

Welcome

Lin Sun & Mitch Connors



#IstioCon

Lin Sun



Director of Open Source, Solo.io

Founding Istio TOC & Steering member



@linsun_unc



@linsun



[linkedin.com/pub/lin-sun/1/...](https://www.linkedin.com/pub/lin-sun/1/...)

#IstioCon



Mitch Connors



Software Engineer, Google



@mitchashimself



@therealmitchconnors



[linkedin.com/mitchconnors](https://www.linkedin.com/mitchconnors)



Joined 2018

User Experience WG Lead

1x16,500 Line Contribution



**Kubernetes
Podcast**

from Google

Later This Week

#IstioCon



PLATINUM



Google Cloud



solo.io



Red Hat

SILVER



ASPEN MESH



COMMUNITY



#IstioCon



Program Committee (English)



Mitch Connors

Software Engineer at
Google Cloud | Program
Chair IstioCon



Lin Sun

Director of Open
Source at Solo.io |
Program Chair IstioCon



Srihari Angaluri

Principal Product
Manager at IBM Cloud



Neeraj Poddar

Head of Engineering at
Solo.io



Jason Webb

Distinguished Engineer
at Intuit

Program Committee (Chinese)



Iris Ding

Cloud Software
Engineer at Intel



Jimmy Song

Developer Advocate at
Tetrate



Zhonghu Xu

Senior Engineer at
Huawei

#IstioCon



Organization



María Cruz

Program Manager at
Google Cloud



Sakhi Patel

Event Producer at
Google Cloud



Alexandra Bush

Head of Open Source
and Community
Marketing at Google
Cloud



Rose Sawvel

Head of Community &
Education at Solo.io

Produced by Software Guru



Mara Ruvalcaba

Event manager



Pedro Galván

Technical writer



**Alberto
Rodríguez**

Streaming & website



**Fernando
Hernández**

Promotion and social
media



**Monse
Hernández**

Design



Norma López

Project manager



Teyza Ponce

Communications



Ximena Cruz

Streaming

#IstioCon



Logistics

Code of Conduct

#IstioCon Slack

Swag & Jobs

Networking event

Listening Sessions

Survey

Workshops

Recording

#IstioCon



Slack - Event chat

Join the conversation.

Join the Istio slack, the event chat will happen at the #istiocon channels. You will get the last news, contact other participants, speakers, and contact with the sponsors who will have a lot of surprises for you!



Swag bag

Gifts for everyone!

Thanks to our sponsors and event organizers, you will get books, discounts, gift cards, and much more. Visit the swag bag page and discover all the gifts available for you.



Event t-shirt

The first 400 registered to the event will receive the event t-shirt. If you were one of them, you will receive an email with instructions about how to get your t-shirt.



Networking event

During this virtual 1 hour experience, you and your team are sent on an important mission to Mars! With a guided host, race the clock to make your way through the different rooms of the spaceship to save the day. The winning team will get a surprise gift!

Note: As we have limited spots, we will share via email the registration form with the event participants.
Tuesday 1:30 PDT

**LISTENING
SESSIONS**

Listening sessions

Listening Sessions are "open mic" sessions where the Istio Community invites users to provide feedback on specific developments in the project.



Rate the event and sessions

Give us your feedback and help us improve.

Your opinion is very important for us. Please fill out the event evaluation. It will be very helpful for future events organization.

We are giving away an Amazon gift card (\$100 USD) to a randomly selected participant! If you would like to be considered for the selection, please rate the event and sessions and enter your email in the corresponding field



Welcome our New Maintainers

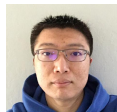
Product Security



Justin Pettit



John Wendell



Yuchen Dai



Lawrence Gadban



Lin Sun

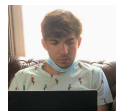


Oliver Liu

Environments



Tong Li



Sam Naser



Welcome our New Maintainers

Security



shankgan

Test And Release



Stewart Butler

User Experience



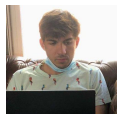
Xiaopeng Han



Steve Zhang



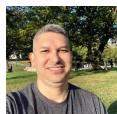
Thank You to our Release Managers



Sam Naser



zhihanz



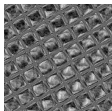
John Wendell



Ryan King



Steve Zhang



Daniel Grimm



Kenan O'Neal



eliavem



Lei Tang



Steven Landow



Welcome 51 New Team Members!

