# Elevating Containerization a Dive into Buildah

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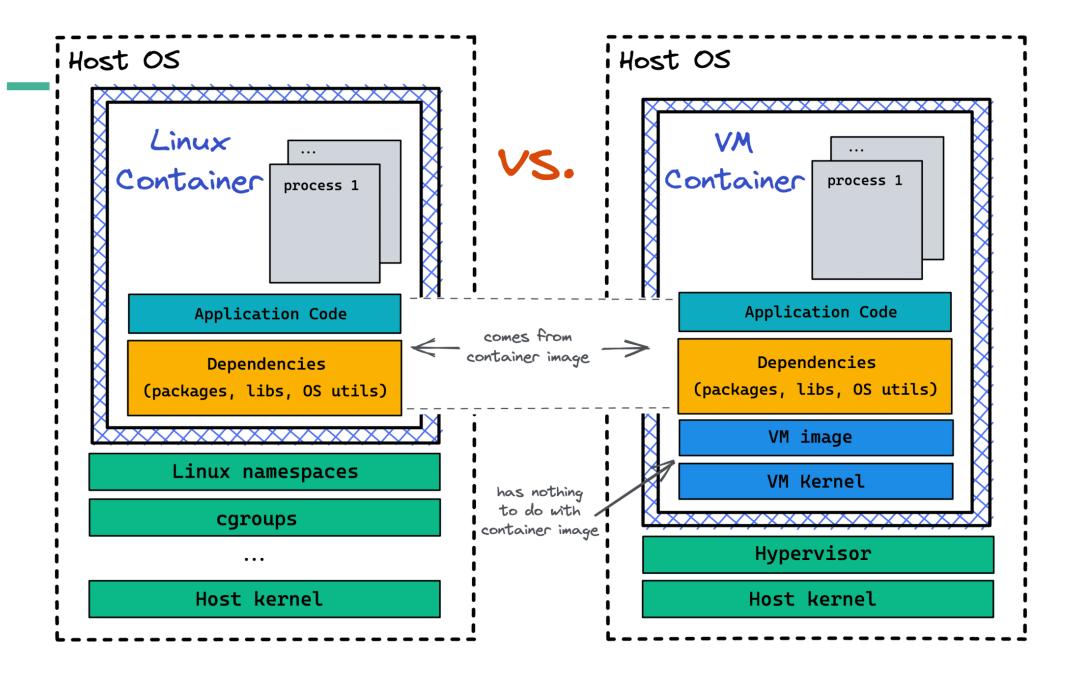
#### Intro

- Containerization, a brief intro
- Docker, a refresher
- The Open Container Initiative
- Podman
- Buildah

## A brief intro to containerization

- Encapsulating application code, files, libraries and environment
- All it needs to run independent of the underlying infrastructure
- Runs all places





## A Brief intro to Containerization

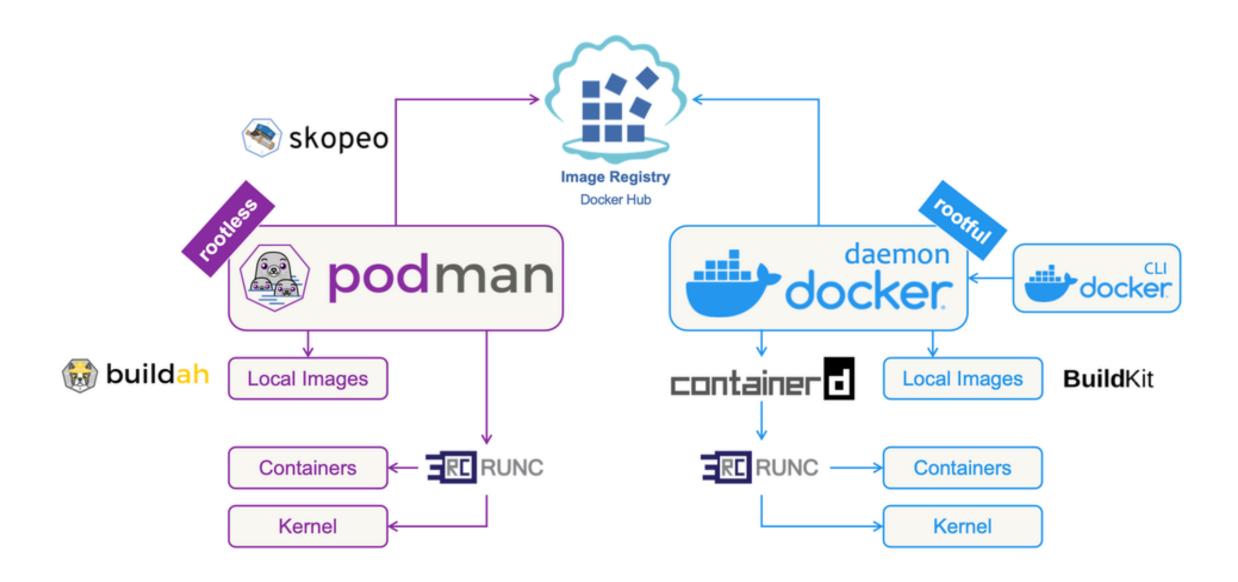
- Benefits:
  - Portability
  - Scalability
  - Fault tolerance
  - Agility
- Use Cases
  - Cloud migration
  - Microservices
  - Portability





