at the same time.

Types of Kubernetes Volume

➤ **emptyDir:** It is a type of volume that is created when a Pod is first assigned to a Node. It remains active as long as the Pod is running on that node.

➤ The volume is initially empty and the containers in the pod can read and write the files in the emptyDir volume. Once the Pod is removed from the node, the data in the emptyDir is erased.

➤ **hostPath:** This type of volume mounts a file or directory from the host node's filesystem into your pod.

➤ **gcePersistentDisk:** This type of volume mounts a Google Compute Engine (GCE) Persistent Disk into your Pod. The data in a **gcePersistentDisk** remains intact when the Pod is removed from the node.

Types of Kubernetes Volume

➤ **awsElasticBlockStore:** This type of volume mounts an Amazon Web Services (AWS) Elastic Block Store into your Pod. The data in an **awsElasticBlockStore** remains intact when the Pod is removed from the node..

➤ **nfs:** An **nfs** volume allows an existing NFS (Network File System) to be mounted into your pod. The data in an **nfs** volume is not erased when the Pod is removed from the node. The volume is only unmounted.

➤ **gitRepo:** A **gitRepo** volume mounts an empty directory and clones a **git** repository into it for your pod to use.

➤ **azureDiskVolume**: An **AzureDiskVolume** is used to mount a Microsoft Azure Data Disk into a Pod.

See you in next lecture …