crictl CRI container debugging

CONCEPTS

crictl talks to the node's CRI runtime directly, so it sees kubelet-managed pods that docker or nerdctl do not list. Run it on the node, usually as root.

crictl CRI client
↓ gRPC socket
Runtime containerd / CRI-O
↓ runs
Pod sandbox shared network
↓ holds
Containers app + sidecars

CONNECT

crictl --runtime-endpoint *<socket>* **ps**
Use a specific runtime socket

crictl config --set runtime-endpoint=*<socket>*
Store the endpoint in the config

crictl config --list
Show client config values

CONTAINER_RUNTIME_ENDPOINT
Env var for the runtime socket

PODS

crictl pods
List pod sandboxes

crictl pods --name *<name>*
Filter pods by name

crictl pods --namespace *<ns>*
Filter pods by namespace

crictl inspectp *<pod>*
Pod sandbox details

CONTAINERS

crictl ps
List running containers

crictl ps -a
Include exited containers

CONTAINERS (cont.)

crictl ps --name *<name>*
Filter containers by name

crictl ps --pod *<pod>*
Containers of one pod

crictl inspect *<container>*
Container details as JSON

crictl stop *<container>*
Stop a container

crictl rm *<container>*
Remove a container

LOGS AND EXEC

crictl logs *<container>*
Show container logs

crictl logs -f *<container>*
Follow the log

crictl logs --tail=*<n>* *<container>*
Last N lines

crictl exec -it *<container>* **sh**
Interactive shell

crictl exec *<container>* *<cmd>*
Run one command

IMAGES

crictl images
List images

crictl pull *<image>*
Pull an image

crictl rmi *<image>*
Remove an image

NODE AND METRICS

crictl info
Runtime status and config

crictl stats
Container CPU and memory

crictl ps -o json
Machine-readable output