

Service Mesh: Beyond the Hype

Starring: Linkerd

#OracleCloudNative
cloudnative.oracle.com

Mickey Boxell & Jesse Butler



Linkerd

Linkerd 2

An open source service mesh for Kubernetes

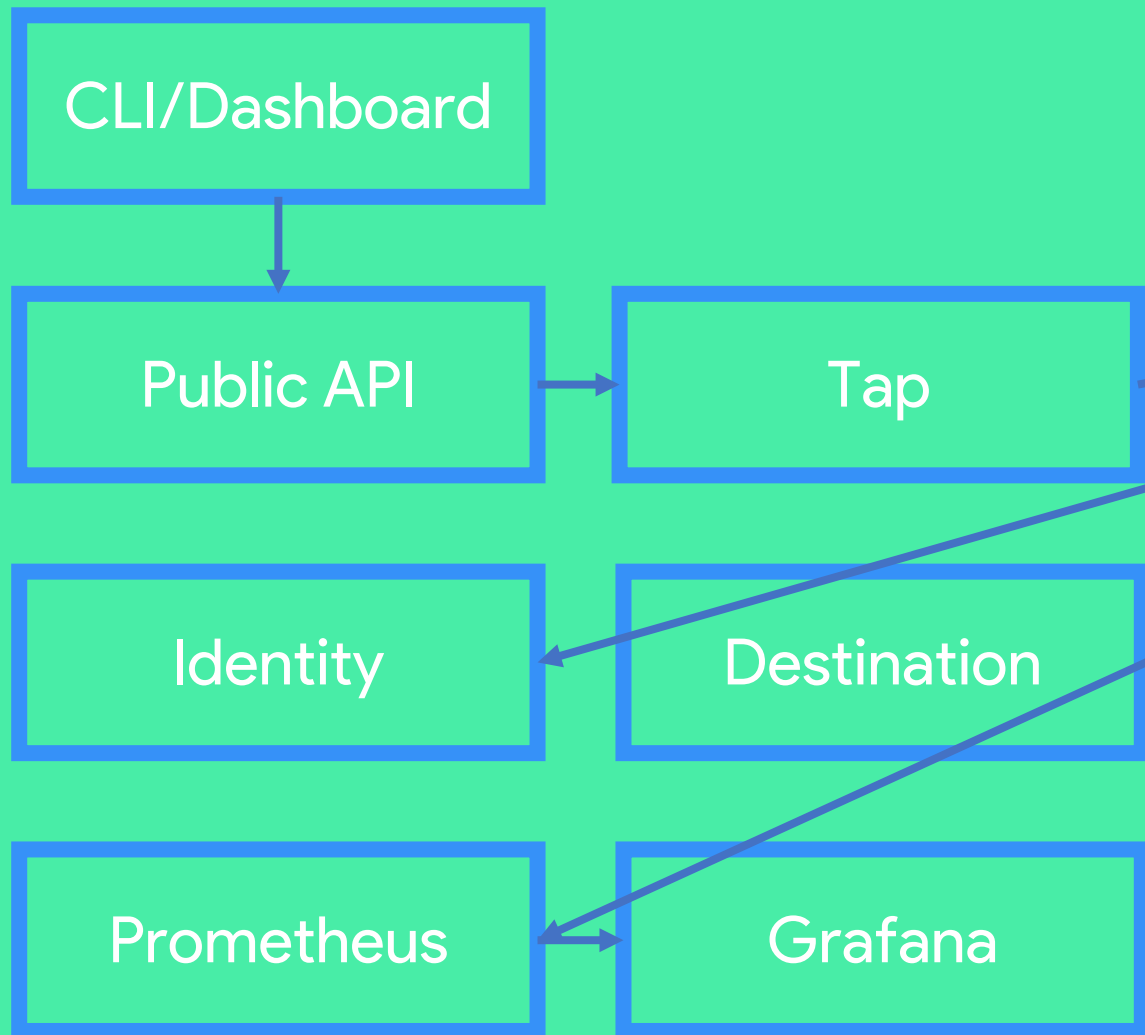
Written in Rust

Comprised of a CLI, control plane, data plane

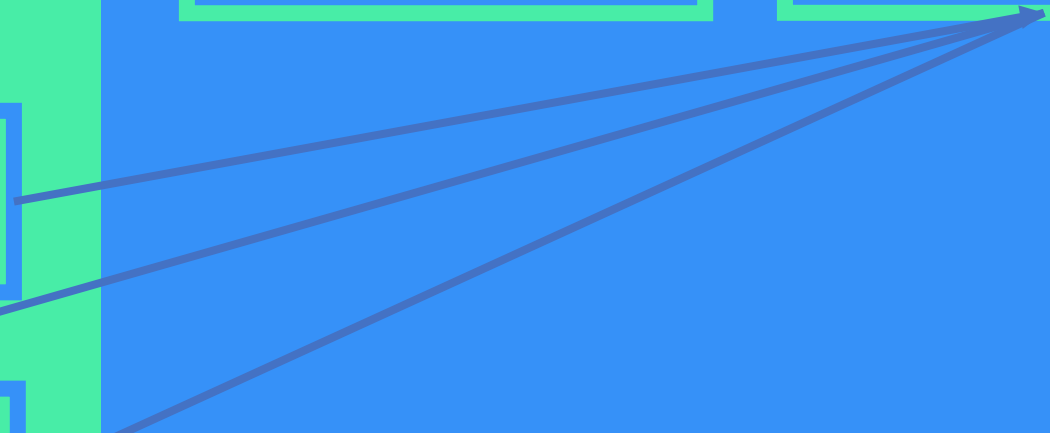
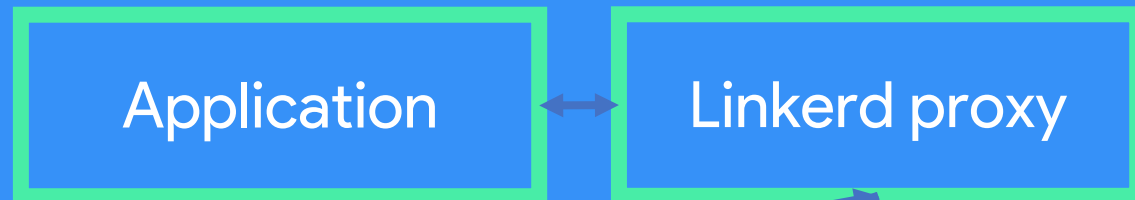
Sidecar proxies handle traffic to services

Control plane receives telemetry from data plane

control plane



data plane



Lab Overview

Lab 0: Oracle Cloud Account & K8's Cluster Creation

Lab 1: Install Linkerd

Lab 2: Demo Application

Lab 3: Canary Deployments

Lab 4: Failure Injection

Lab 5: Debugging Your Service

service profile

Define a list of routes for a service

Enables per-route metric reporting and features such as retries and timeouts

metrics

Fetch metrics directly from Linkerd proxies

inject

Add the Linkerd proxy to
a Kubernetes config

uninject

Remove the Linkerd
proxy from a Kubernetes
config

tap

Listen to a traffic stream

top

Display sorted
information about live
traffic

routes

Display route stats

stat

Display traffic stats
about one or many
resources

flagger

Kubernetes operator
automating promotion of
blue/green and canary
deployments using
Linkerd or other tools for
traffic shifting

blue/green

Simultaneously running two versions of a production environment with one serving live production traffic while the other is idle

canary

Rolling out a new version to production to a small subset of users and incrementally changing the rest of the environment

Additional Resources

<https://linkerd.io/>

<https://docs.flagger.app>

<https://docs.cloud.oracle.com/iaas/Content/home.htm>

Stay Connected

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<https://www.linkedin.com/in/jesse-butler-33449a2/>

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