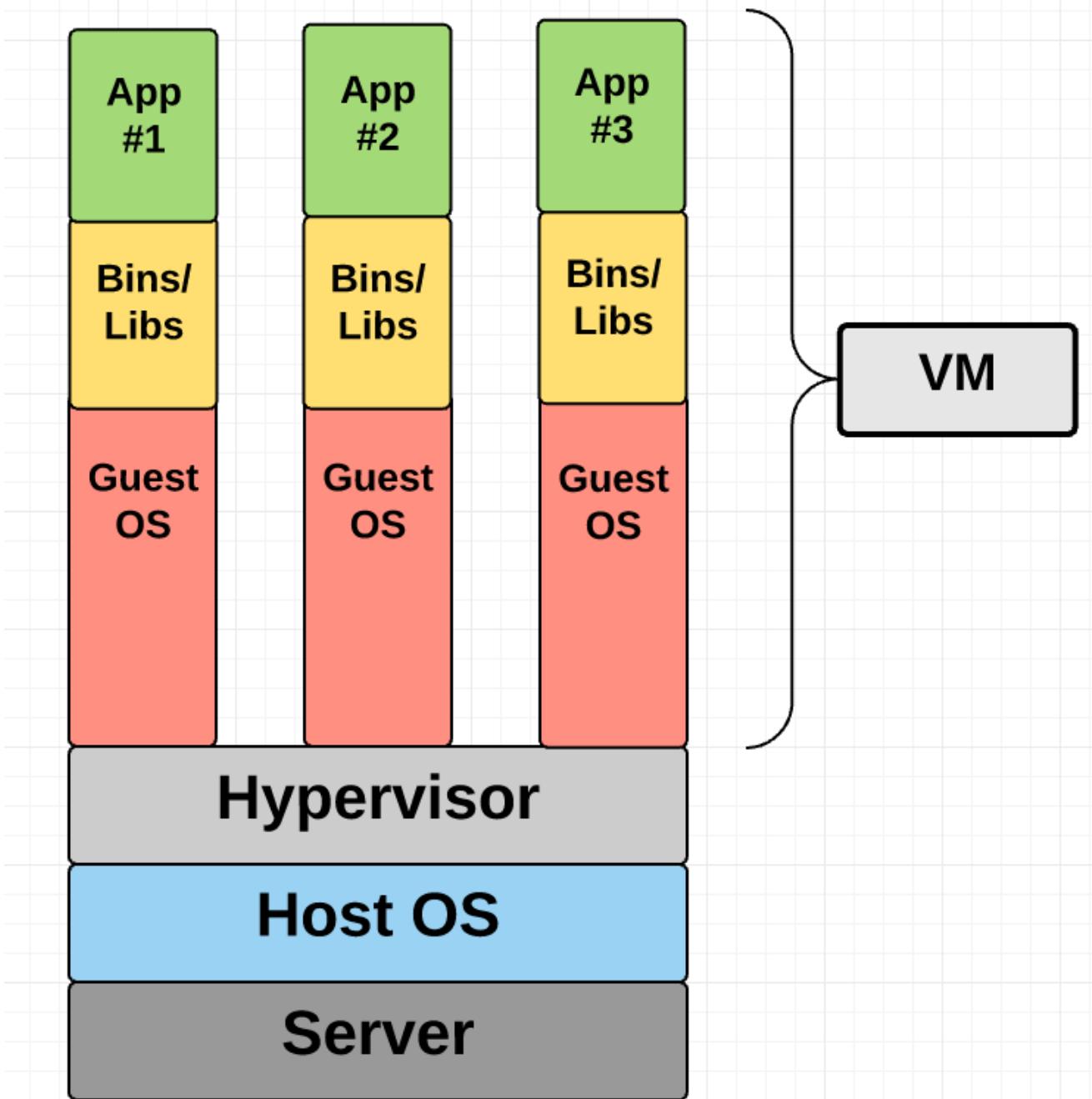
