Discover, **Deliver** and **Secure** Your APIs **Anywhere**

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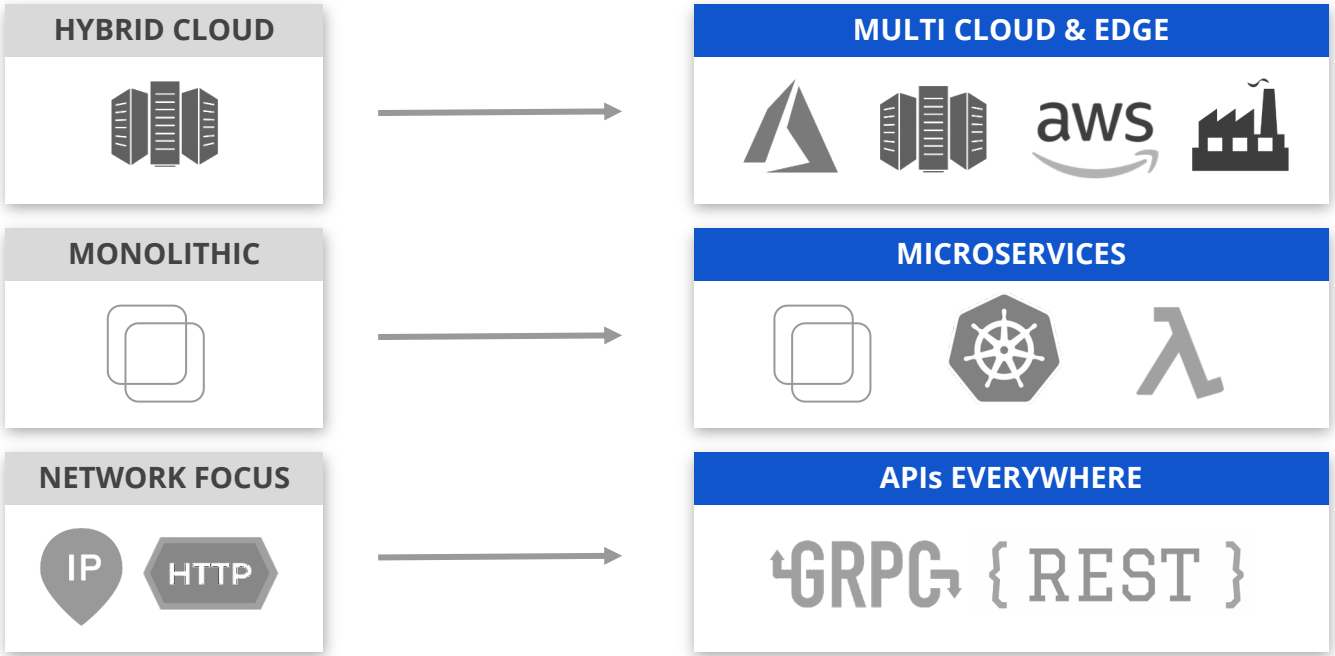
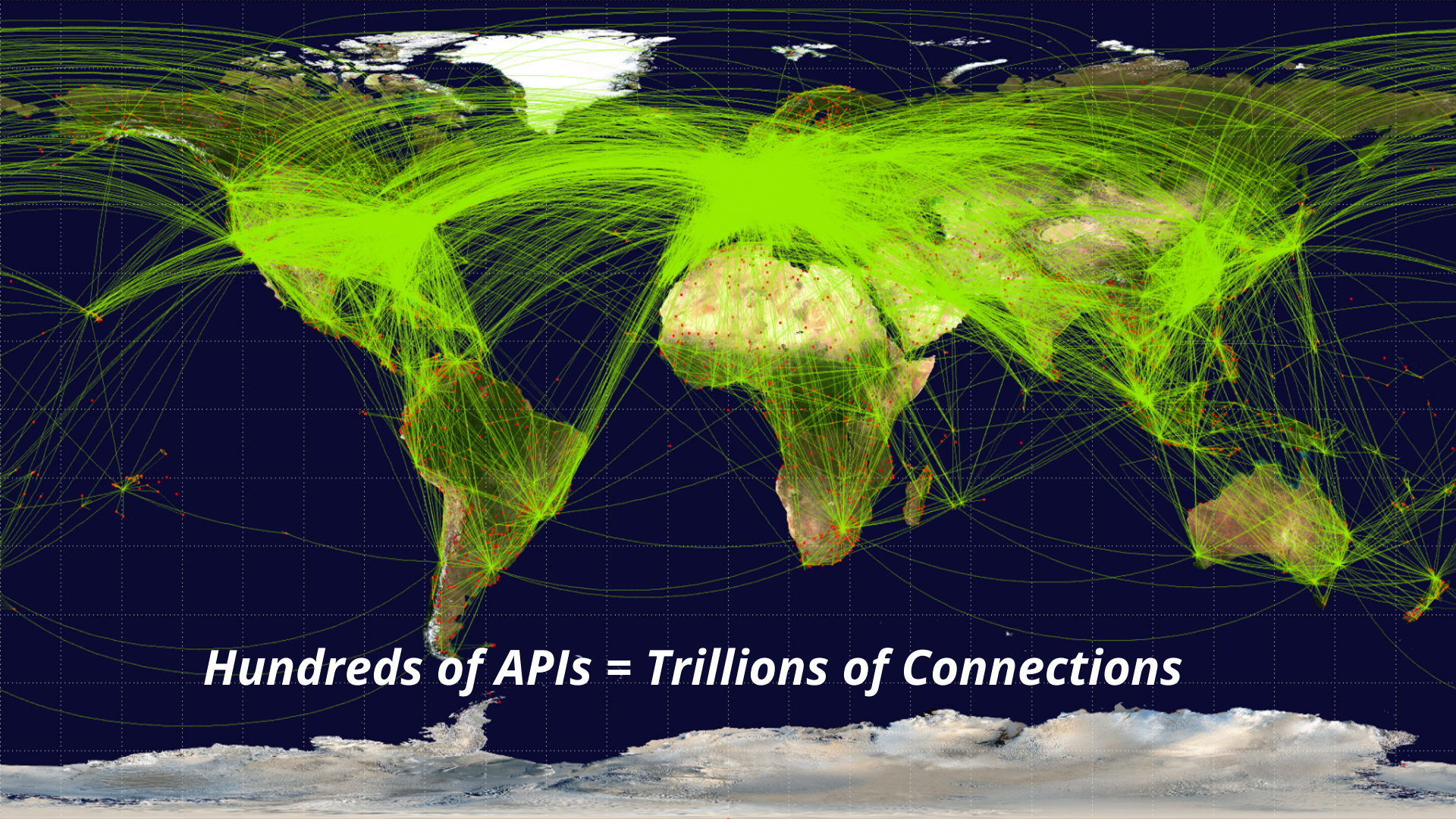
Enable the Cloud for Everyone, Everywhere