aakash2017
AdamKorcz
ameer00
andream12345
andrewshaoyu
angaluri
Arhell
aryan16
BinacsLee
bryankaraffa
Chen-Xintong
ChenglongGao327
CloudJason
cnvergence
cyran-ryan
dddddai
deveshkandpal1224

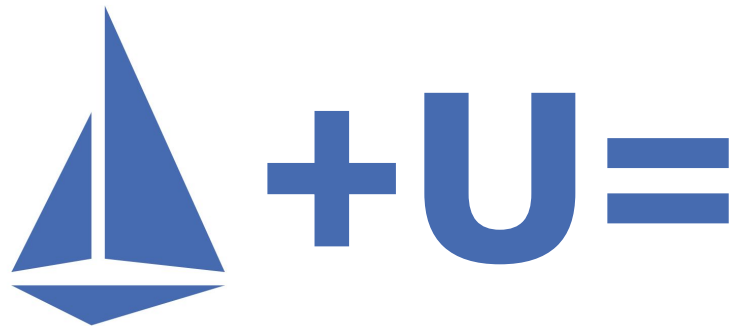
duglin
eliavem
feeltimeQ
g3n-github-robot
gy95
Haleygo
hanxiaop
johnzheng1975
jupblb
kerthcet
kfaseela
kfreez
knabben
l8huang
lgadban
mathetake
my-git9

nicole-lihui
riita10069
ryantking
sergii-ssh
shaowenchen
shivanshu1333
shonecyx
shriramsharma
shuaijinchao
thisisnotapril
wokeao
Xunzhuo
yanrongshi
ycai-aspen
YonkaFang
zirain
zouyee

#IstioCon



Want to become a member?



Community Listening Session Friday 11:00 PDT

#IstioCon



IstioCon takes place April 25–29, and is 100% virtual. [Register now!](#)

Istio 1.13.3 is now available! [Click here to learn more](#)

Simplify observability, traffic management, security, and policy with the leading service mesh.

What is Istio?

