



F5 SLEDFest 2022

Introduction to F5 Distributed Cloud – F5 XCS

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Your Homework

Should you choose to accept it...

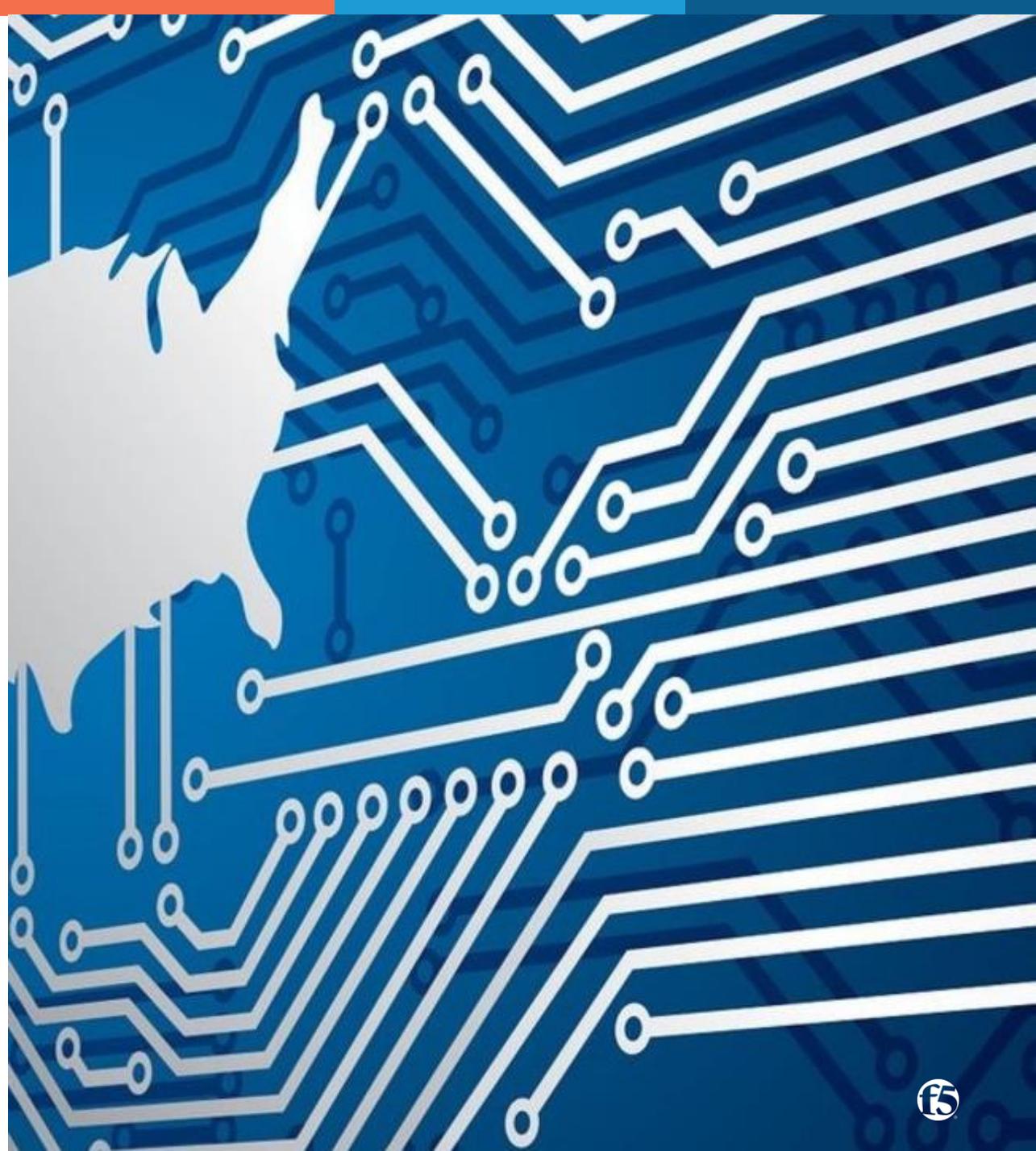
- Take the F5 XC (Distributed Cloud) Training.
 - <https://trainingf5cloud.teachable.com/>
 - <https://simulator.f5.com/distributedcloud>
- Participate in a POV!
- Give us feedback!