The Needs for Modern Apps Are Changing



API-Powered World...

amazon Prime | NETFLIX | airbnb | UBER | slack


Hundreds of APIs = Trillions of Connections

Challenges with the Management of APIs & Microservices

APIs

- Multiple API Version Control
- Discovering and Management of Distributed APIs is #@%!@
- Multi-Cloud Secure API Communications
- Traffic Management & Scaling

Microservices

- Microservices Increases complexity of end to end API visibility
- Webhook Development, Visibility and Security
- Testing Mobile Apps on Laptop & Dev Machines with Visibility & Security
- Distributed API AuthZ/AuthZ is @#%@%

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State of the Union

- **Service Mesh logging, observability and API Management designed around single cluster.**
- **Distributed Apps require common API Frameworks to deploy, manage and observe heterogeneous environments**
- **Emerging Cloud Native Edge Requirements**
- **Complex solutions for API delivery to large # of branches / SOHO**
- **Developer solutions have limited visibility and security, e2e not available across fleet**
- **Before commit & merge, no easy workflow to deploy a local instance of sw on dev cluster**

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Where Do We Need to Go?

A universal stack for API discovery, control & delivery that's centrally managed but globally distributed

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A New Approach Is Needed

APP2APP NEEDS

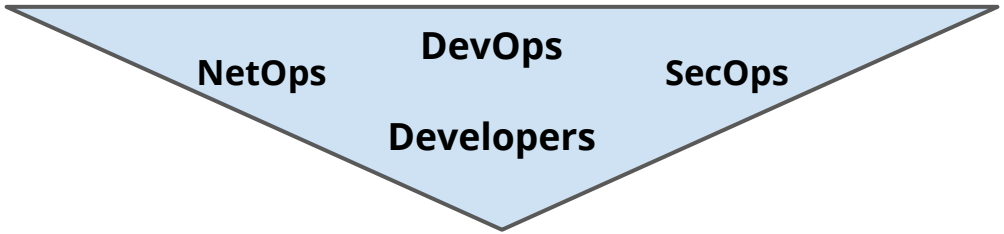
A single L3-L7 Network & Security Services Stack

