- Conduit
  - sidecar to deployment?
  - dashboard
  - conduit.io
  - light weight
  - zero config
  - linked Salon ~~before on~~ Thurs

- Envoy
  - edge & svc proxy
  - makes network transparent to apps
  - (Salon @ 3:46 Today room 17a)

- gRPC
  - language support for testing

- Fluentd v1.0 released
  - filth data streamer
  - Prometheus integrator
  - data streaming pipeline
  - Fluentbit
    - routing part of data pipeline
  - (Fluentd Salon @ 2pm)

- Jager
  - open tracing system by Uber
  - Jager tech Salon @ (Friday 2pm)

- Linkerb
  - service mesh
  - Salon Thursday

- Conduit
  - run conduit @ github
    conduit example

- Dave Marsh ~ Netflix
  - Asgard 2012 - Spinnaker precursor
  - Edge Center 2013 - internal

- Spinnaker!
  - Enterprise CI/CD
  - Opensource
  - Kubernetes

- LHA? Chaos
  - CA Canary
- Engineers manage & monitors
  - choose when to deploy
  - decide deployment strategy

- Roadmap
  - extend Suite to CI
  - Declarative CD
  - Abstract deployment details
-

- TUF - software update spec
  - attacks are expected/lin
- Notary
  - project that adopted TUF

- Kata Containers
  - isolation Containers
  - speed vs security
  - iter-dev containers
    - project @ intel
  - run V
  - merges Intel clear containers
  - Hyper runV
  - Hardware Accelerated containers that use virtualization tech
  - Open Stack Foundation
    - no pay to play
  - Tech steering group
    - by contributions
  - Multiple hypervisors

  IRC #kata-dev
  freenode

- Adrian Cockroft
  - VP cloud strategy Aws
- Fargate container prev

NAMP io netheus Salon
- Notes on computer
- Envoy @ nuttklen 123
  - Service mesh
    envoy proxy/IO
- Core DNS? rm 4a @ 3:40
  - Research
- Nginx / Istio
  - most on computer
  - zipkin?
- istio / book info example
- istio → auto gen proxy configs

CoreDNS #4? - en camp

- John Belamaric
  → Infoblox.io

- writing plugins
  = ~~config~~
  = plugin.cfg?
  - fallthru?
  - enable?

Ahost → txt forum localhost

V1.9 dns policy; custom
Pod spec
Bowei - google

- Service Mesh Keynote
  - Ben Sigelman
    - lightstep

- Microserve transactions
  → Dist Tracing tells stories
  about transactions across svc
  boundaries

- Zipkin
- Jaeger
→ lightstep

- Observing every RPC is just not
  something needs to be install
  together

- Don't care - make Fast & Belize tags
  SaaS

Oper Tracing
  - conduit
  → nginx mesh
  → envoy
  → istio
  → linkerd

- Opentracing salon
  thu 3:30pm
- Jagar Friday 2-3:30pm
- Inked Fistof 2pm

• Brendan Burns
  - msft
  @brendanburns together sit
  kubernetes ..? too hard
  - new tools patterns paradigms
  to democratize dist systems dev

- Principle #1 - everything in 1 place
- #2 - Build libraries not platforms
- #3 - Encourage sharing & reuse

• Language Idiomatic Cloud
  - Design your app in code
  - no yaml /DSL
  - more approachable
  - Better tooling
  - Thoughtful language features

- Hadoop
  public classMapper {
  public classReducer {
  -Python
  WREN.exec.map(my-func, range(10))

- Meta Particle

  std lib
  Runtime
  Objects

  Meta particle
  Kubernetes
  Containers

→ Higher level patterns
  sync/lock
  election
  sharding

→ metaparticle.io/package
  sync
  github
  @metapartcle.io

Alexis Richardson
@monadic

Can IDOM devs use k8s

- GitOps talk Thurs
@colorize bot
-openfaas
-

- Kelsey Hightower keynote
  - Infrastructure repo
  - Auto updates per commit
  - Curated Dashboard
  github. hightowerlabs.com
  - hellowork - infrastructure pod
  - how to manage configs?
    = helm
    = kassonet?

