



Containers From Scratch

- I'm Mohammad Nasr
- Cloud & Software Engineer
- Currently work @ Snapp!
- B.Cs @ Amirkabir

Thanks to DevopsHobbies





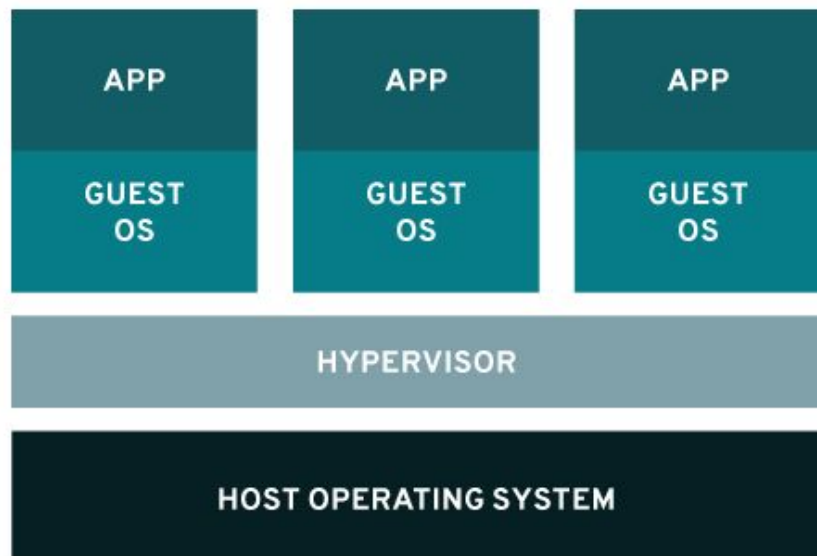
What are the containers?



Linux Containers

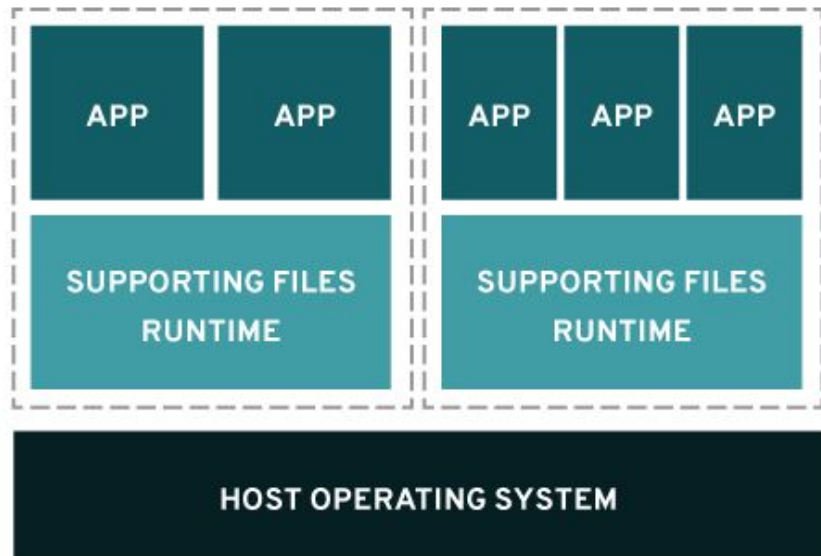
- Originally Jails in FreeBSD in early 2000s.
- set of 1 or more processes that are isolated from the rest of the system.
- Isolation
- Containers are not virtualization!

VIRTUALIZATION



VS.

CONTAINERS



Problem without Containers

- Dependency issues
- Security risks

Docker

- Platform for running and building containers (uses linux namespaces and cgroups)
- Docker doesn't provide the container technology
- Comes with a server daemon, a library of pre-built container images, and the concept of a registry server
- Portability and shipments

Table Of Contents

- Namespaces
 - Network
 - Mount
 - PID
 - User
 - UTS
 - IPC
- CGroups
- Implementation