Consolidated Service

SaaS-based Operations

Common Tooling Across Environments

Centralized Policy & Observability



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Demonstration

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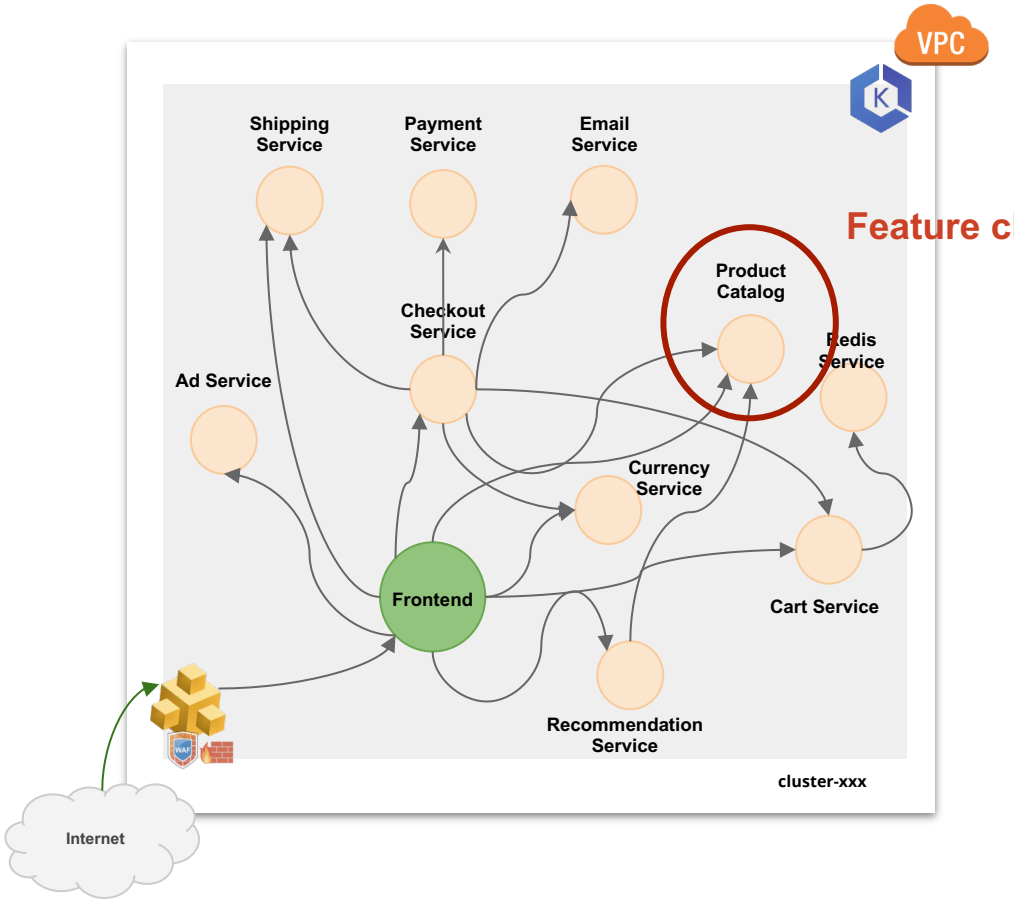
Hipster-shop (now Online Boutique) Application Topology



