Further Study

1. Cgroups

Podman EX188

1. Podman uses the forck/exec model Docker uses a daemon
2. Podman is rootless Docker privileges
3. Podman namespaces – isolation
4. Podman integrates with system, so containers are system services
5. Podman can run Kubernetes Pods and fully supports YAML format
6. When containers are running, podman is not required to remain running, allowing for upgrades.

History

1. Named – access to a directory, but hackers jump up higher on the filesystem
2. Chroot – a fence around the named directory
   1. All dependencies need to be in the directory
3. Container Image --- tar ball with super powers.
   1. Archive with all dependencies
   2. Stored in registries
   3. Namespaces
      1. Mount
      2. User
      3. Process
      4. Network
   4. Linux Kernel cgroup –
      1. Kernel feature allow you to put resources in your container.
      2. Limite Memory allocation

# Exercises

Development Notes

1. WARN[0000] The cgroupv2 manager is set to systemd but there is no systemd user session available

WARN[0000] For using systemd, you may need to log in using a user session

WARN[0000] Alternatively, you can enable lingering with: `loginctl enable-linger 1001` (possibly as root)

WARN[0000] Falling back to --cgroup-manager=cgroupfs

**Solution**  
${HOME}/.config/containers/containers.conf:

**[engine]**

events\_logger = "file"

cgroup\_manager = "cgroupfs"

podman run -d docker.io/library/nginx

podman search ubi9

podman search registry.redhat.io

podman search registry.redhat.io/ubi9/

**Accounts**

podman login registry.redhat.io

fazuskazooio

Rminor7flat5 x2

podman pull registry.redhat.io/ubi9/ubi

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**Rootless containers do not get an ip address**

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But if you use sudo for all the commands you will have an IP Address. You must be root to connect to eth0

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podman run --name myweb -it nginx sh

Random Stuff

1. Turn an image into a non running container

podman create --name server\_volume be2596b7d887

1. If podman compose says pod already exists

podman compose down