FOSS North

Podman and Kubernetes
(OCI Containers with CRI)

Podman and Buildah

https://www.opencontainers.org/
CRI (Container Runtime Interface)
CNI (Container Network Interface)

podman
    Running containers/pods
    https://podman.io/
buildah
    Building container images
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Lightweight Kubernetes

Kubernetes is an open-source container orchestration system for automating deployment, scaling, and management of containerized applications.
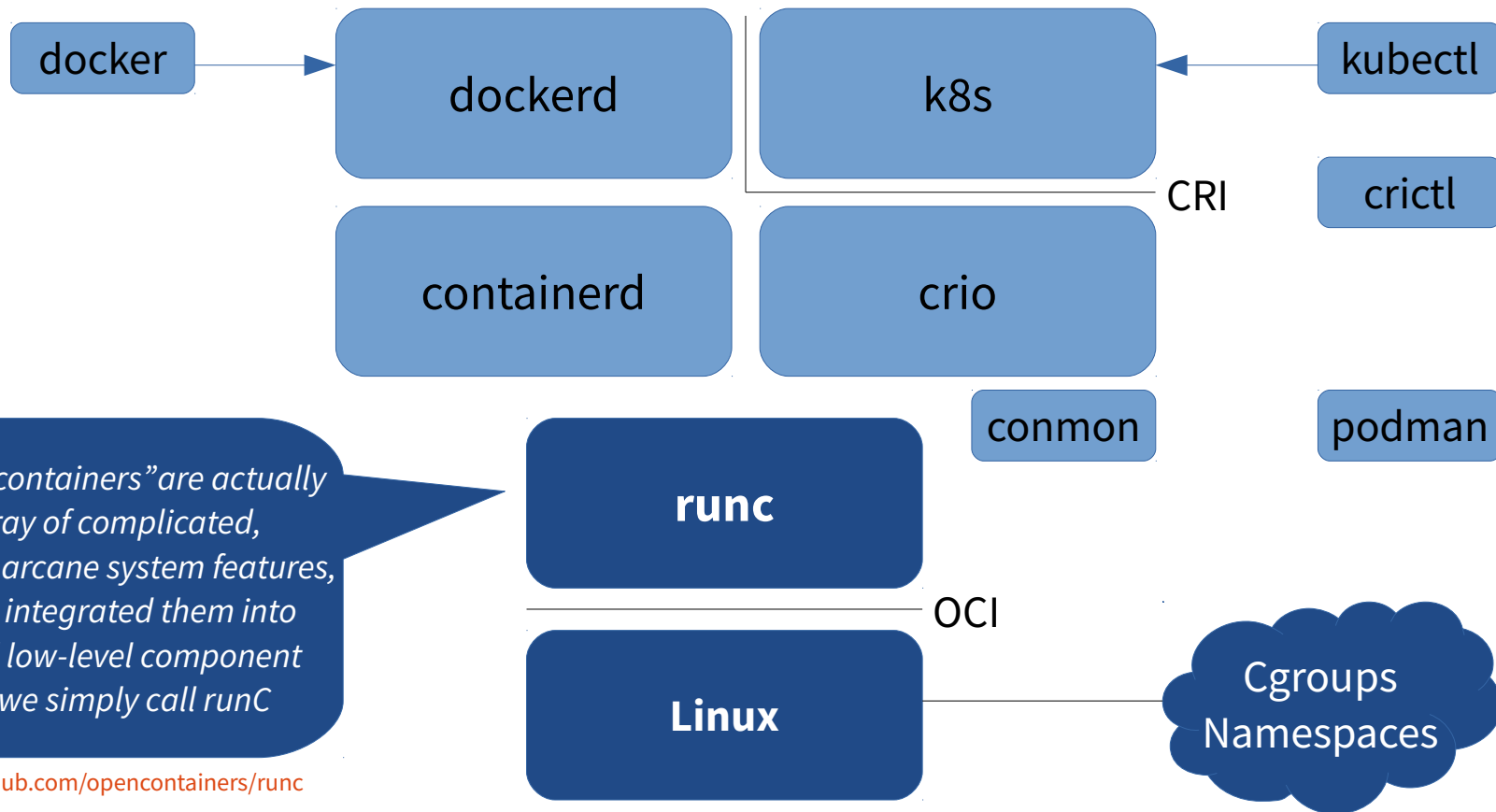https://kubernetes.io

cri-o

 Lightweight container runtime for Kubernetes

 https://cri-o.io/

k3s

 Lightweight Kubernetes. "5 less than k8s".

 https://k3s.io/

Container Runtimes

docker → dockerd

kubectl → k8s

crictl

containerd   crio   ——— CRI

conmon   podman

Because "containers" are actually an array of complicated, sometimes arcane system features, we have integrated them into a unified low-level component which we simply call runC

runc

https://github.com/opencontainers/runc

Linux   ——— OCI

Cgroups Namespaces

Demo - Boot2podman

Questions?

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For more info on boot2podman:
https://boot2podman.github.io/