Discover how a service mesh helps with many common

Solutions

Learn how to build secure, reliable and scalable

Deployment

Get what you need to deploy and utilize Istio for your unique

Congrats to NEW Istio Users

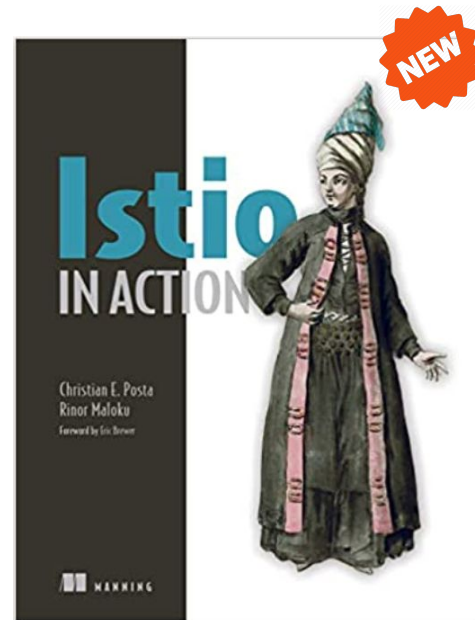
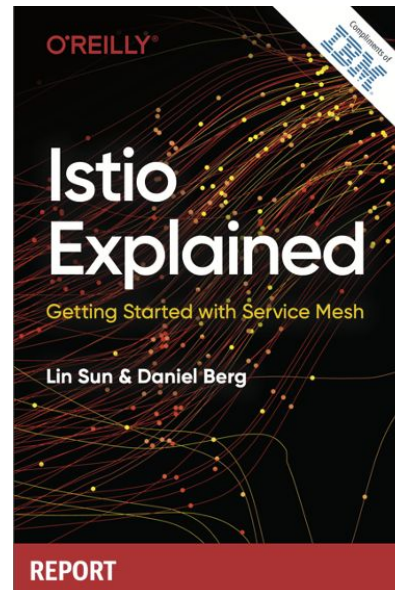
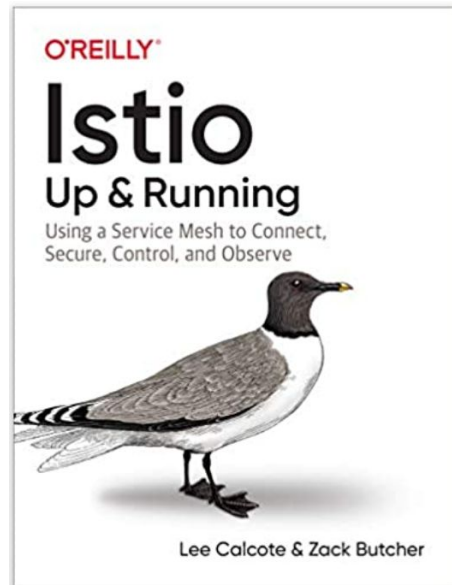
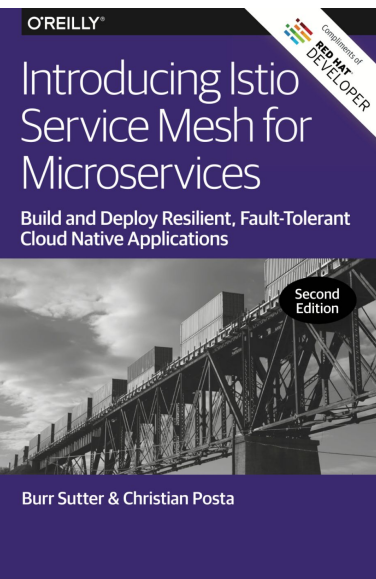


STILINGUE

#IstioCon

Add your logo: <https://github.com/istio/istio.io/blob/master/data/companies.yml>





#IstioCon



Happy Birthday Istio!