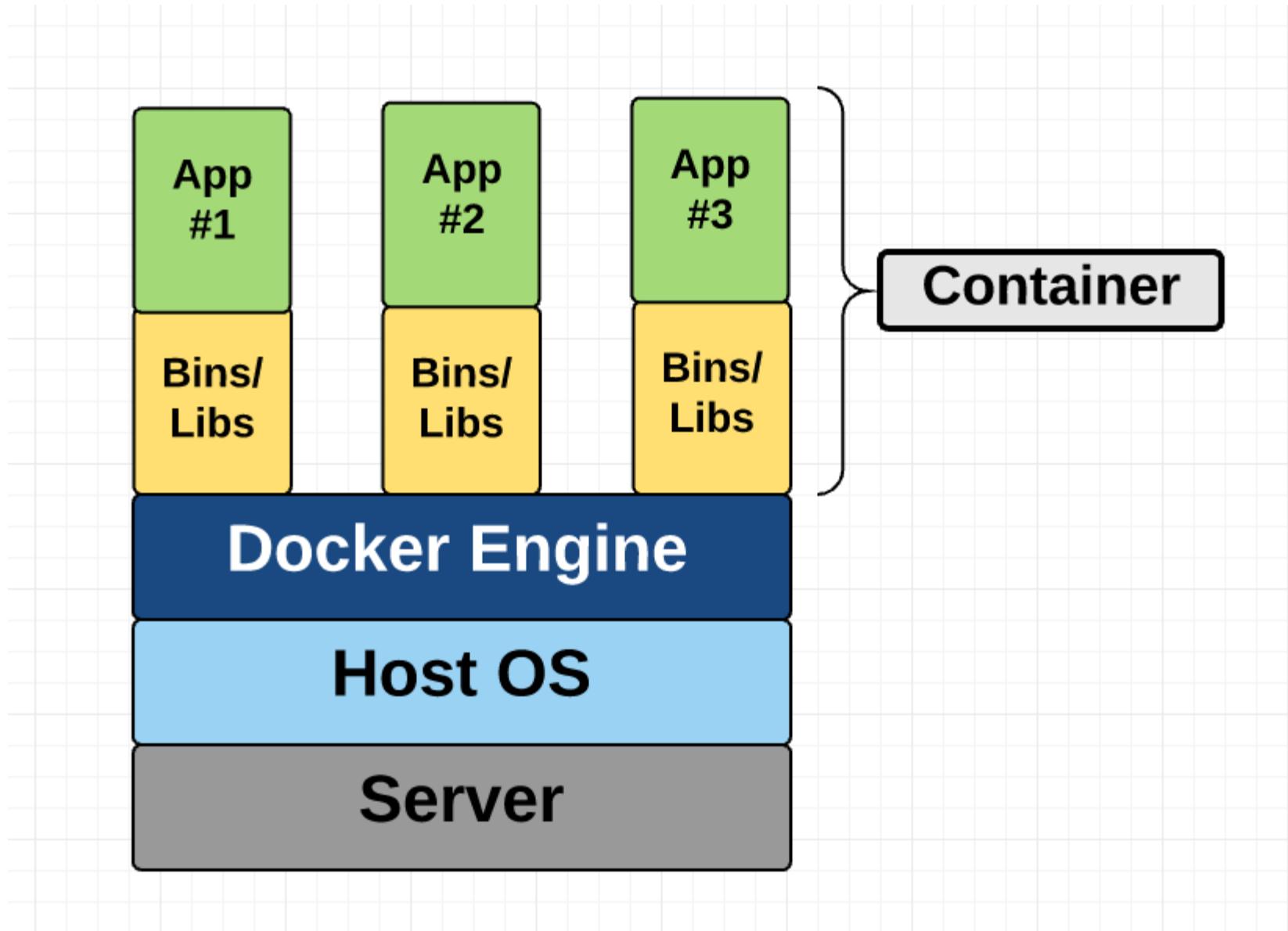


