



**KubeCon**

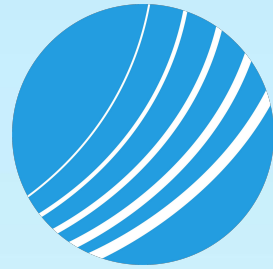


**CloudNativeCon**

**Europe 2023**



# Contour



## ContribFest



KubeCon



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# Introductions



**Steve Kriss**

Staff Engineer, VMware  
Contour maintainer  
@skriss



**Tero Saarni**

Principal Developer, Ericsson  
Contour maintainer  
@tsaarni

# Agenda

- Overview of Contour
- Brief outline of repo organization
- Basics of tooling & process for making contributions
- Demo
- Set up dev environments / work on issues / open discussion



# Poll



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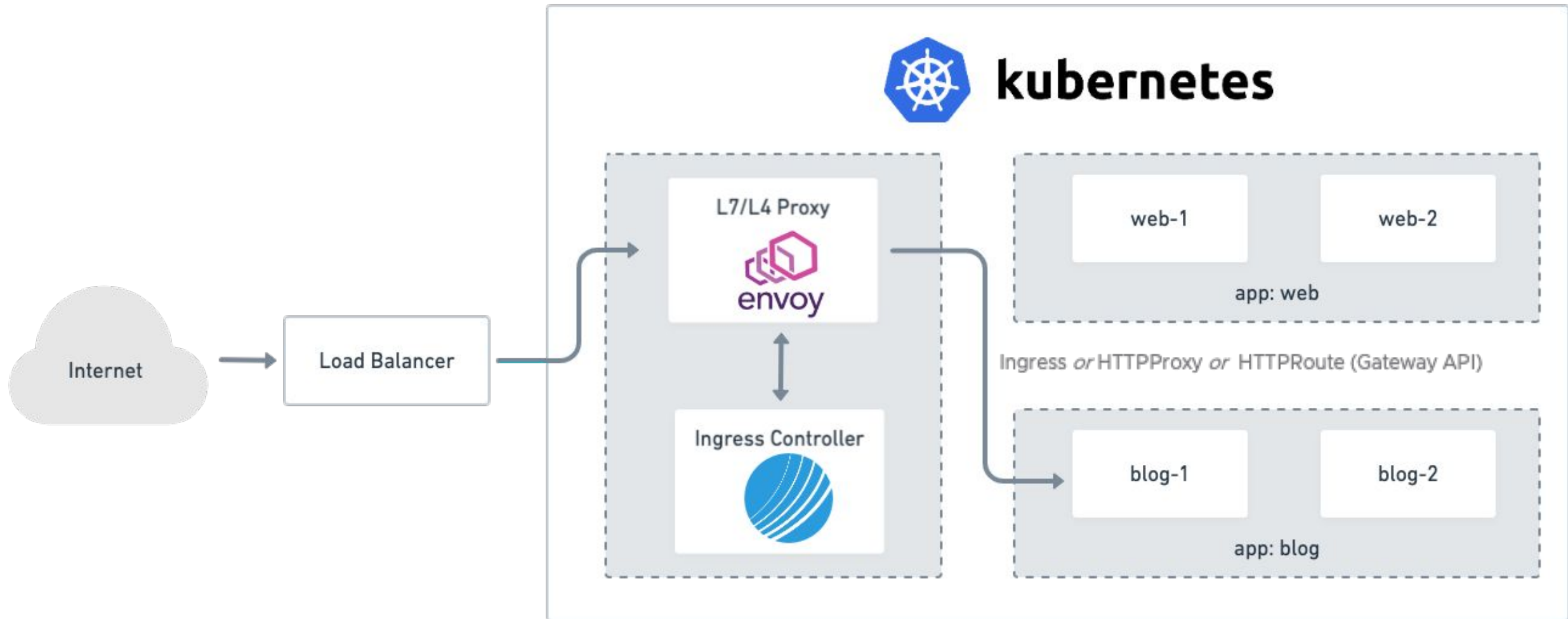