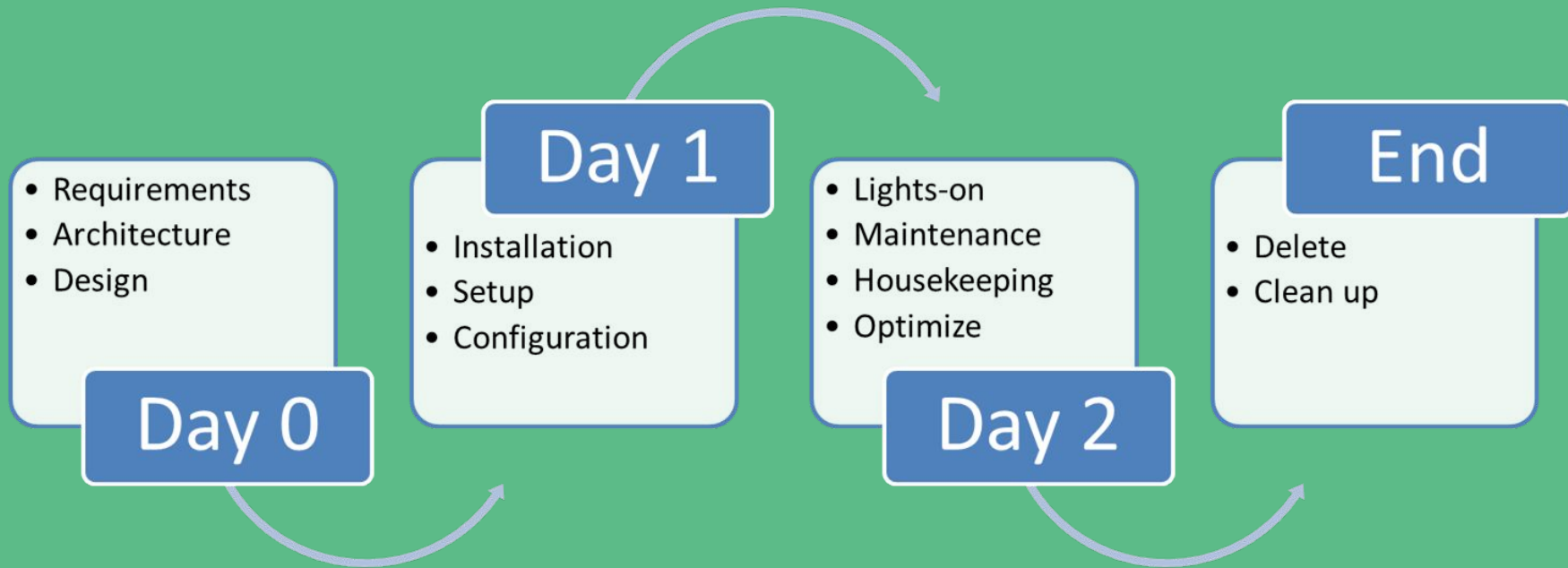
#IstioCon

A Message from your Steering
Committee

A Look Back at 2021

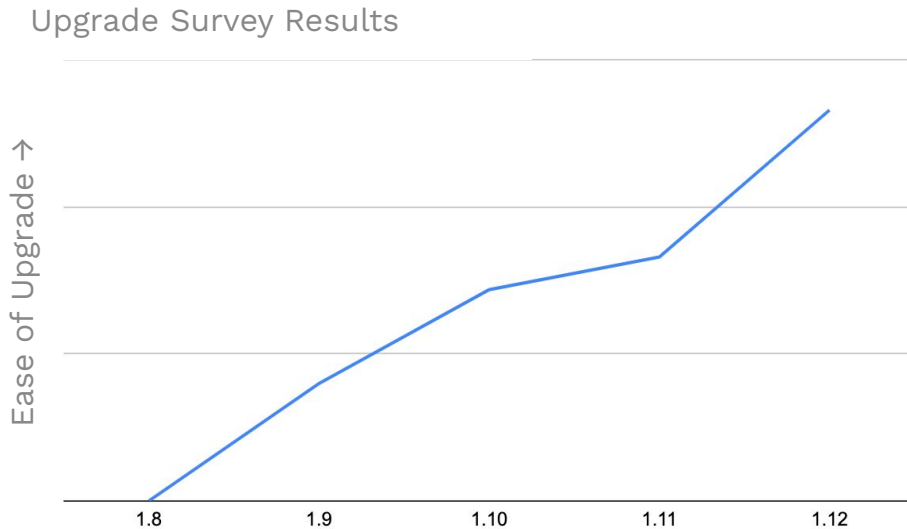
#IstioCon

Focus on Day 2 Operations

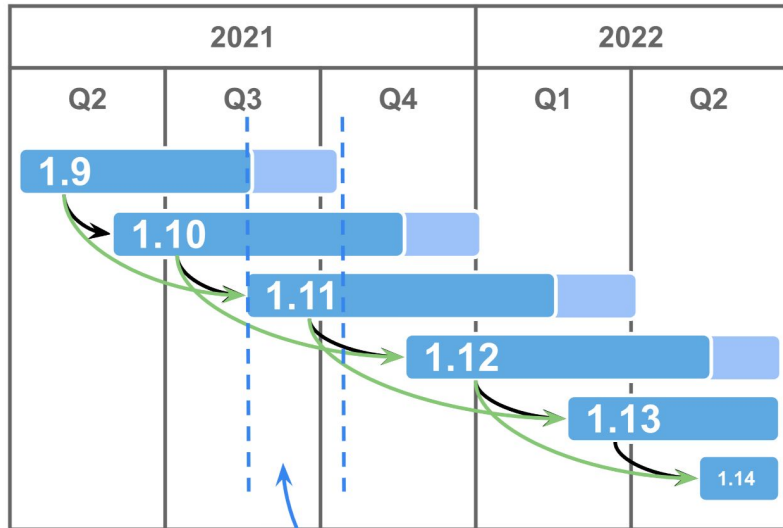


Istio Upgrades - Easier than Ever

- Revision Upgrades
- Revision Tags
- Default Tags
- Gateway Injection
- Helm



Istio Upgrades - Twice a Year



Previous

Extended

→ Standard Upgrade

→ Direct Upgrade

Upgrades Listening
Session - Tuesday
11:00 PDT

*Direct Upgrade Window
from 1.9 to 1.11*



Istio Security Assessment

- Third-Party assessment conducted July '21
- No Critical Issues
