How the GAMMA initiative is shaping the future of Service Mesh

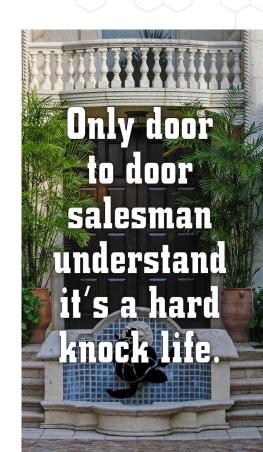
Speaker: Stephane Karagulmez



The Challenge of Complexity

Me, the sales guy, sending you an email everyday: "Overwhelmed by managing multiple service meshes?"

The issue: A fragmented ecosystem with vendor-specific implementations generating steep learning curves and difficult migrations



The Current Landscape

North-South Traffic:

- Kubernetes Gateway API is the leading resource
- Replaces traditional Ingress resources
- Broad vendor support and interoperability

East-West Traffic:

Managed by various service meshes

Challenges:

- Fragmented ecosystem with vendor-specific implementations
- Complexity and steep learning curves



Introducing the GAMMA

Initiative

GAMMA: Gateway API for Mesh Management and Administration

Purpose:

- Extend Gateway API to support service mesh use cases
- Adapt North-South constructs for East-West traffic

Benefits:

- Standardization: Unified configuration reduces fragmentation
- **Ease of Migration:** Simplifies switching between service meshes

Ongoing Efforts and Future

Vision Conformance Testing:

- Enhancing functionality and stability
- Ensuring adherence to standards

Vendor Collaboration:

- Encouraging participation in upstream testing
- Identifying and resolving discrepancies

Future Vision:

- Achieve relevant feature parity between East-West and North-South traffic management
- Thoughtfully integrate functionalities to enhance service meshes

Community Involvement and Call to Action

How You Can Get Involved:

- Advocate for Standardization: Encourage vendors to adopt GAMMA standards
- Provide Feedback: Share use cases and challenges
- Collaborate: Engage in discussions and contribute to testing

Closing Statement:

- "Join us in unifying the Kubernetes service mesh landscape!"

Thank You!!

Dear Santa (a.k.a. My Favorite Service Mesh Vendor),

I've been a really good DevOps kid this year. I've patched all the CVEs, kept my YAMLs tidy, and even cleaned up after stray pods without complaining! So, for Christmas, I only want one thing: support for the Gamma Initiative.

I promise I'll be super good next year too—I'll even write fewer feature requests (well, maybe). But please, please, bring me Gamma support so I can spread holiday cheer to all my microservices!

Your biggest fan,

A Very Good Kubernetes Boy/Girl