Feature change

VIPs

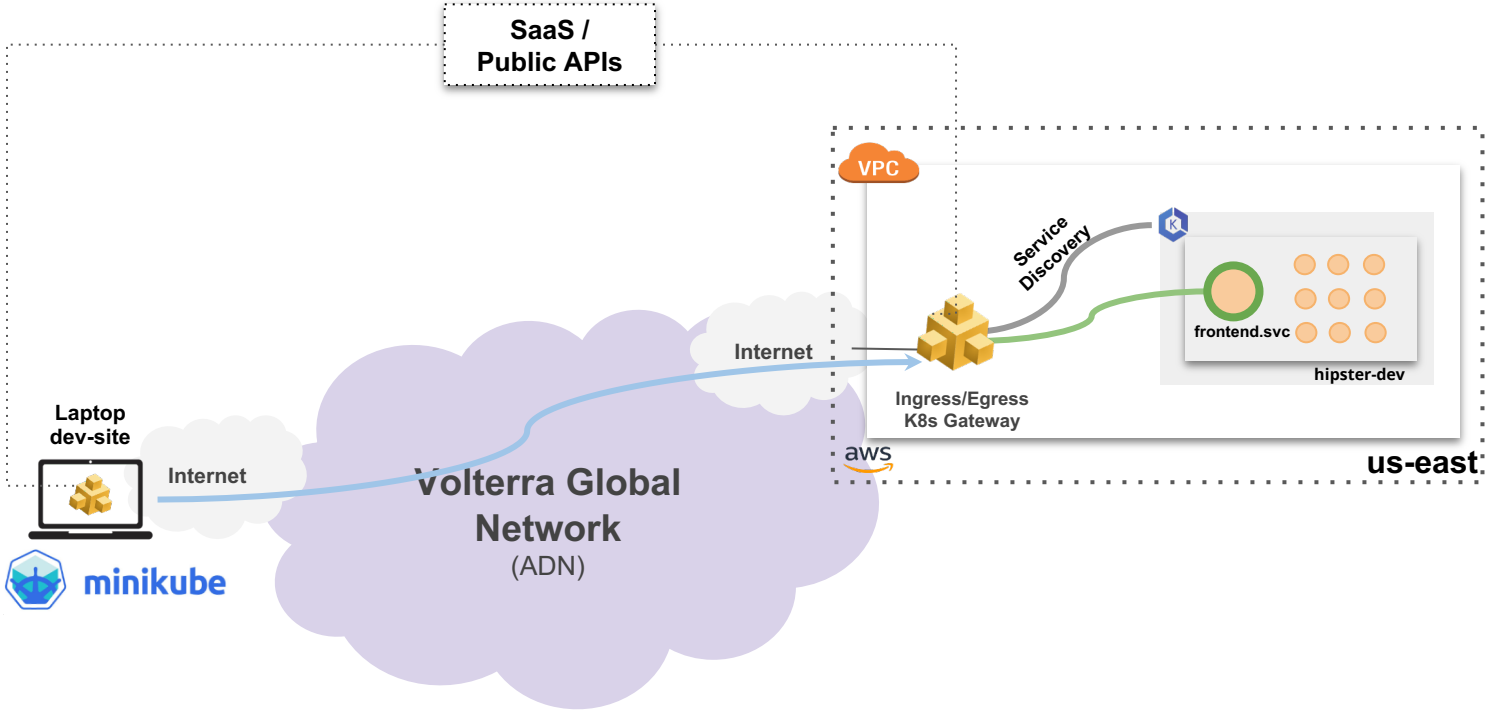
Hipster Webapp

Services

- Frontend
- Catalogue
- Shipping
- Payment
- Email
- Currency
- Cart
- Cache (redis)

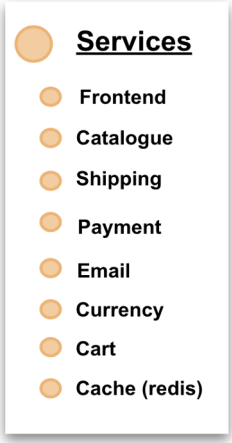
Project: https://github.com/GoogleCloudPlatform/microservices-demo