- Security Best-Practices Guide
 - Service Mesh Security Best Practices - Tuesday @ 10:20
- <https://istio.io/latest/blog/2021/ncc-security-assessment/>



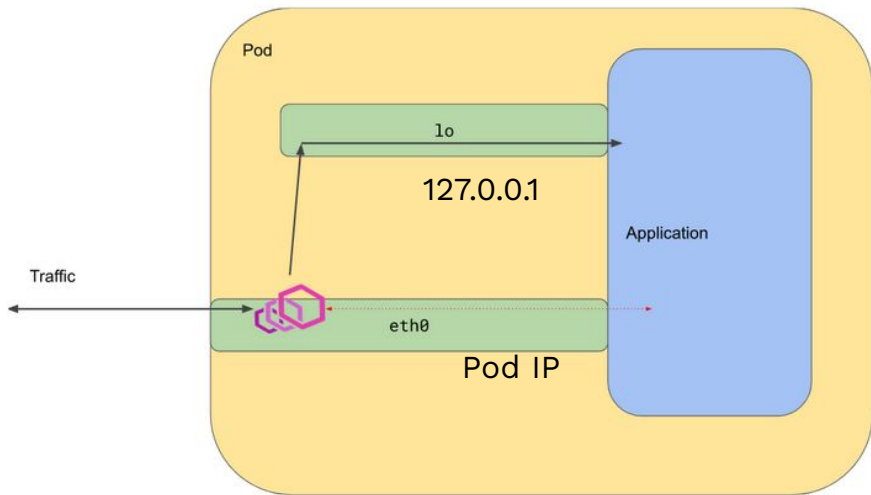
Keep Istio Boring



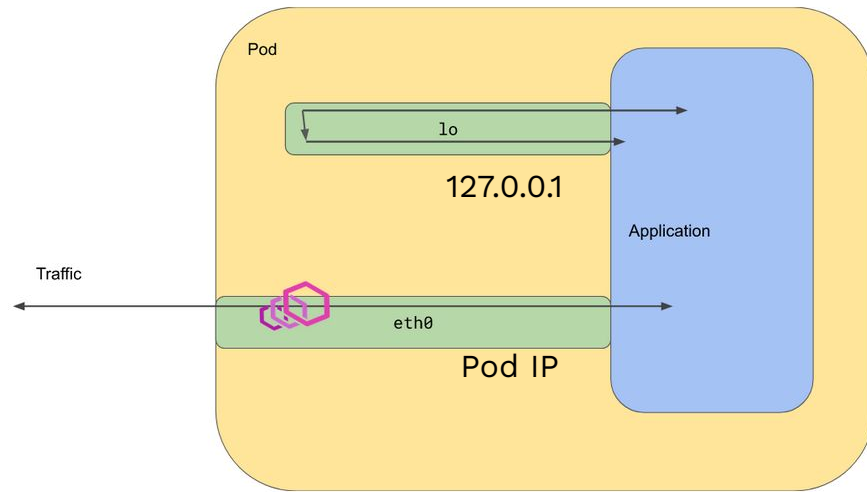
#IstioCon



Pod Networking Changes



Pod network with Istio < 1.10



Pod network with Istio >= 1.10



Feature Promotions

Beta Graduation

- Istio CNI
- External Control Plane
- Gateway Injection
- DNS Proxying

Stable

- Service Credential Distribution
- Mutual TLS
- Gateway
- Traffic Control
- Protocols:HTTP1.1/HTTP2/gRPC
/TCP/Websockets/MongoDB
- Service dashboard in Grafana
- ...

