Linkerd

Service mesh CLI

CONCEPTS

The CLI only prints YAML: pipe it to kubectl apply -f - to change the cluster.

linkerd install CRDs, then control plane
↓ linkerd check
Control plane identity, destination, policy
↓ inject
Meshed pods proxy sidecar per pod
↓ viz install
Viz extension stat, tap, top, dashboard

Install order matters: CRDs first, then the control plane, then extensions such as viz.

Meshing is done at pod creation: restart workloads after annotating them.

INSTALL & UPGRADE

`linkerd check --pre`
Pre-flight cluster checks

`linkerd install --crds | kubectl apply -f -`
Install the CRDs

`linkerd install | kubectl apply -f -`
Install the control plane

`linkerd viz install | kubectl apply -f -`
Install the viz extension

`linkerd install --ha`
High-availability control plane

`linkerd install --set <key>=<val>`
Override a Helm chart value

`linkerd install -f <values.yaml>`
Install with a values file

`linkerd install --identity-trust-anchors-file <ca.crt>`
Supply your own trust anchor

CHECK & VERSION

`linkerd check`
Verify the control plane

`linkerd check --proxy -n <ns>`
Verify data-plane proxies

CHECK & VERSION (cont.)

`linkerd viz check`
Verify the viz extension

`linkerd version`
Client and server versions

INJECT

`linkerd inject <file|dir|URL⟷>`
Annotate manifests for meshing

`kubectl get deploy <name> -o yaml | linkerd inject - | kubectl apply -f -`
Mesh a live deployment

`kubectl annotate ns <ns> linkerd.io/inject=enabled`
Auto-inject a whole namespace

DASHBOARD

`linkerd viz dashboard`
Open the web dashboard

METRICS

`linkerd viz stat deploy -n <ns>`
Success rate, RPS, latency

`linkerd viz stat <kind>/<name> -n <ns>`
Stats for one resource

`linkerd viz edges deploy -n <ns>`
Show who talks to whom (mTLS)

LIVE TRAFFIC

`linkerd viz tap deploy/<name> -n <ns>`
Stream live requests

`linkerd viz top deploy/<name> -n <ns>`
Top-like live table of requests

UNINSTALL

`linkerd uninstall | kubectl delete -f -`
Remove the control plane

GLOBAL FLAGS

`-n, --namespace <ns>`
Namespace of the resource