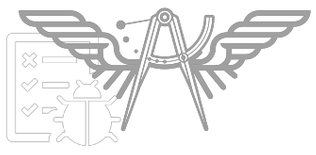
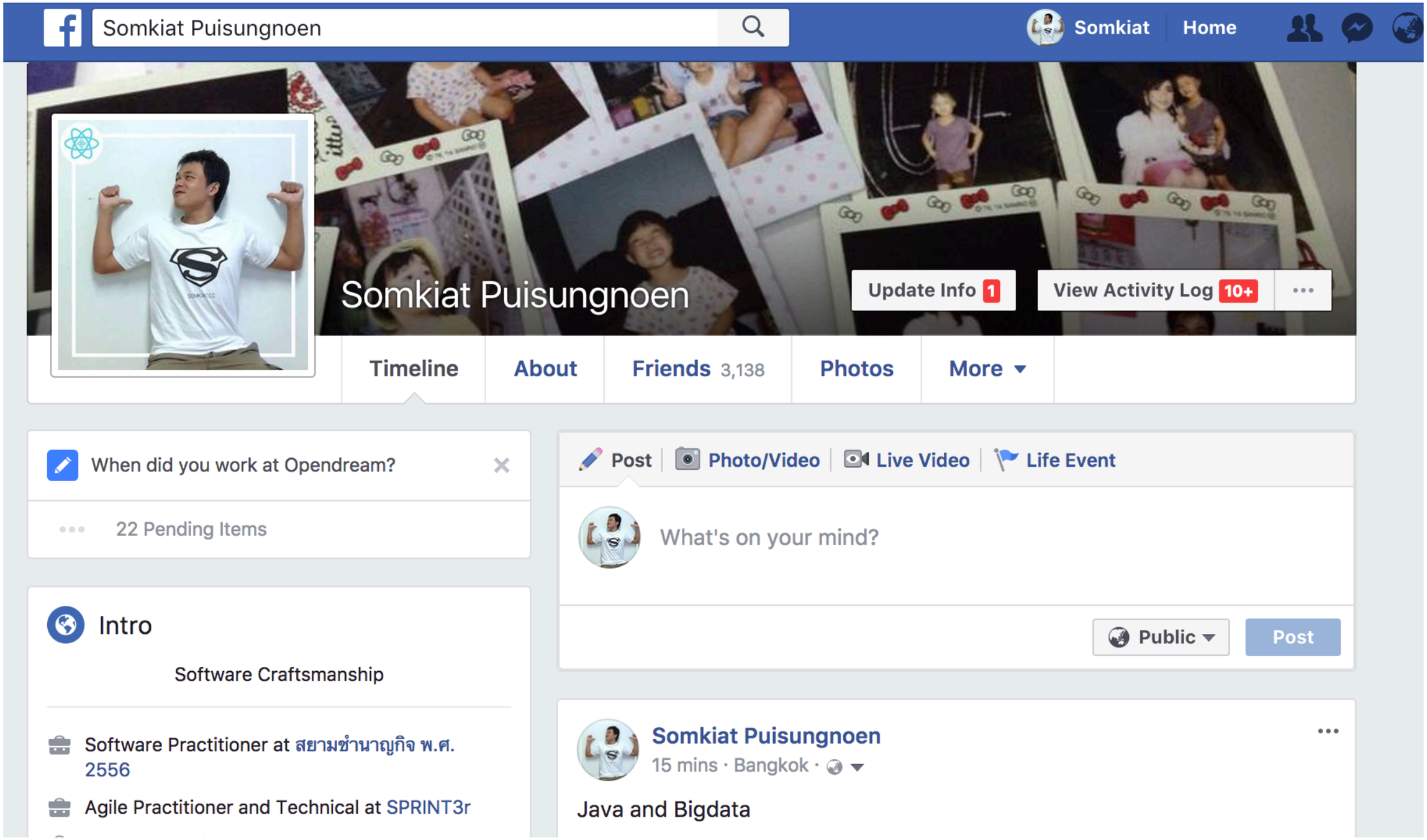