The Challenge of **Public Sector**

FISMA / FEDRAMP / NIST / NIAP / FIPS

- Secure & Repeatable
 - Consistent Firewall Policies
 - Intrusion Prevention & Detection
 - Application Security
 - Access Control
- Multi-Cloud
 - Operations
- Single Console / API

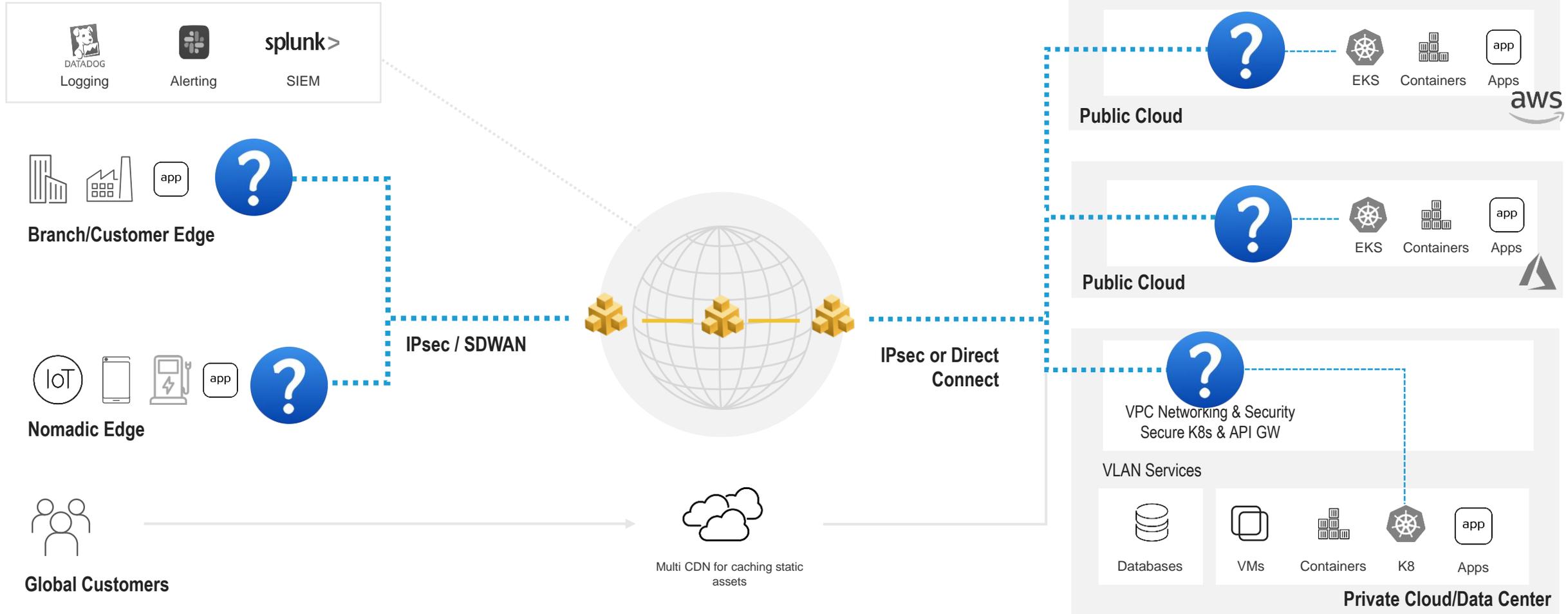


A Brief History of The Edge

The First 4,500 Years...