# What is Contour?

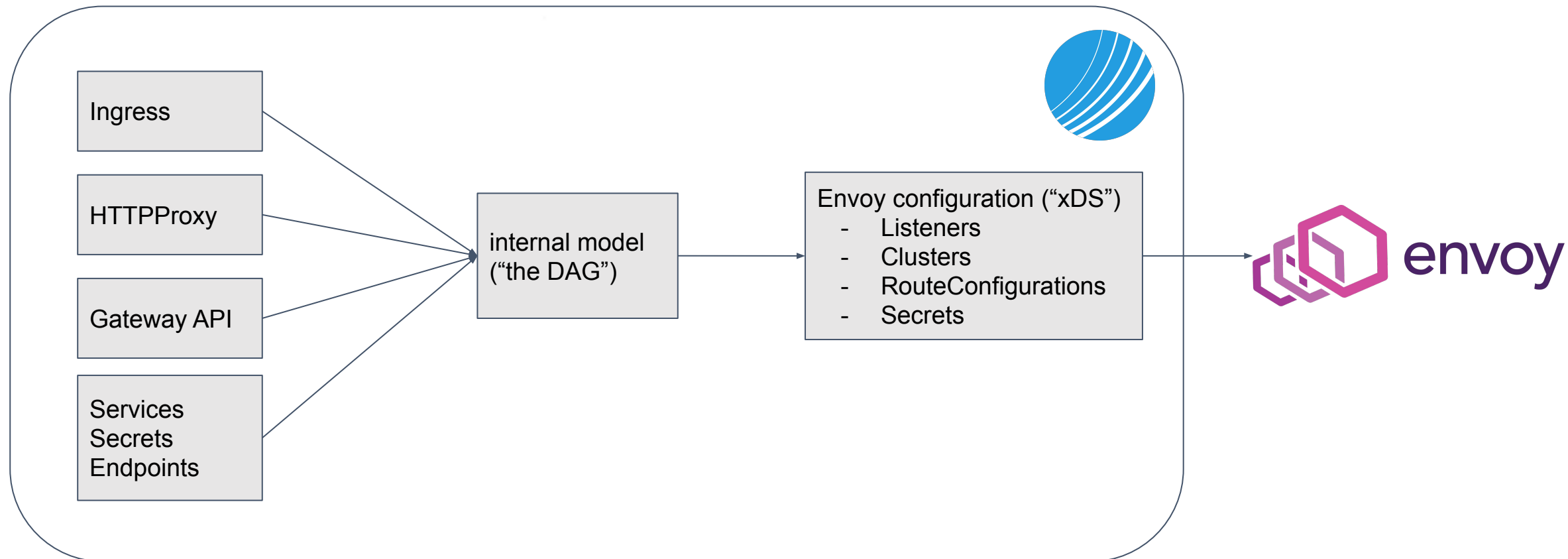


- Kubernetes ingress controller using Envoy Proxy
- CNCF incubating project since 2020
- Path/header/query-based routing, TLS termination, rate limiting, external auth, upstream TLS and much more
- Supports HTTPProxy CRD, Ingress, and Gateway API

# Architecture



# Translation Flow





# Repo Organization

- **cmd/contour/serve.go**: entrypoint for the Contour control plane
- **internal/dag**: internal model and processors to translate from Kube to DAG
- **internal/envoy/v3**: functions for translating from DAG to xDS
- **internal/xdscache/v3**: caches for serving xDS; call functions from internal/envoy/v3
- **internal/provisioner**: dynamic provisioning of Contour instances for Gateway API
- **hack/**: tooling & scripts
- **site/content/docs**: <https://projectcontour.io/docs> source



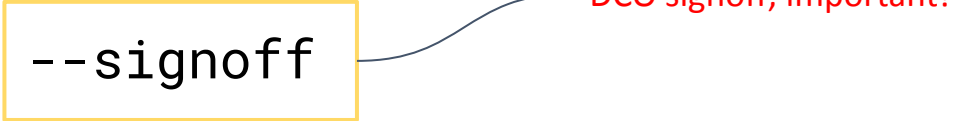


- minimum: **git, go**
  - `git clone git@github.com:YOUR-USERNAME/contour.git`
  - `go build ./cmd/contour`
  - `go test ./...`
- better: **make, docker, kind, kubectl, jq, yq**
  - `make install-contour-working`
  - `make install-provisioner-working`
  - `make checkall`

More details at <https://github.com/projectcontour/contour/blob/main/CONTRIBUTING.md>

# Contributing Process



- Create a feature branch
  - `git checkout -b my-feature-branch upstream/main`
- Make changes
- Commit your changes
  - `git add . && git commit --signoff` 
- Push to GitHub
  - `git push --set-upstream origin my-feature-branch`
- Open a pull request



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# Demo



# Let's Get Started!



- <https://github.com/projectcontour/contour/blob/main/CONTRIBUTING.md>
- <https://github.com/projectcontour/contour/labels/contribfest>
  - Comment on an issue if you start working on it
  - Add “Co-authored-by: Name <email>” to commit if working in a group
  - Sample workload: <https://projectcontour.io/examples/kuard.yaml>
- Experienced contributors: open discussion on roadmap & feature design
  - e.g. [data path extensibility via Wasm, external processing, etc.](#)
  - Outcomes: roadmap PRs, issue updates, spikes/PoCs
- **Work doesn't have to be completed today!**

# Contour Community



# CONTOUR

projectcontour.io  
<https://projectcontour.io/community/>



#contour



project-contour@googlegroups.com

20M+  
Image Pulls

190+  
Contributors

600+  
Forks

3.4k  
GitHub Stars

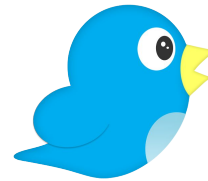
95  
Releases

130+  
Contributing  
Companies

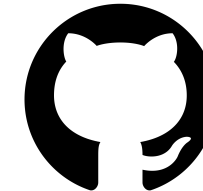
1,250  
Slack  
members

17 Blogs  
8 KubeCon  
talks

1k+  
Twitter  
followers



@projectcontour



<https://github.com/projectcontour>



<https://www.youtube.com/channel/UCCde7QSfcyYJ8AuXofD5bTA>



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