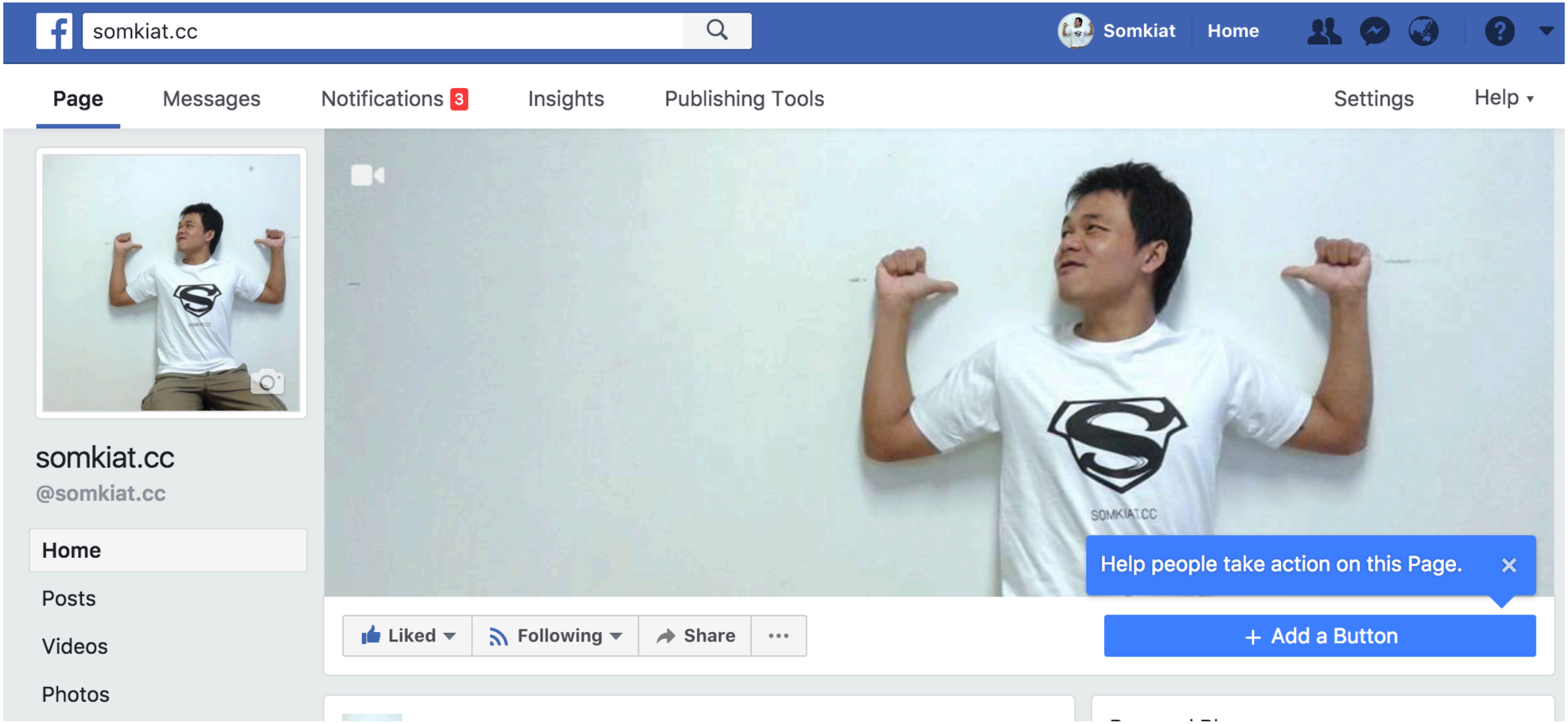
สยามชำนาญกิจ
SIAM CHAMNAN KIT

