BELOW KUBERNETES
DEMYSTIFYING CONTAINER RUNTIMES

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WHY AM I HERE?
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- OpenStack is more than just VMs
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Kubernetes
Kubernetes
1. THE WORLD USED TO BE SIMPLE
2. INTERFACES
OCI

- Open Containers Initiative, est. June 2015
OCI

- Open Containers Initiative, est. June 2015
- Standardize the wild west of container tech
OCI

- Open Containers Initiative, est. June 2015
- Standardize the wild west of container tech
- Runtime spec defining OCI runtimes
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- Open Containers Initiative, est. June 2015
- Standardize the wild west of container tech
- Runtime spec defining OCI runtimes
- Image spec defining OCI runtime bundles
CRI

- Container Runtime Interface, est. Dec 2016
CRI

- Container Runtime Interface, est. Dec 2016
- Primitives to manage pods of containers
CRI

- Container Runtime Interface, est. Dec 2016
- Primitives to manage pods of containers
- A single interface for Rkt & Docker
2. MORE PUZZLE PIECES
Linux Kernel

runC

CRI

crictl-containerd

cri-containerd

CRI-O

containerd

OCI

runC

Docker CLI

Podman

Kubernetes
3. WORKLOAD ISOLATION
THE DIRTY SECRET OF CONTAINERS
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- Containers don’t contain
THE DIRTY SECRET OF CONTAINERS

- Containers don’t contain
- Real-world containers run in VMs
THE DIRTY SECRET OF CONTAINERS

- Containers don’t contain
- Real-world containers run in VMs
- In GCP, Azure, AWS or Alicloud
THANKS!

Any questions?

You can reach me at
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