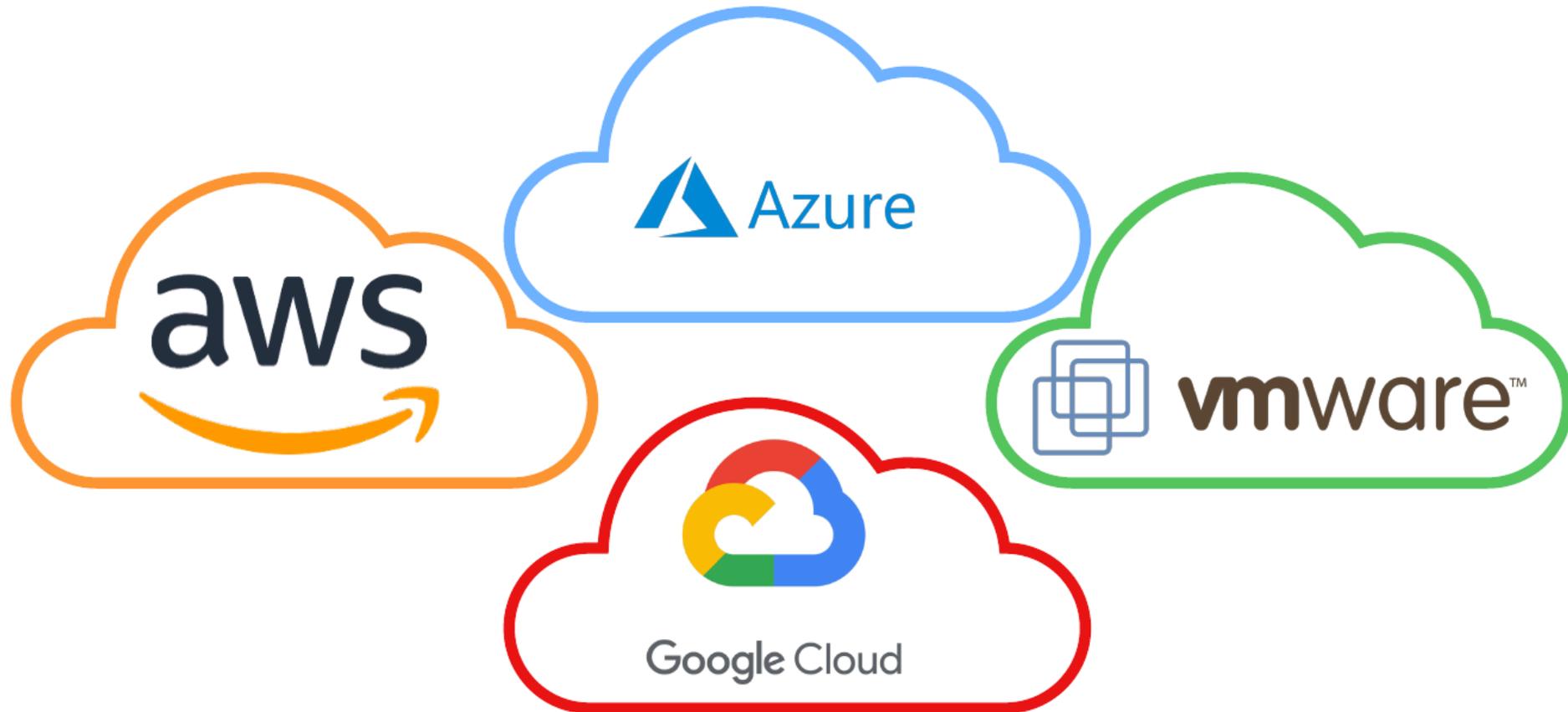
Why is Everything so Complex?

Multi-Cloud Networking (Cloud-to-Cloud)