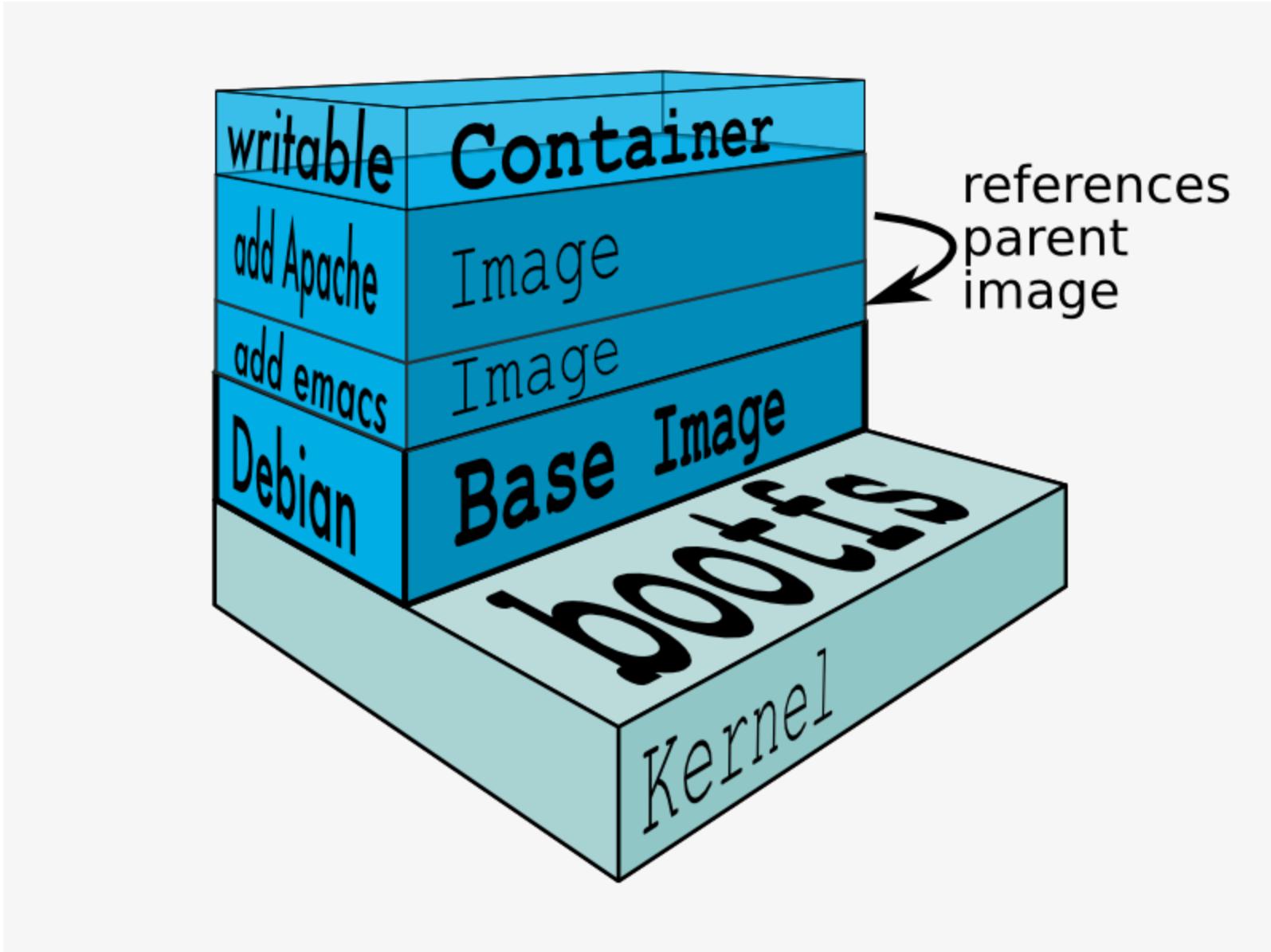


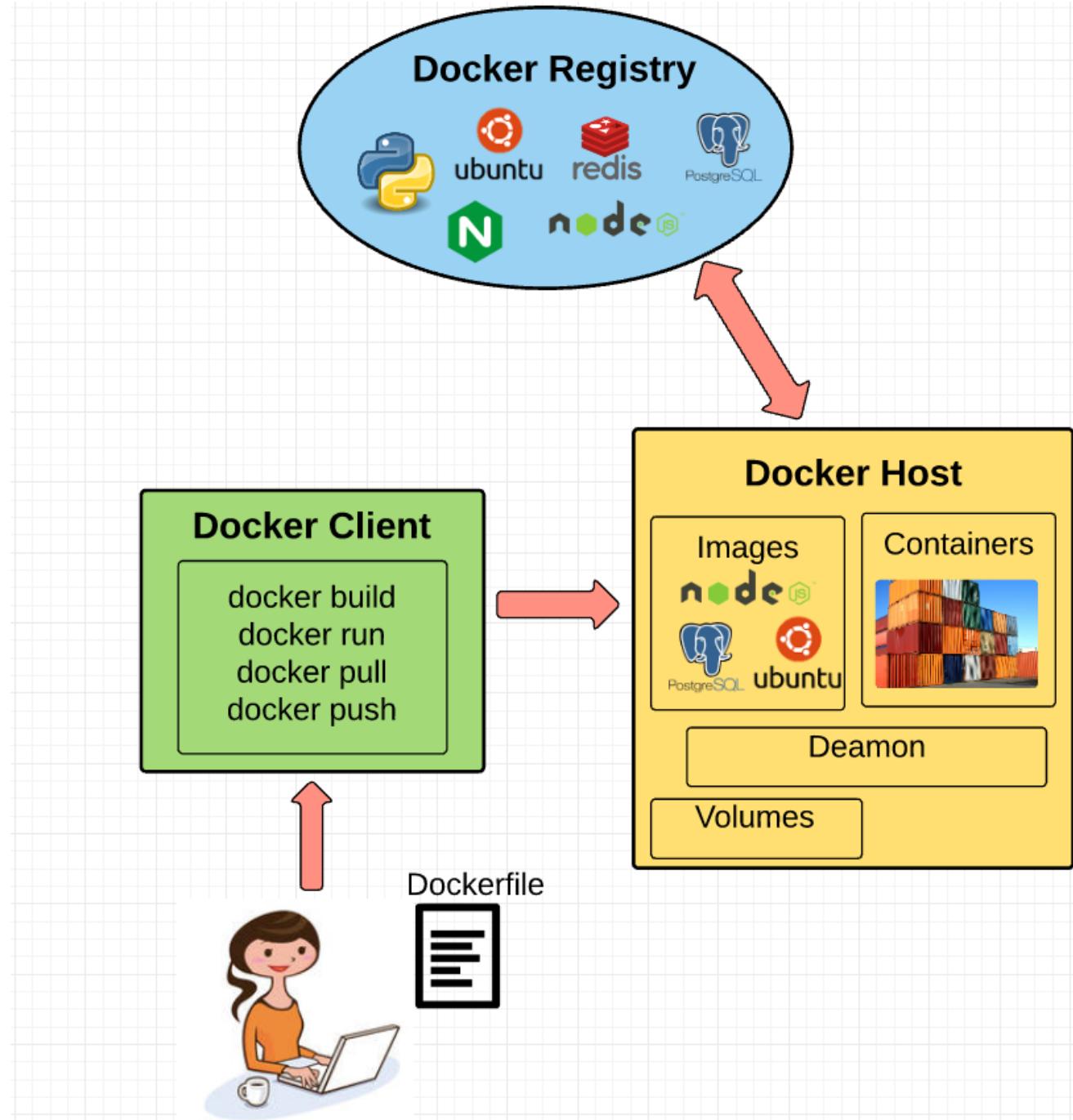
Deployment with K8s







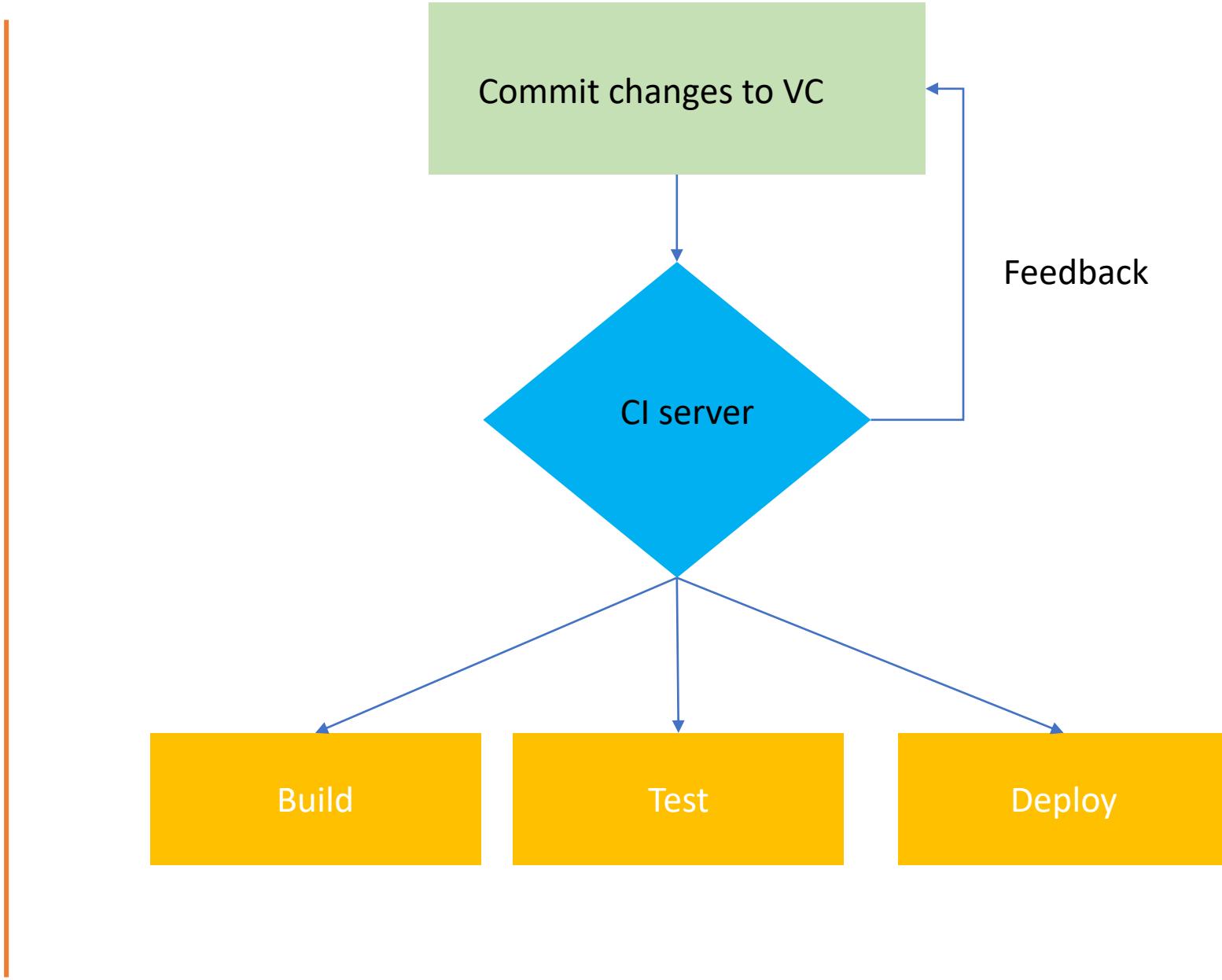


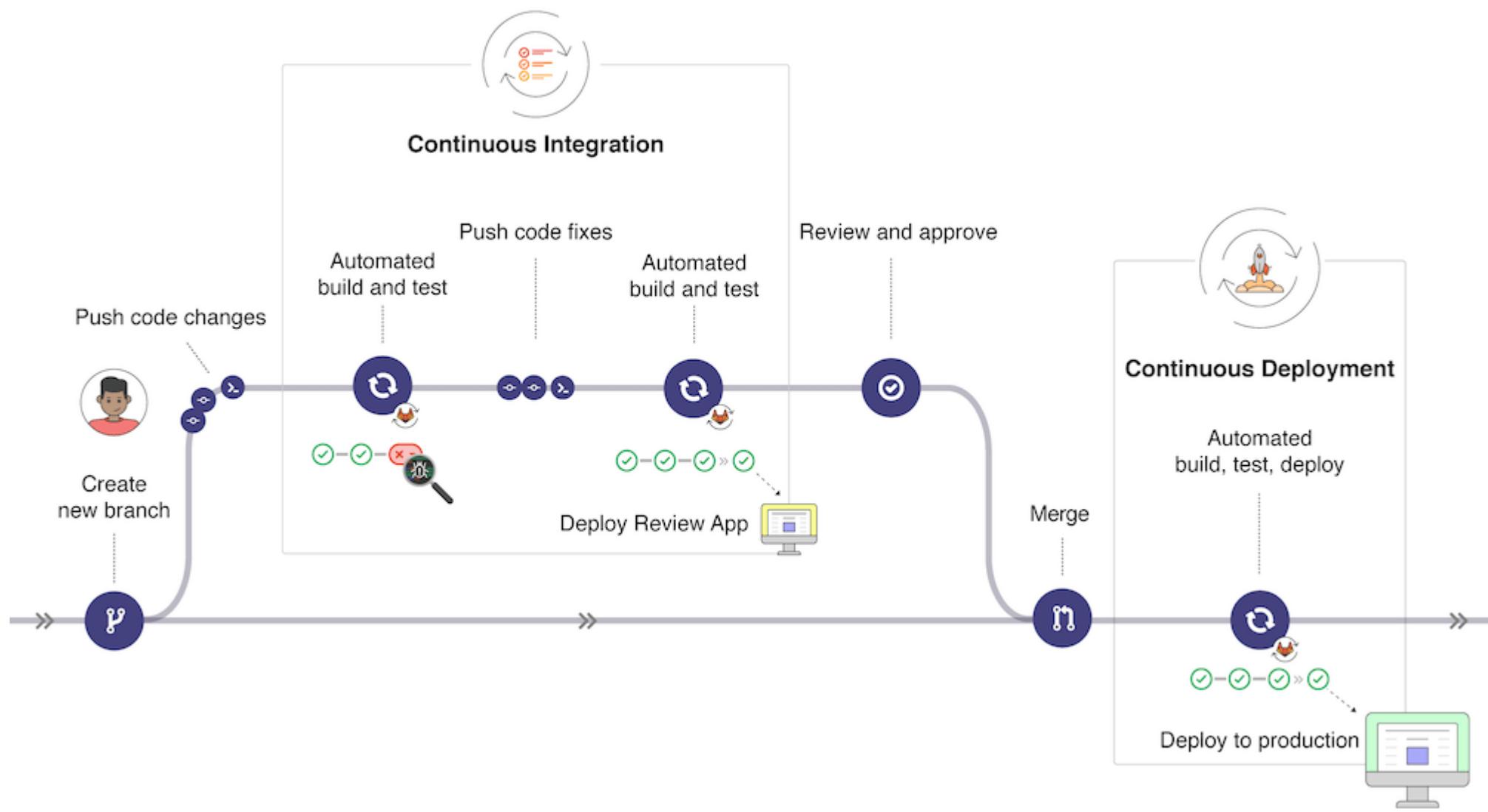


CI / CD

- Continuous Integration
- Orchestrating builds
- Continuous deployment

CI / CD





Deployment

- Replica-Sets
- Blue-Green Deployment
- Canary-Deployment

Deployment

- Recreate
 - Delete all the old pods and start with the new pods
 - Causes application downtime
 - Can introduce breaking schema changes
- Rolling update
 - Start the pods and delete the old pods once the new pods are up and serving traffic
 - No downtime
 - Cannot introduce breaking schema changes

K8s Deployment

- Higher order resource for Deployment
- Manages the Replica-Sets
- Creates the Replica-Sets in the background
- Co-ordinates between older and newer versions of Replica-Sets
- No change is needed at the Service and Ingress level