Kubernetes

In Practice







Manage Stateful Workload

1. Cloud Native Application
2. Kubernetes architecture
3. Key-features
4. Pods and Containers
5. Service
6. Replication Controller (RC)
7. Deployment and ReplicaSet (RS)
8. Volume

https://github.com/up1/course-kubernetes-in-practice

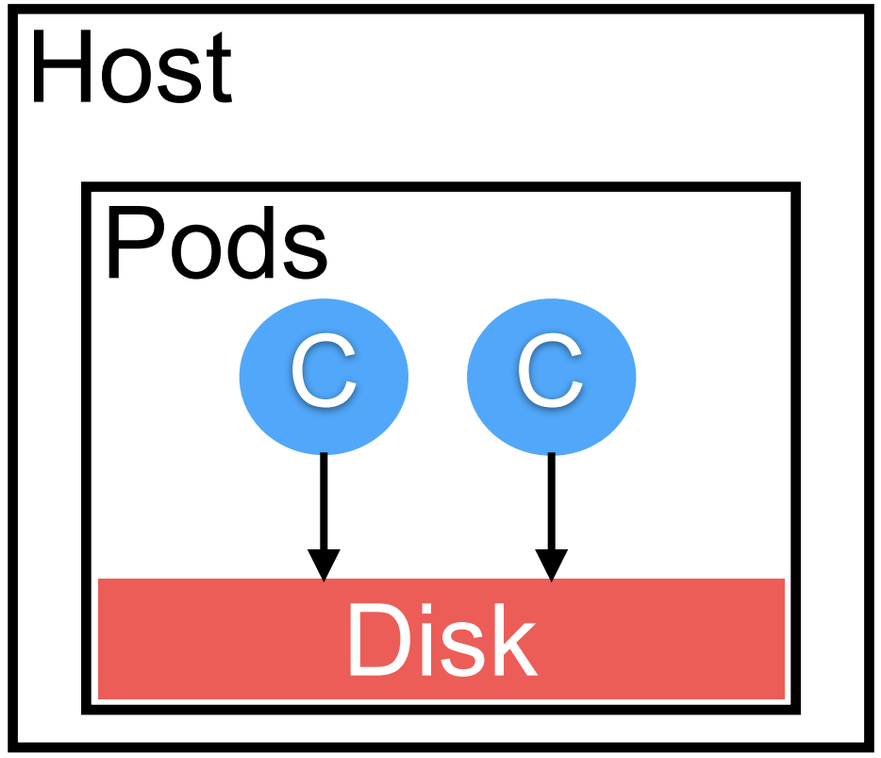
Kubernetes Volume Management

Default

Use a **local disk** by default