### A brief intro to containerization

- Docker
- OCI
- Kubernetes
- Podman

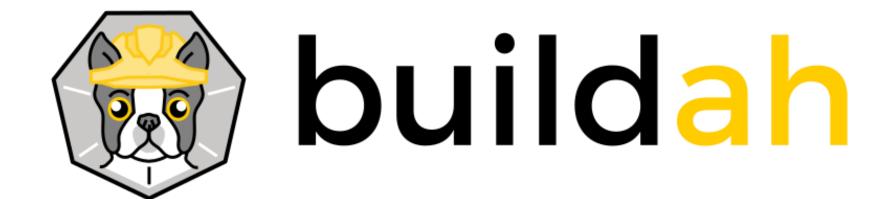


#### Podman

- Rootless by default (can run with sudo)
- No Running daemon
- Truly free
- Docker compatible
- Systemd scheduleable as well
- K8s compatability







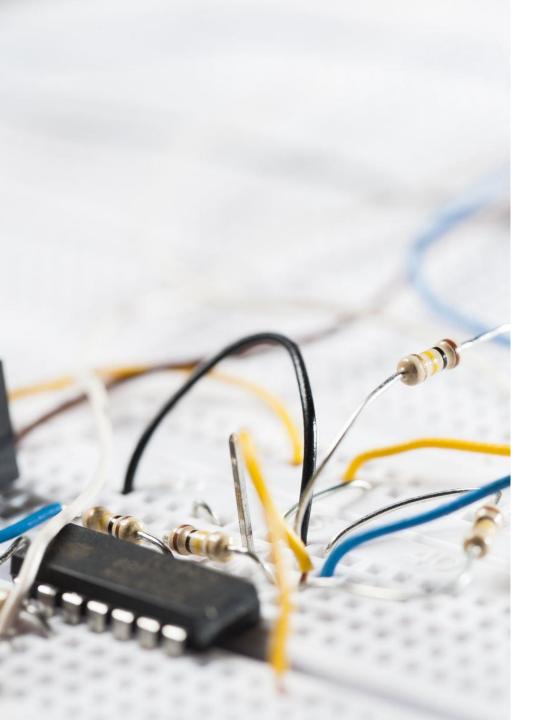
- create a working container, either from scratch or using an image as a starting point
- create an image, either from a working container or via the instructions in a Dockerfile
- images can be built in either the OCI image format or the traditional upstream docker image format
- mount a working container's root filesystem for manipulation
- unmount a working container's root filesystem
- use the updated contents of a container's root filesystem as a filesystem layer to create a new image
- delete a working container or an image
- rename a local container



## Understanding Buildah

- Purpose
- OCI
- Advantage
- Commands:
  - Buildah from
  - Buildah add
  - Buildah commit





#### **Comparing Buildah and Docker**

- Lightweight
- Single purpose
- Compatibility with OCI image spec
- Command line and no dæmon

#### Common issues and concerns

- Image compatibility
- Command syntax
- Road less traveled

#### Brief review

- Where we have been
- Future





Questions?