

# Graphiant Network Edge Service

## SOLUTION BRIEF

In a rapidly evolving digital landscape, enterprises are embracing cloud computing, distributed workforces, and AI. As these trends expand, so does the complexity of networking infrastructure.

Traditional networking architectures struggle to meet the demands for agility, security, and performance at the edge. Recognizing these challenges, Graphiant built its Network Edge Service – a comprehensive solution that enables secure, flexible, and cost-effective connectivity for businesses at the edge.



## Overview of Graphiant's Network Edge Service

Graphiant's Network Edge Service is a next-generation networking solution designed to meet the needs of businesses connecting branch locations, data centers, remote users, and cloud environments. By combining the power of software-defined networking (SDN) with the flexibility of a cloud-native platform, Graphiant allows enterprises to connect their distributed infrastructure with efficiency, security, agility, and scalability.

## Key Benefits of Graphiant Network Edge Service

### 1. Enhanced Security at the Edge

As enterprise networks extend to the edge, securing remote locations, devices, and users becomes increasingly difficult. Traditional perimeter-based security models are no longer sufficient. Graphiant's Network Edge Service addresses these challenges with advanced security features, including:

- **Zero Trust Security Model:** Graphiant operates on a Zero Trust framework, meaning no entity—whether a user or device—is trusted by default. Every access request is authenticated and continuously validated. This drastically reduces the risk of unauthorized devices connecting to the network.
- **End-to-End Encryption:** All data traveling across the edge is fully encrypted, protecting sensitive information in transit. Whether it's branch offices communicating with the cloud or remote employees accessing internal applications, Graphiant ensures the highest level of data privacy and integrity.
- **Micro-Segmentation:** With Graphiant, enterprises can segment their network into distinct zones, each with its own security policies. This isolation prevents lateral movement of threats, limiting the impact of any potential breach.

## 2. Unparalleled Agility and Scalability

One of the core challenges in edge networking is the need for rapid deployment, scalability, and management. Graphiant's Network Edge Service is built to provide maximum flexibility, enabling businesses to dynamically connect their edge locations, devices, and cloud environments:

- **Cloud-Native Connectivity:** Graphiant's platform seamlessly connects hybrid and multi-cloud environments with on-premises infrastructure, ensuring consistent performance and security regardless of where applications and services are hosted. This flexibility allows enterprises to adopt the best cloud solutions for their needs without compromising on connectivity.
- **Centralized Management:** The Network Edge Service is managed through a single, intuitive dashboard, allowing businesses to monitor, configure, and optimize their network from one location. This makes it easy to manage edge devices, control access, and set security policies for a distributed enterprise, all while reducing the burden on IT teams.
- **Elastic Scalability:** As business demands evolve, Graphiant's Network Edge Service can scale up or down effortlessly. Whether connecting additional branch offices or supporting thousands of IoT devices, the platform's elasticity ensures that enterprises can meet their network requirements without significant hardware investments or complex reconfigurations.
- **Rapid Deployment:** Graphiant enables enterprises to quickly deploy network services to new edge locations or remote sites without requiring proprietary hardware installations. New branches, data centers, or remote users can be onboarded in hours rather than weeks.

## Use Case: Media and Entertainment Company with Global Locations

### Challenge

A global media and entertainment company with 100+ locations globally needed a cost-effective and secure way to connect its branch locations to its on-premises and cloud-based services. The existing MPLS-based solution was expensive, slow to scale, and difficult to manage.

### Solution

The company adopted Graphiant's Network Edge Service to replace its legacy MPLS connections and establish secure, high-performance connectivity between its global locations, data centers, and cloud services.

### Results

- **Reduce Costs:** The company saw a greater than 60% reduction in networking costs, thanks to the subscription-based pricing and elimination of MPLS circuits.
- **Improved Performance:** Media files were processed faster and shared between services seamlessly, improving the overall end-user experience.
- **Enhanced Security:** Each location's network was segmented and secured, ensuring that any potential breach would be contained without impacting other locations or systems.

### 3. Cost-Effective Networking for the Edge

Graphiant's Network Edge Service enables enterprises to adopt a more cost-efficient networking model than traditional approaches, which often involve expensive proprietary hardware, maintenance, and rigid contracts.

- **Subscription-Based Model:** With Graphiant, businesses can switch to an OpEx-based pricing model, paying only for the networking resources they consume. This eliminates the need for long-term contracts based on peak bandwidth utilization.
- **Bandwidth Efficiency:** Graphiant uses advanced traffic optimization techniques to ensure that bandwidth is used efficiently, reducing the overall cost of connectivity. This is especially important for enterprises with multiple branch locations or those relying on bandwidth-heavy applications like video conferencing and cloud collaboration.
- **Reduced Operational Complexity:** Centralized management and automation capabilities reduce the time and resources required to maintain the network. IT teams can focus on strategic initiatives rather than spending time troubleshooting and configuring network devices at the edge.

### How Graphiant's Network Edge Service Works

Graphiant's Network Edge Service is powered by its stateless, policy-driven core architecture, which allows businesses to extend secure, policy-controlled connectivity to the edge of their network. Here's how it works:

- **Policy-Based Control:** IT teams define policies for routing, security, and bandwidth management, which are then applied across the network, ensuring consistent performance and compliance regardless of location or user.

- **Edge Connectivity:** The service connects edge locations (such as branch offices, data centers, or remote users) to the private stateless core. All data traveling across the edge is fully encrypted, protecting sensitive information in transit.
- **Real-Time Monitoring:** Businesses gain real-time visibility into network performance, security, and usage, enabling them to address potential issues before they impact operations proactively.
- **Self-Healing Capabilities:** The platform's AI-driven capabilities can detect and resolve common network issues automatically, reducing downtime and improving overall network reliability.

### Conclusion

Graphiant's Network Edge Service is a game-changer for enterprises looking to modernize their network infrastructure, particularly at the edge. With a focus on security, flexibility, and cost savings, this solution provides businesses with the tools they need to connect their distributed environments and edge locations without the complexities of traditional networking solutions.

By adopting Graphiant's Network Edge Service, enterprises can ensure their networks are prepared for the future—whether that means supporting remote workforces, connecting IoT devices, or managing hybrid cloud environments—while driving down costs and improving overall performance.

[Learn more at graphiant.com](https://graphiant.com)



Next-Gen Networking that is Agile, Performant and Secure