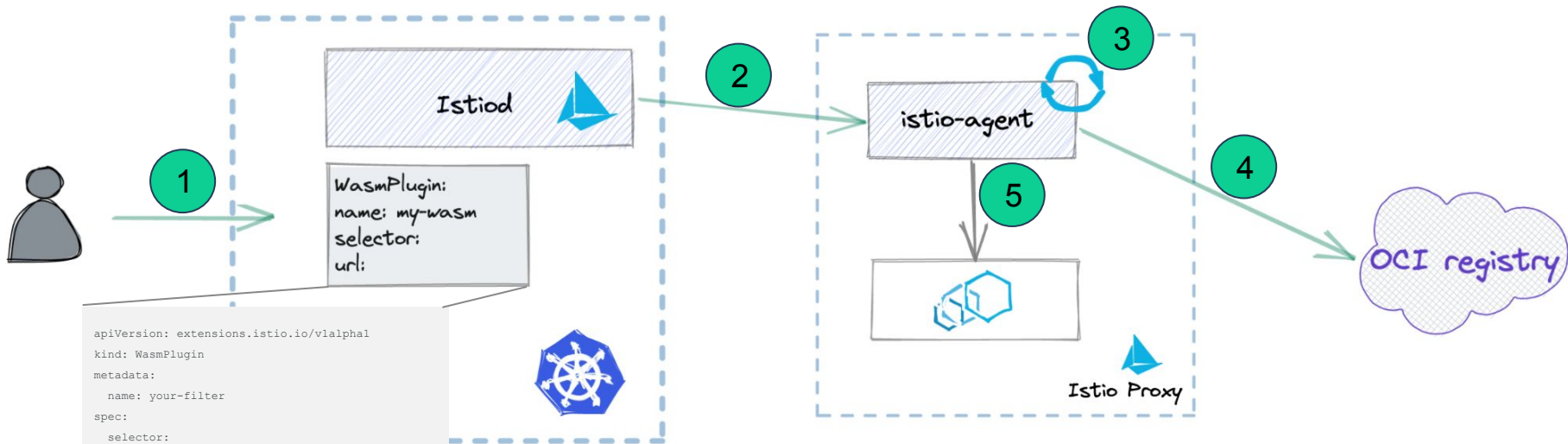




Continuous

Innovation

WasmPlugin

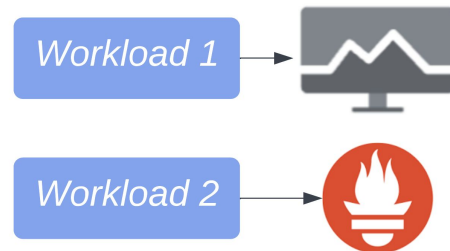


```
apiVersion: extensions.istio.io/v1alpha1
kind: WasmPlugin
metadata:
  name: your-filter
spec:
  selector:
    matchLabels:
      app: server
  phase: AUTHN
  priority: 10
  pluginConfig:
    someSetting: true
    someOtherSetting: false
    youNameIt:
      - first
      - second
  url: docker.io/your-org/your-filter:1.0.0
```



Telemetry v2

- Metrics, tracing, and access logging
- At the workload level
- Without reinstalling Istio
- Supports multiple providers in one mesh



Understanding Telemetry v2 - Wednesday 9:00 PDT
Telemetry v2 Listening Session - Wednesday 11:00 PDT



Proxy Configurations

- ProxyConfig in MeshConfig
- proxy.istio.io/config pod annotation
- ProxyConfig resource
 - Limited config options

```
apiVersion: networking.istio.io/v1beta1
kind: ProxyConfig
metadata:
  name: per-workload-proxyconfig
  namespace: example
spec:
  selector:
    labels:
      app: ratings
  concurrency: 0
  image:
    type: debug
```