Dev Environment: All Services Running on AWS Cloud



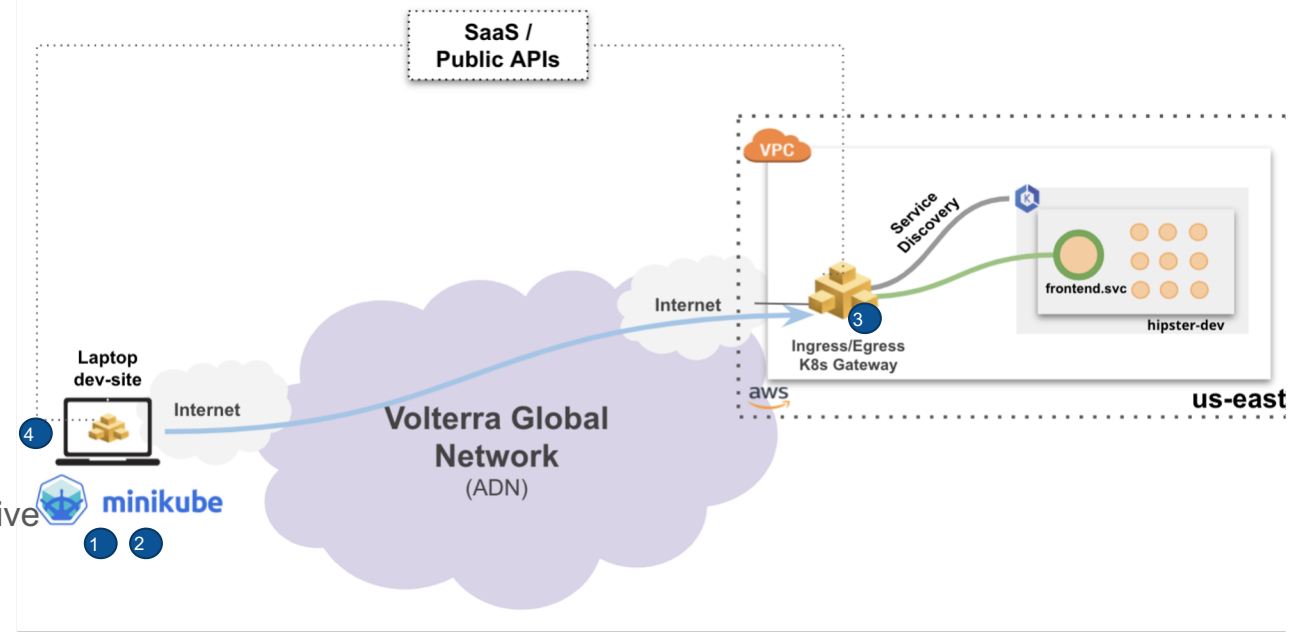
VIPs

Hipster Webapp

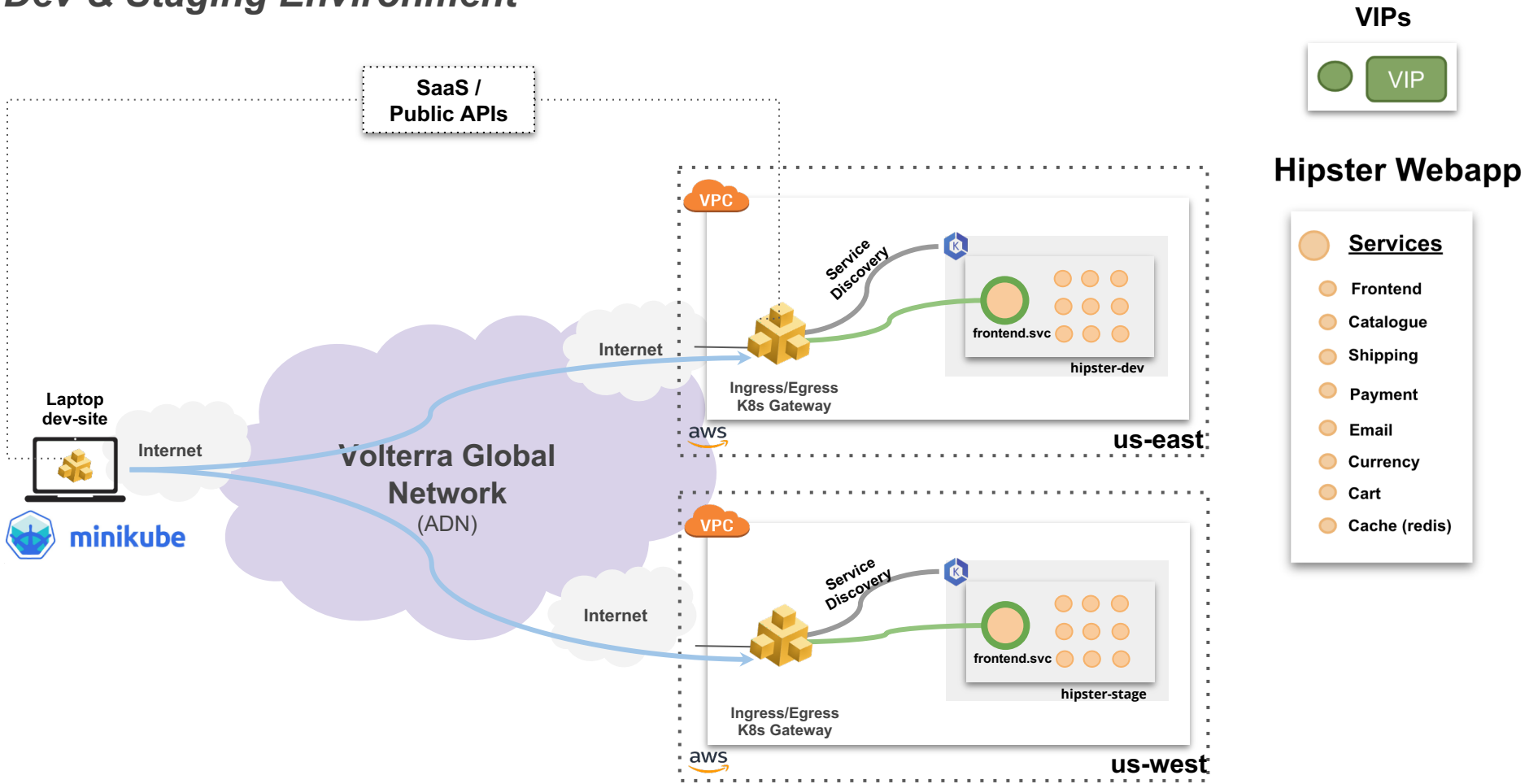


Developer Workflow: Deliver & Test New Feature

1. Feature Dev on **Laptop**
2. Unit Test & Run Build Locally in IDE
3. Make Local service Available to ***hipster-dev***
4. Test against laptop ***dev-site*** from live ***hipster-dev*** cluster