-

- Chen Goldberg Pete
  @goldbergchen

- code Fresh
  - Spinnaker better at scale

→ Patron Project
  (Postgres) DB operator

- client-go
- kubo
- Istio
- Spinnaker
- Jaeger
- linkerd
- TUF Notary
- Squash - dist app debuser
- Kedge Project - deploy k8s resrcs
- chat by coreOS → Cate?

I/o/s Istio on k8s

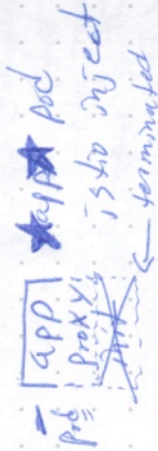- puZKNK goo.gl/

- Daneyoh Hanson
  @daneyohhansen
  Cisco

* Follow Along – goo.gl/puZKNK
- bbk Info – example app
- istio = cp + data plane

- ~~Istio CA & egress proxy~~
- Manually inject sidecar proxy
-

I. Initialize Controller
   - pre-init tasks
   - init controller
   - start API server w/ flags
   - runtime -config -
   - extra config = AdmCtroll

- Initializer pod & config

=> io Ca
   io mixer
   io pilot
   io ingress
   io initializer

Gladly CI/CD

!bot create chat-dev
-> ient go
-> Elastic search
   - kafka
   - Postgres
   - edge-broker - master
   - supernova - chat-dev
   - ingress + edge-router-master
   - config maps

- ksonnet?

— Initializer = ~~Proxy~~ webserver on p pod3
ConfigMap mounted @
- /etc/istio/config
➡ init Image
proxy Image
mesh ConfigMap

Pod: [app] ★ app pod
proxy istio inject
← terminated
init container redirects
traffic then terminates

istio
- injt config to customize
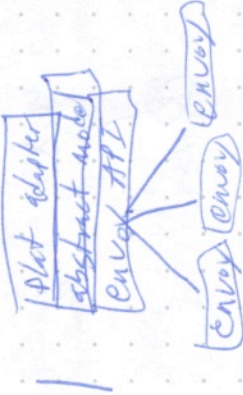behavior
- hmt Ybg - goo.gl/
➡ proxy modes;
  - ideal
  - other

- envoy runtime config

- /etc/listio /proxy/envoy-rev0
  envoy Pxy/support-stat-rev0 ↑
- istio ⇛ data plane ↑
= control plane ↓
- Pilot

|

Pilot adapter
abstract model
envoy API

Envoy Envoy Envoy

- Discovery q Load Balancing

- Pilot pod

- pilot
- proxy

- EVF tma?
- Mutual TLS done by proxy sidecar
- Istio Security / CA pod
  - curl localhost :xxxx/certs
- Ingress
  33140 ingress = istio ingress controller
- Also runs envoy ingress PXY
- egress rules only support HTTP/S currently
- resources cant access stuff outside of the mesh
- include IPRanges param can be used & prevent PXY from intercepting external requests

- Pilot has a serviceacnt
- mounts /etc/certs
- BAYeSg -geo dl
- Control Plane: Mixer
  Mixer = attribute processng & routng engine
- Envoy -> Mixer -> Infra Backend
  (?) operator
- SMM HgV
- Mixer config looks similar to pilot /etc/certs
- Side car for mixer can comm with envoy PXY

- hosted prom & grafana
  - 50k/month
  - 8k/yr
  - dd Plugin
  - Cloud watch
  - €1k/month
  - 1/3 price

- Grafana
  - Raj - CEO

← setting sail w/Istio
  (Youtube channel)

- for fio - load tester
- istio & envoy
- istioctl

[kubkapropcrossp] - Wedge?

- mail is best content on slide

- teakers plugin by pierson jags
  github.com/pierson technology

- environment operator

- Matt Klich - matt@elementavoid.com
  - ShutterStock
    in Denver, CO

- KPS plat admin

- Istio Can say
  - v3 should not have
    more than 10 req/sec
  - to limit traffic onnew release

- Can write bad code but
  not Impact production

—

Nov → IND
AS3
boarding 10:20Am
Conf # SPYE6H
gate 47

ASAP