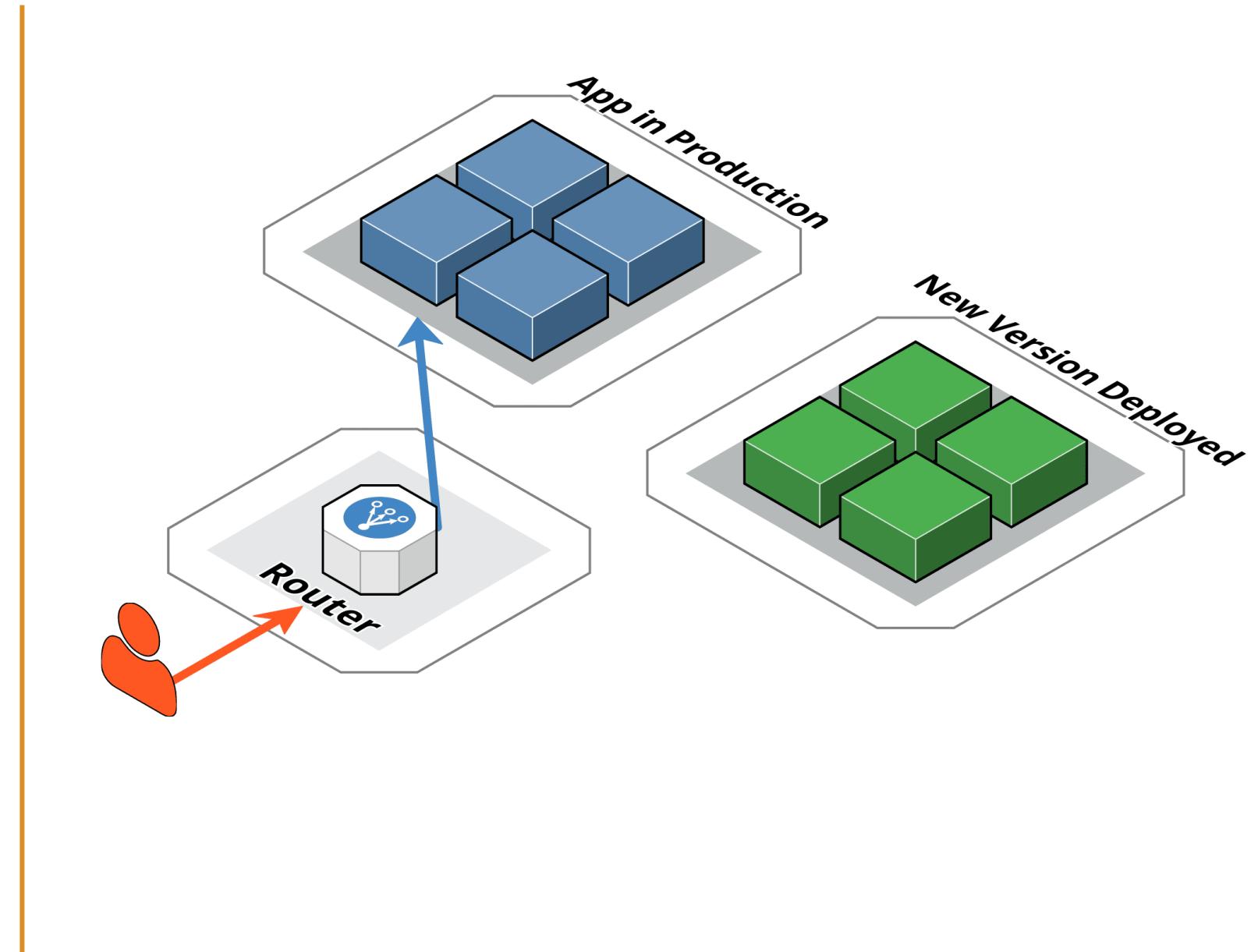
Deployment Strategies

- Rolling Update
 - Default strategy
 - Removes the pod one by one while adding the pods
 - Application is available through out the deployment steps
 - Use this, when applications supports both versions of the application to run parallelly.

Deployment Strategies

- Recreate
 - Delete all the pods and replaces with new pods
 - Use this, when different versions of the applications cannot be run parallelly.
 - Application downtime during deployment

Blue-Green



K8s Deployment Commands

- Deployment
- Triggering the rolling update
- Pausing the deployment
- Resuming the deployment
- Status of the deployment