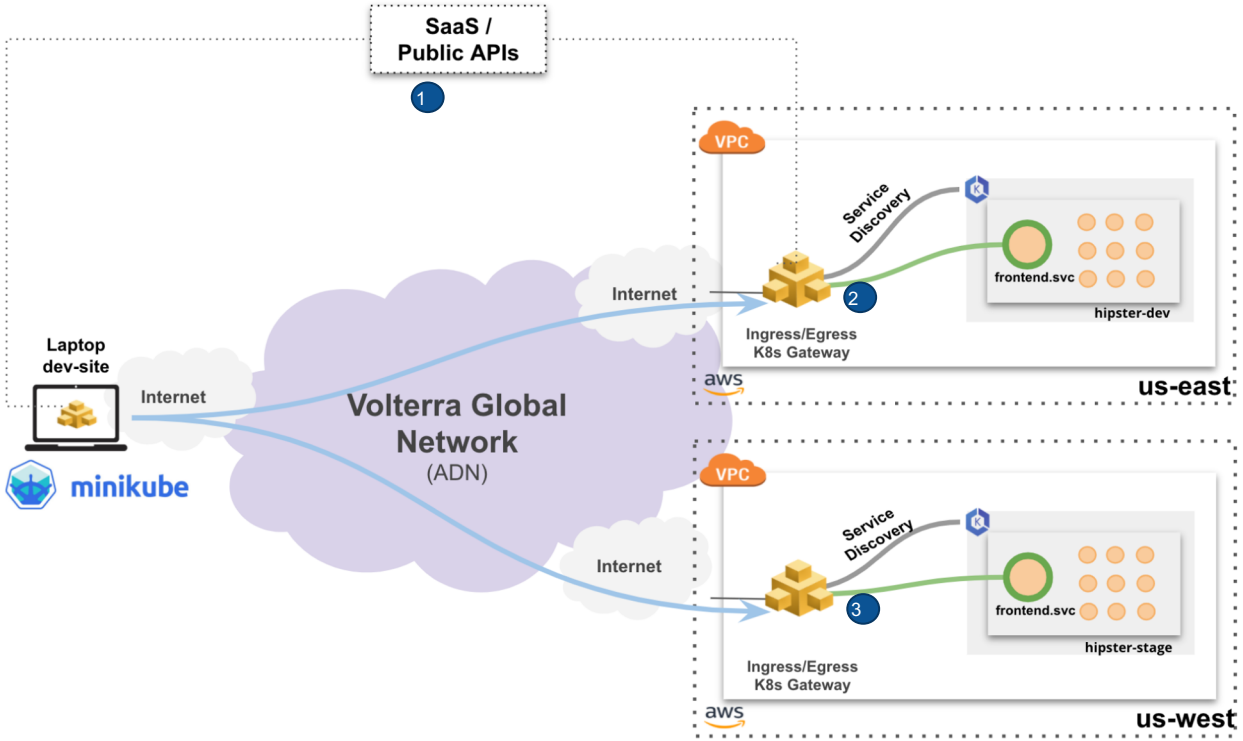


Dev & Staging Environment



Developer/DevSecOps Workflow: Discover & Secure API Access

1. Discover New and Existing API endpoints
2. Secure new API endpoints on ***hipster-dev***
3. Enforce secure policy to ***hipster-stage***



Thank You!

Q&A

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