Gateway Evolution

Gateway Injection

- No complex template
- Upgrades Just like proxy

K8s Gateway API

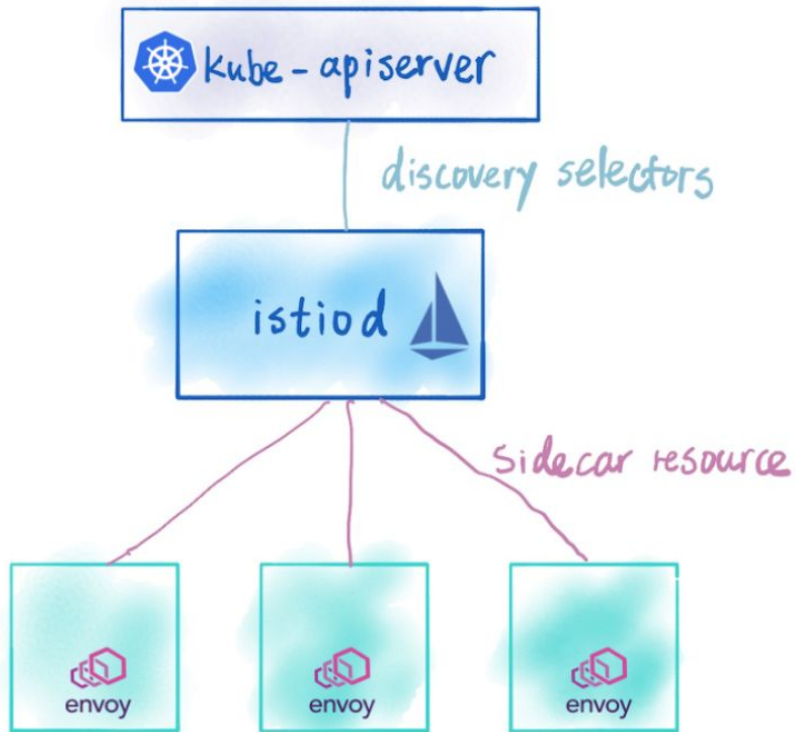
- Auto-Provisioned Gateway
- Consistent API



Gateway API Status Update - Thursday 9:40 PDT



Discovery Selectors



Keeping Istio Boring

Is Anything But Boring



Welcome, Eric Brewer!

#IstioCon














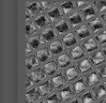














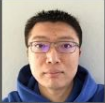
























Cofounder, Inktomi

Prof Emeritus CS, UC Berkeley

Formulated CAP Theorem

VP and Fellow, Google Infrastructure

Thank you!