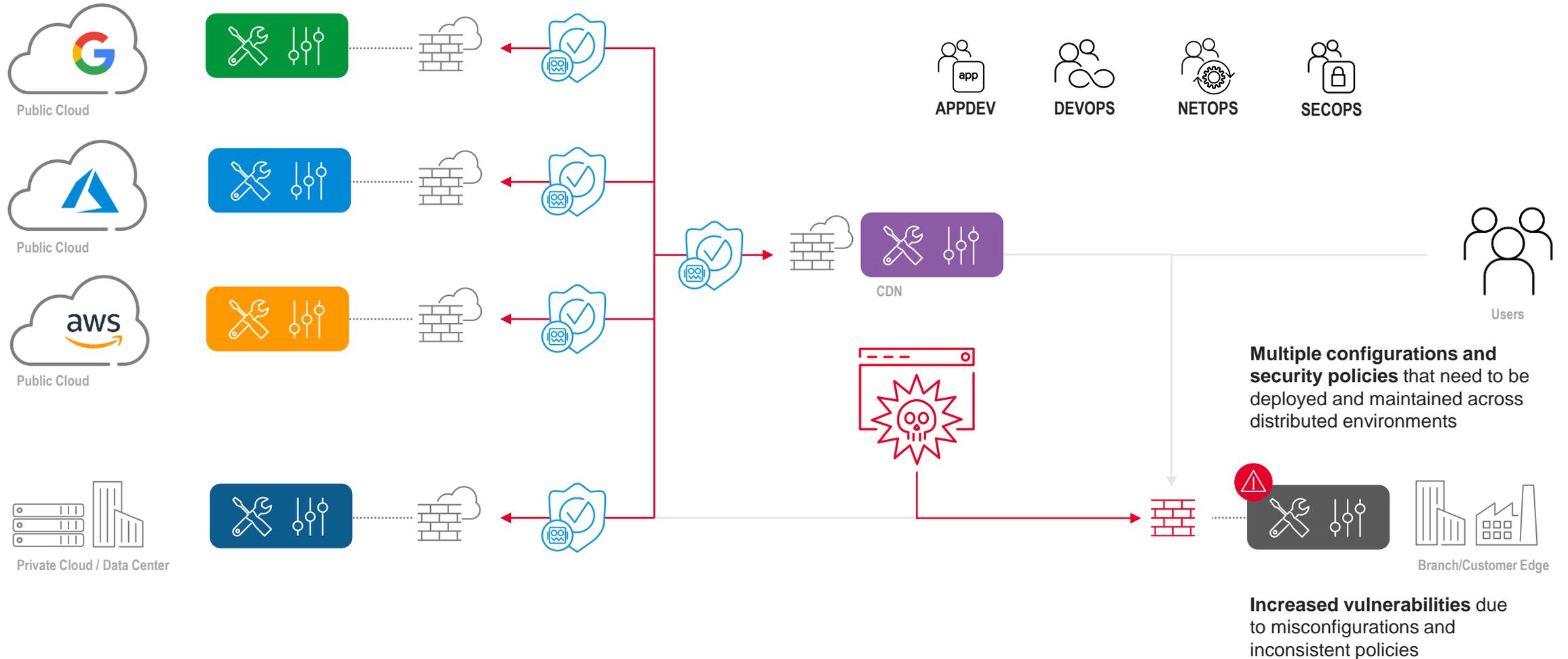


Even Single Cloud is Multi-Cloud

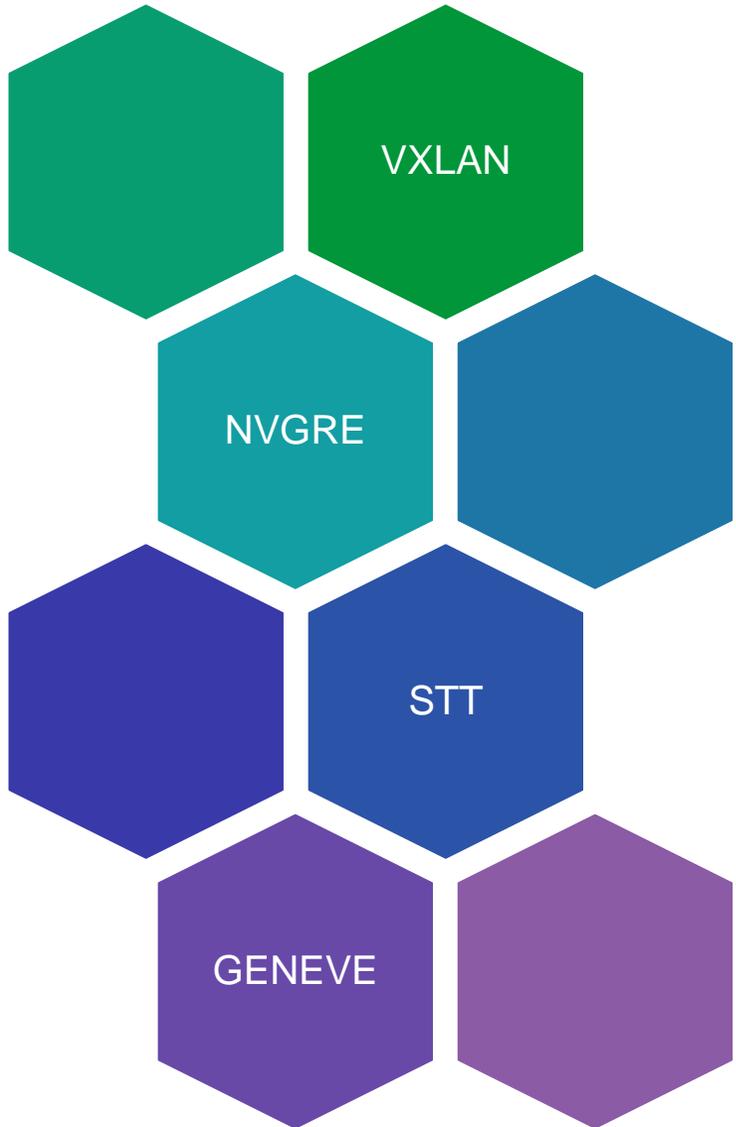
EINHORN IS FINKLE, FINKLE IS EINHORN



Increasing Complexity and Risk