Log data, temporary file, app data

When container terminate/exit/crash the data will be lost

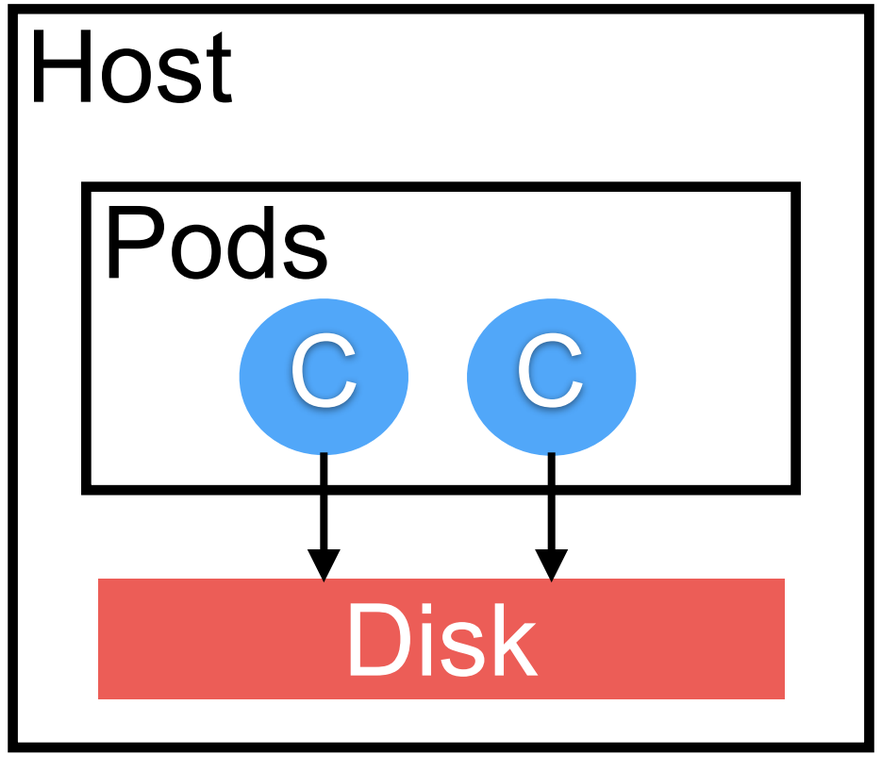


Share volume between containers

Use a **local disk** by default

Log data, temporary file, app data

When container terminate/exit/crash the data will be lost



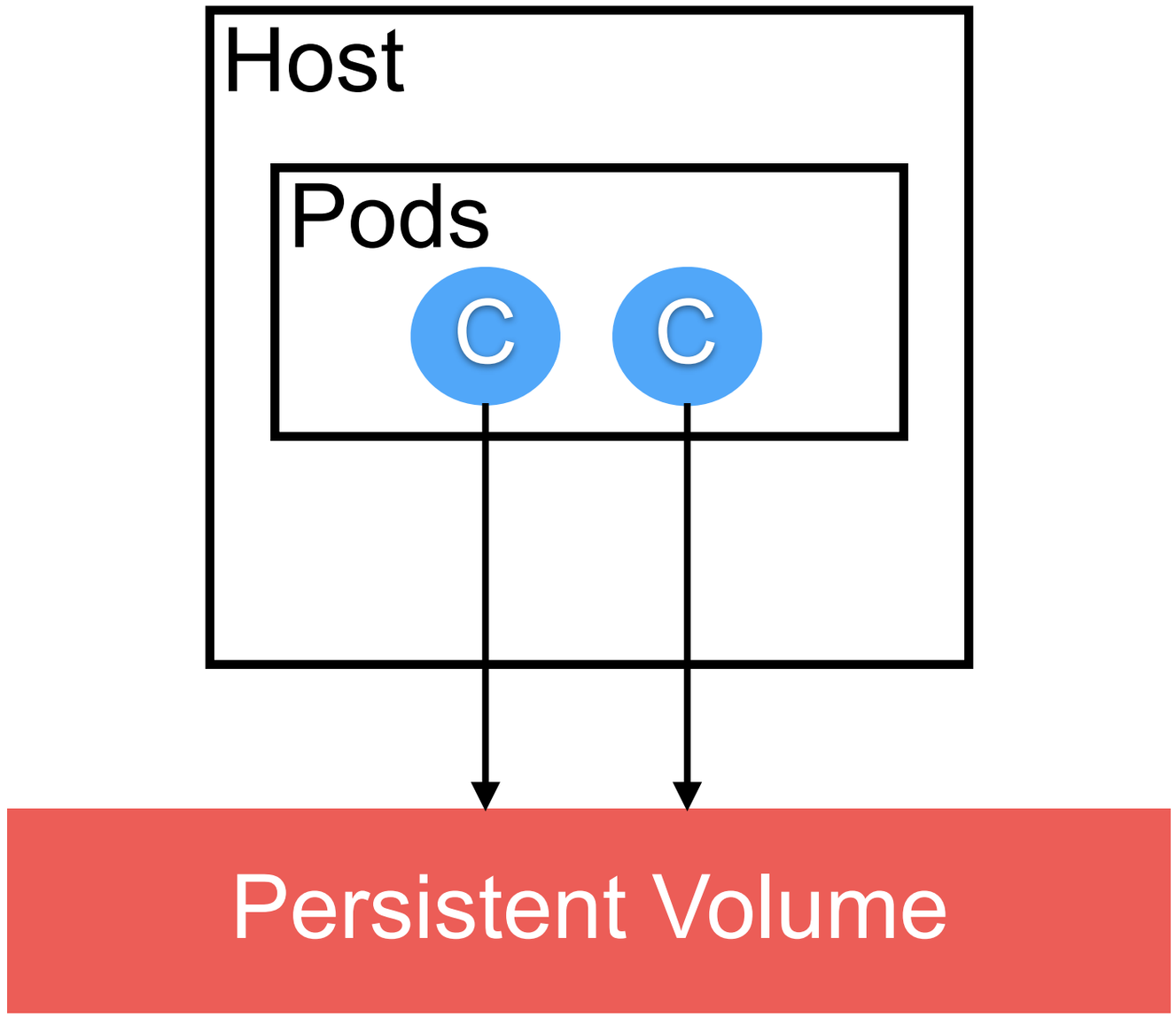
Using Persistence volume

Public cloud storage (AWS EBS, google persistent disk)