 <p>Maintainer in 3 repos Last active on 2022-04-21 23.30.31 +0000 UTC</p>	 <p>Maintainer in 4 repos Last active on 2022-04-16 22.22.58 +0000 UTC</p>	 <p>Maintainer in 3 repos Last active on 2022-04-21 16.56.20 +0000 UTC</p>	 <p>Maintainer in 12 repos Last active on 2022-04-20 18.42.39 +0000 UTC</p>	 <p>Maintainer in 3 repos Last active on 2022-03-21 04.32.06 +0000 UTC</p>	 <p>Maintainer in 2 repos Last active on 2022-04-16 14.20.58 +0000 UTC</p>	 <p>Maintainer in 4 repos Last active on 2022-04-08 06.04.28 +0000 UTC</p>	 <p>Maintainer in 10 repos Last active on 2022-03-14 17.13.37 +0000 UTC</p>	 <p>Maintainer in 10 repos Last active on 2022-03-23 16.50.06 +0000 UTC</p>	 <p>Maintainer in 10 repos Last active on 2022-02-04 23.04.21 +0000 UTC</p>	 <p>Maintainer in 6 repos Last active on 2022-04-21 02.01.14 +0000 UTC</p>	 <p>Maintainer in 3 repos Last active on 2022-04-21 02.17.01 +0000 UTC</p>	 <p>Maintainer in 3 repos Last active on 2022-03-22 22.06.04 +0000 UTC</p>	 <p>Maintainer in 5 repos Last active on 2022-03-28 15.48.28 +0000 UTC</p>
 <p>Maintainer in 2 repos Last active on 2022-04-20 23.12.14 +0000 UTC</p>	 <p>Maintainer in 11 repos Last active on 2022-04-02 03.30.27 +0000 UTC</p>	 <p>Maintainer in 2 repos Last active on 2022-02-09 16.22.57 +0000 UTC</p>	 <p>Maintainer in 3 repos Last active on 2022-04-21 17.30.12 +0000 UTC</p>	 <p>Maintainer in 2 repos Last active on 2022-04-10 23.16.24 +0000 UTC</p>	 <p>Maintainer in 14 repos Last active on 2022-04-21 27.53.45 +0000 UTC</p>	 <p>Maintainer in 2 repos Last active on 2022-04-21 07.43.36 +0000 UTC</p>	 <p>Maintainer in 1 repo Last active on 2022-03-14 25.22.23 +0000 UTC</p>	 <p>Maintainer in 3 repos Last active on 2022-04-19 09.11.19 +0000 UTC</p>	 <p>Maintainer in 10 repos Last active on 2022-04-20 18.52.26 +0000 UTC</p>	 <p>Maintainer in 10 repos Last active on 2022-04-12 15.18.13 +0000 UTC</p>	 <p>Maintainer in 11 repos Last active on 2022-04-19 17.32.19 +0000 UTC</p>	 <p>Maintainer in 3 repos Last active on 2022-04-22 02.06.48 +0000 UTC</p>	 <p>Maintainer in 2 repos Last active on 2022-04-21 21.52.36 +0000 UTC</p>
 <p>Maintainer in 3 repos Last active on 2022-04-18 20.18.40 +0000 UTC</p>	 <p>Maintainer in 2 repos Last active on 2022-04-16 02.15.14 +0000 UTC</p>	 <p>Maintainer in 1 repo Last active on 2022-03-07 16.02.48 +0000 UTC</p>	 <p>Maintainer in 16 repos Last active on 2022-04-20 01.43.15 +0000 UTC</p>	 <p>Maintainer in 1 repo Last active on 2019-02-04 23.58.53 +0000 UTC</p>	 <p>Maintainer in 3 repos Last active on 2022-04-16 11.57.48 +0000 UTC</p>	 <p>Maintainer in 3 repos Last active on 2022-04-22 05.46.20 +0000 UTC</p>	 <p>Maintainer in 4 repos Last active on 2022-04-07 22.27.28 +0000 UTC</p>	 <p>Maintainer in 3 repos Last active on 2022-04-22 02.10.34 +0000 UTC</p>	 <p>Maintainer in 1 repo Last active on 2022-03-08 06.01.36 +0000 UTC</p>	 <p>Maintainer in 15 repos Last active on 2022-04-21 22.42.43 +0000 UTC</p>	 <p>Maintainer in 4 repos Last active on 2022-04-11 09.59.06 +0000 UTC</p>	 <p>Maintainer in 3 repos Last active on 2022-02-17 01.07.16 +0000 UTC</p>	 <p>Maintainer in 2 repos Last active on 2022-04-21 14.48.52 +0000 UTC</p>
 <p>Maintainer in 12 repos Last active on 2022-04-08 17.34.17 +0000 UTC</p>	 <p>Maintainer in 3 repos Last active on 2022-03-22 01.56.32 +0000 UTC</p>	 <p>Maintainer in 3 repos Last active on 2022-04-19 14.14.59 +0000 UTC</p>	 <p>Maintainer in 12 repos Last active on 2022-03-23 01.51.00 +0000 UTC</p>	 <p>Maintainer in 1 repo Last active on 2022-03-16 19.36.43 +0000 UTC</p>	 <p>Maintainer in 13 repos Last active on 2022-03-17 23.42.11 +0000 UTC</p>	 <p>Maintainer in 10 repos Last active on 2022-04-18 22.29.06 +0000 UTC</p>	 <p>Maintainer in 12 repos Last active on 2022-04-18 20.27.18 +0000 UTC</p>	 <p>Maintainer in 1 repo Last active on 2022-04-21 23.12.16 +0000 UTC</p>	 <p>Maintainer in 3 repos Last active on 2022-04-21 02.48.02 +0000 UTC</p>	 <p>Maintainer in 2 repos Last active on 2022-04-22 02.32.24 +0000 UTC</p>			