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Distributed Cloud Firewall

Why Are Traditional Firewalls Failing in the Cloud?

Data-center era firewalls, bolted-on to a cloud network, dramatically increase operational complexity, create bottlenecks, increase application latency, and drive up cloud data transfer costs. There are three areas where cloud has fundamentally changed the firewall game, leading to these common pain points when traditional firewalls are used.

1. The cloud perimeter is endless and dynamic.
Cloud environments regularly have thousands of dynamic ingress and egress points on the "endless perimeter", which quickly becomes unfeasible with the traditional approach.

2. Cloud-based applications are dynamic and are rapidly shifting towards a microservices architecture.
Modern cloud application workloads are containerized, ephemeral, and require elastic scale. Security teams can no longer leverage IP addresses due to constant change in these dynamic application environments.

3. Cloud infrastructure teams need far more agility to keep up with application requirements.
The centralized hardware appliance operational model for network security from the data center cannot meet the rapid release cycles embraced by applications teams, including DevSecOps automation and CI/CD pipelines.

New Rules, New Tools

To address these three fundamental changes, cloud infrastructure teams need a network security solution specifically designed for the cloud. What's needed is a *Distributed Cloud Firewall*. What makes a Distributed Cloud Firewall right for cloud, and so different from traditional firewalls? There are five key differences.

> **"This is more cloud native than native cloud firewalls. It's a game changer for us."**
> - Jason Simpson, VP of Engineering at Choice Hotels

1. Distributed Enforcement Embedded into Natural Cloud Traffic Flow – Traffic does not have to be pushed into centralized inspection points, thereby eliminating bottlenecks and automatically scaling with application environments.

2. Centralized Policy Creation Consistent Across Multicloud Environment – The entire system will appear and function as a single large firewall.

3. Cloud Operational Model– A fully programmable Terraform provider enables DevSecOps and CI/CD pipelines, in order to match application requirements.

4. Native Cloud Network and Security Orchestration – Creates consistency across cloud service providers and avoids conflicts between networking and security configurations.

5. Advanced Security Services Consolidation – Supports commoditized features (L7 decryption and inspection, full traffic visibility, and audit reporting) plus micro-segmentation, network isolation, automated threat detection and mitigation, anomaly detection, vulnerability scanning, and cloud workload risk scoring, all with the same distributed architecture and central policy creation.

Why Is Aviatrix Best Suited to Deliver a Distributed Cloud Firewall?

Aviatrix has been building and delivering secure cloud networking, the fundamental underlying infrastructure for a distributed cloud firewall, for over five years to over 500 enterprise customers. In the past two years, Aviatrix has delivered standalone network security services, such as threat detection and mitigation, internet egress URL filtering, network segmentation and microsegmentation using a distributed cloud firewall architecture. Now, with additional enterprise-grade features such as decryption and deep packet inspection, IDS/IPS and vulnerability scanning, combined with centralized, abstracted policy creation, Aviatrix has delivered the first full-featured distributed cloud firewall.
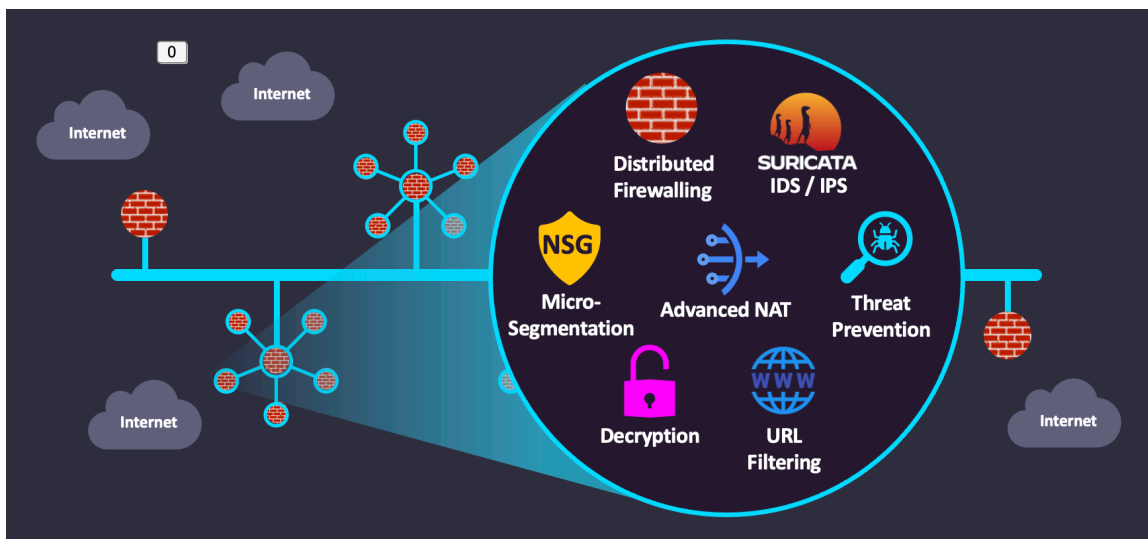
Reap The Benefits of a Distributed Architecture

Cloud scale economics demand that enterprise infrastructure costs be reduced. Cloud teams must constantly rein in costs, while also being driven to improve cyber security. Implementing a distributed cloud firewall offers a myriad of benefits:

- **Reduced cost and increased security**
- **Improved cloud infrastructure agility**
- **Reduced mean time to detection and resolution**
- **Simplified corporate and regulatory compliance**
- **Reduced business risk**

About Aviatrix

Trusted by more than 500 of the world's most innovative companies, Aviatrix empowers businesses to accelerate innovation, minimize downtime, and gain control of IT costs. Aviatrix delivers an enterprise-grade secure cloud network, backbone, and edge for mission-critical applications by creating a simplified and consistent networking architecture in and across cloud service providers. Combined with the Aviatrix Certified Engineer (ACE) Program, the industry's first and only multicloud networking certification, Aviatrix helps businesses to achieve their digital transformation goals. Learn more at www.aviatrix.com.

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