Network Virtualization and Software Defined Networking



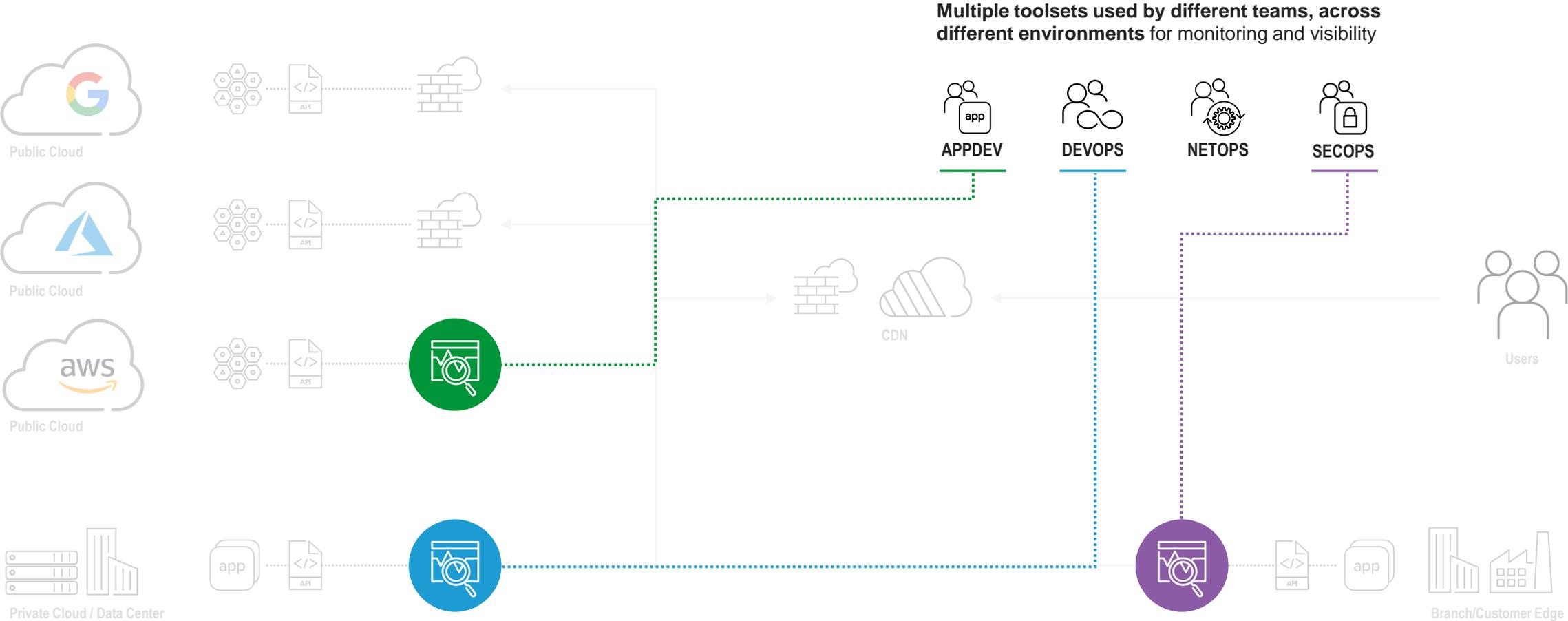
Traditional:

- Lack extensibility
 - No support for metadata
 - Fixed Header size
- Tie in Control Plane
 - Flood and learn.