Network File System (NFS, GlusterFS, Ceph)

Block device (iSCSI, Fibre Channel)

Using Persistence volume

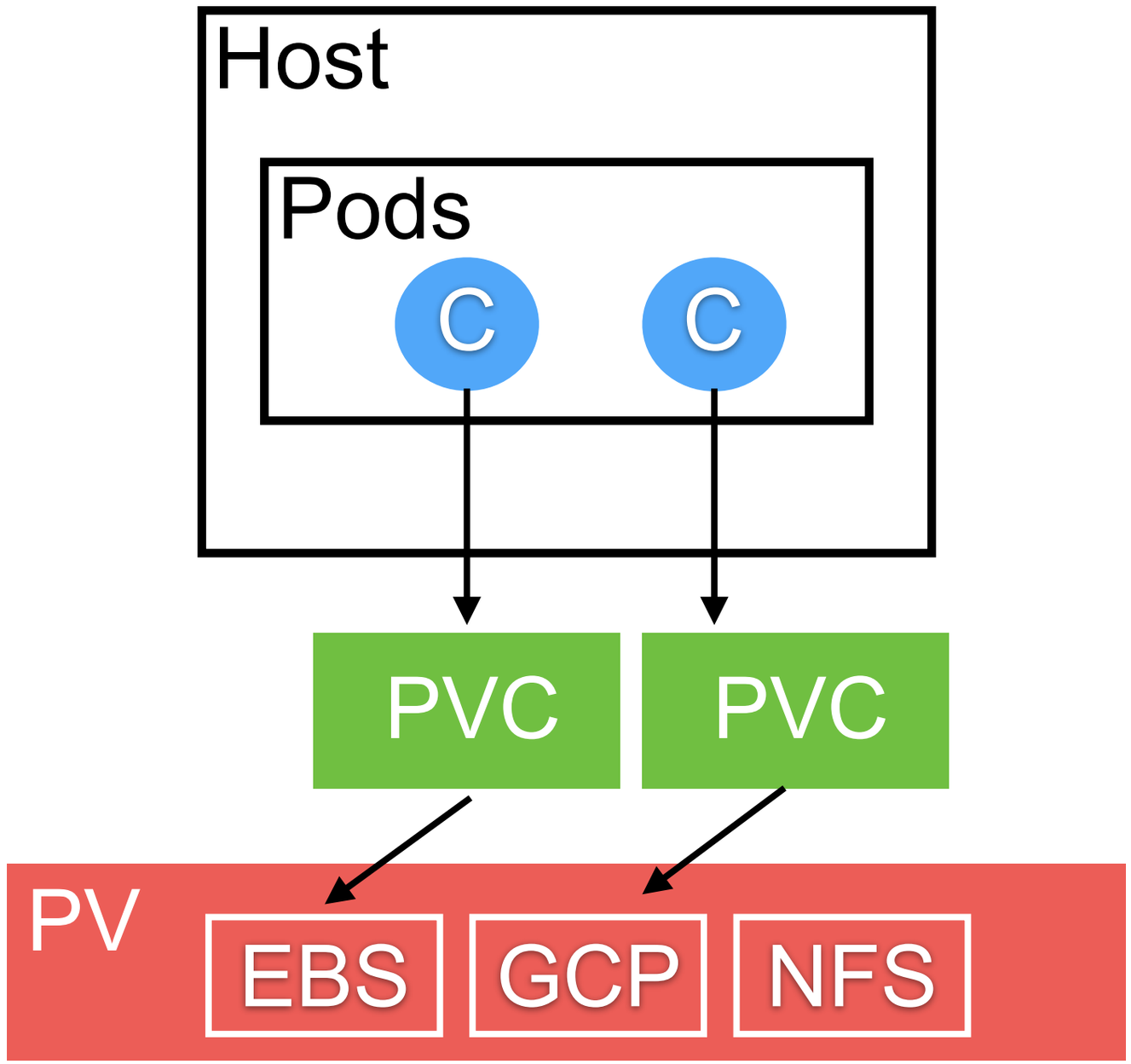


Using Persistence volume

Problem :: Tight coupling with infrastructure

Pods should not be locked into specific env.

Persistence Volume Claim (PVC)



Dynamic Provisioning with Storage class