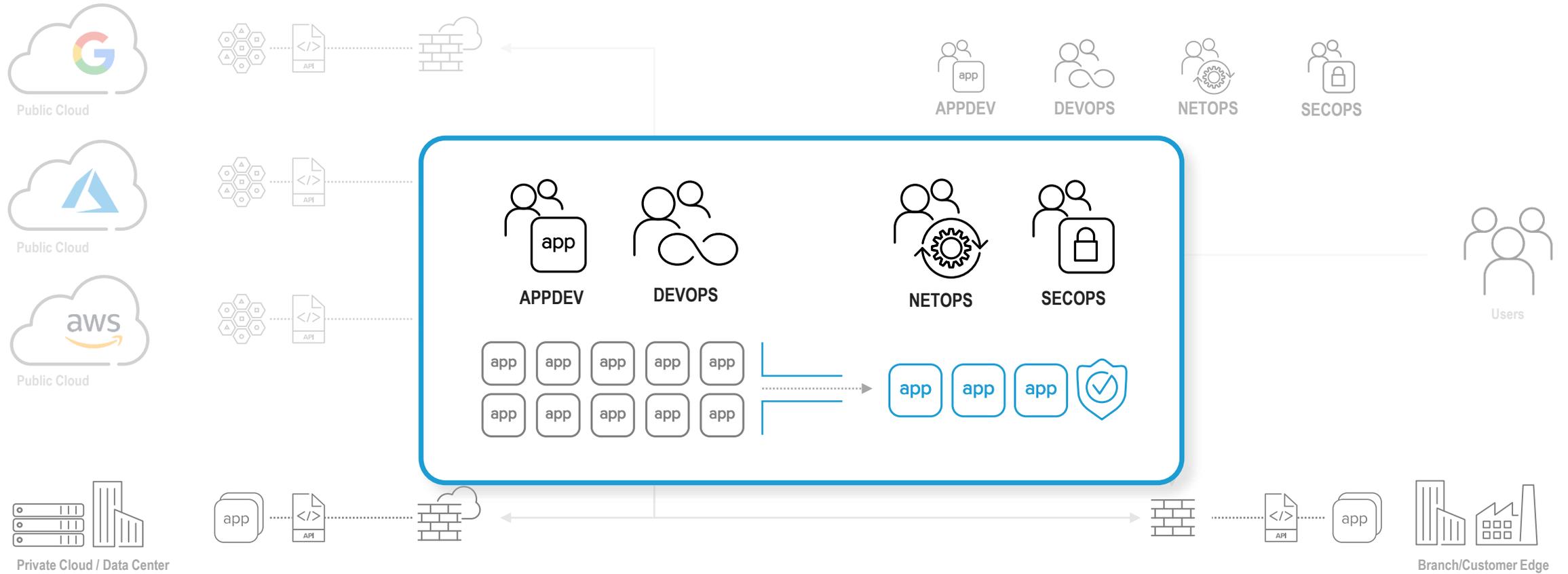
Evolution

- Allow data plane and control plane to evolve
- Allow standardization

Lack of end-to-end Visibility



Security Enforcement impacts Agility





XCS



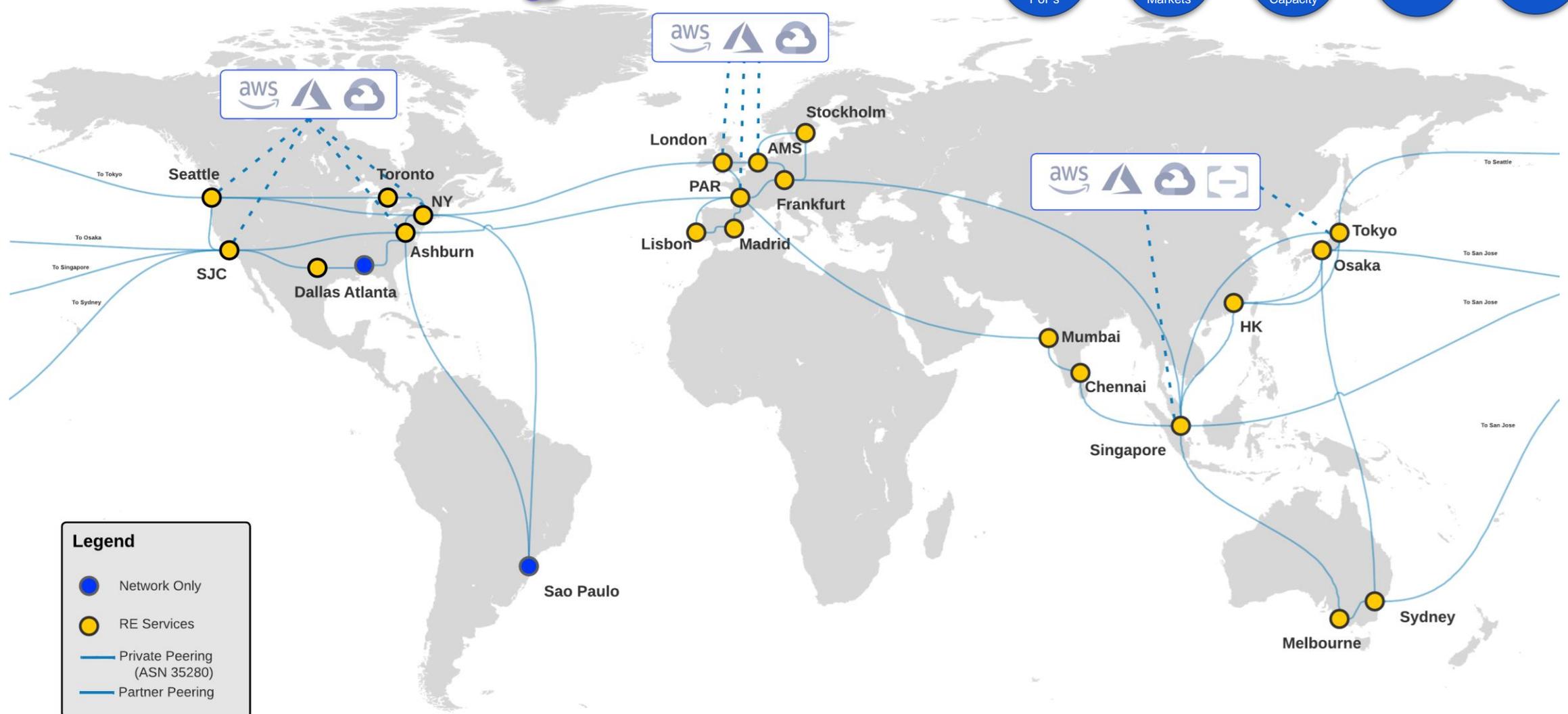
SaaS based, multi-cloud application services, networking, cyber security and delivery platform.

Private Global Network

APPLICATION DELIVERY NETWORK [ADN]



- 36+ Edge PoPs
- 13 Metro Markets
- 10+ Tbps Capacity
- Multi-Tbps Private Backbone
- Dedicated Connectivity To CSPs



Legend

- Network Only
- RE Services
- Private Peering (ASN 35280)
- - - Partner Peering



...comprehensive, easy to use, SaaS Platform (4 Pillars)



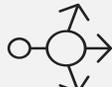
Mesh – Networking & Security Services



Router



Firewall



ADC



DDOS



WAF



API Gateway



Stack – Application Platform Services



K8s Compute Platform



K8s Cluster Management



Service Discovery



Secrets Management



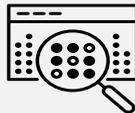
Identity



Console – Cloud-based Central Portal



Centralised Operations



Visibility and Analytics



Artificial Intelligence Advanced Insights



ADN – Global app-to-app network



35+ Global POPs



Public Clouds Private peering



Multi-Tbps Capacity



CONSOLIDATION



OPERATIONAL SIMPLICITY



COMMON TOOLING

What about Use-Cases?

Centralized control and flexible deployments

APPDEV DEVOPS NETOPS SECOPS



Integration with Critical Automation, Git Ops and Dev Tools



Console – Centralized control plane



Integration with SIEM, Logging and Alerting Platforms



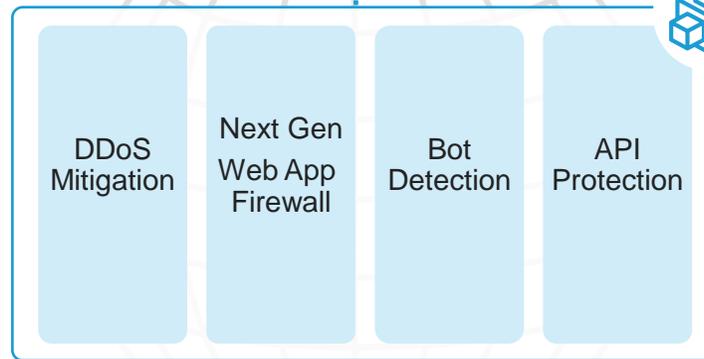
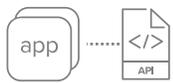
CDN



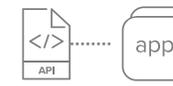
Public Cloud



Private Cloud / Data Center



F5 Global Network



Branch/Customer Edge



OFAC

Office of Foreign Assets Control

Sanctions

- **Streamline Service Policies** Quickly and easily deploy policies to allow or deny access to applications based on IP Reputation, IP Prefix, ASN, or Geographic Location.
- **Enforce Organizational Baselines** Service policies can't be configured and enforced at the System, Shared, and Application levels.



Distributed Cloud Use-Cases

COMMON PROBLEMS, UNCOMMON SOLUTIONS

Multi-Cloud Networking

- Ingress & Egress
 - Obfuscation
- Edge Networking & Security
- Application Delivery Network

WAAP(aaS)

- Web App Security & Performance
- API Security & Performance
- IP Intelligence & GEO
- AI & ML

Edge Infra & App Management

- Managed K8s
- Virtual K8s

K8s Integrations

- Secure Kubernetes Gateway
- K8s Service Discovery & Publication
- Consul Service Discovery

Bots & Fraud Protection

- Application Traffic Insight
- Advanced Bot Defense
- Account Protection
- Malicious User Detection / Mitigation

Multi-Cloud Networking

More than just L3/L4

- **Use-Cases**

- Routing
- Security
 - Firewall
 - Service Policy
 - Proxy
- Ingress & Egress
- Backbone

- **Differentiators**

- Works in every cloud (Public and Private)
- Unified Policy Management and Enforcement for all Security
- F5 Owned Private Backbone
- Eliminate Direct Connect and ExpressRoute reliance.
- Forward and Reverse Proxy
- Simplified Routing. East-West & North-South
- Ingress & Egress Obfuscation
- SaaS



Web Application and API Protection as a Service

Simplified Security Automation



• Use-Cases

- Web App Security & Performance
- API Security & Performance
- IP Intelligence & GEO
- Behavioral Security
 - AI & ML

• Differentiators

- Streamline set-up and Management
 - Automation
- Robust Signature Engine
- Advanced Behavior Engine
- Powerful Service Policy Engine
- Automatic Tuning
- Best Practice Out of the Gate Policies

Edge Infrastructure & Application Management

Managed K8s

- **Use-Cases**

- Managed K8s
- Virtual K8s

- **Differentiators**

- Any Form Factor Edge
- Globally Distributed k8s deployments without complex federation or CNIs
- Centralized Management
 - Roles
 - Bindings
 - Behavior



K8s Integrations

Vanilla k8s, Rancher, OpenShift, etc.

- **Use-Cases**

- Secure k8s Gateway
- K8s Service Discovery & Publication
- Consul Service Discovery

- **Differentiators**

- Security all the way to the Cluster.
 - Ingress with WAAP, Service Policies, Firewall, etc.
- Native Global Service Discovery
- Native Consul Integration



QUESTION:

DOES ANYONE HAVE ANY QUESTIONS?



Benefits with F5 XCS

BUILDING A COMMON PLATFORM UNDER YOUR CONTROL FOR CONTINUOUS INNOVATION



SaaS Platform

Industry first of his kind SaaS platform that delivery's, secure your applications, with end-end networking



OPEX Reduction

With a consolidated view of the entire network and full follow the sun service delivery – OPEX is reduced but visibility and control and support are vastly improved



Reduced TTM

Deployment speed reduces TTM and increases revenue



Multi-Tenancy Support

No vendor lock-in is essentially gone and improve the operational capability of your network.



Full control of App Ecosystem

Enable Enterprise edge use cases with ease while maintaining control and visibility.



Day 2 Operations

Providing a platform that can simplify Day 2 Operations