

Delivering Resilience, Scaling Innovation

How Lightedge unified hybrid cloud infrastructure with Lumen's secure network backbone

Lightedge

www.lightedge.com

- Hybrid cloud and colocation provider with seven purpose-built data centers across the U.S.
- Specializes in secure, compliant infrastructure for regulated industries
- Supports AI workloads, GPU-as-a-Service, and hybrid cloud environments

Challenges

- Needed to unify geographically dispersed data centers with low-latency connectivity
- Faced rising demand for AI-ready infrastructure and scalable hybrid cloud services
- Required compliance-first design and zero-downtime performance for regulated industries

Solutions

- [Lumen® Wavelength Services](#) Active routing with predictable latency and seamless failover for mission-critical workloads.
- [Lumen® Dedicated Internet Access](#) Blended bandwidth for reliable, high-quality internet service across markets.
- [Lumen® DDoS Mitigation](#) Protecting against distributed denial-of-service attacks to help ensure security and availability.

Results

- Saved approximately \$1M annually through optimized circuit design and vendor consolidation
- Enabled seamless hybrid cloud operations and mission-critical workload portability
- Positioned for future growth with scalable, AI-ready infrastructure and resilient connectivity



Lightedge*

**\$1M Annual
cost savings**

through network optimization

14 markets

supported through resale colocation partnership with Lumen

7 data centers

integrated with Lumen's secure global backbone for high-performance connectivity

Challenge

Scaling hybrid infrastructure with resilience

Lightedge's mission is to empower organizations in the midst of change, clearing the way for transformative results. As demand for hybrid cloud and AI-ready infrastructure surged, Lightedge faced the challenge of unifying its data centers across tier 2 and 3 markets while maintaining compliance, security, and performance.

Their clients, spanning finance, healthcare, and manufacturing, required zero-downtime connectivity and scalable infrastructure. Legacy network models couldn't support the flexibility and resiliency needed to meet these demands, and managing inherited circuits added complexity and cost.

Solution

Secure backbone for hybrid cloud agility

Lightedge partnered with Lumen to deploy a secure IP backbone and wavelength services across its national footprint. Wavelength circuits were chosen for their ability to deliver consistent low latency and performance, with each circuit taking an exact path for predictable connectivity and planned failover.

Dedicated Internet Access (DIA) from Lumen provides blended bandwidth and leverages Lumen's global IP peering, enabling reliable, high-quality internet service for every data center. To further strengthen security and reliability, Lightedge implemented Lumen® DDoS Mitigation Service at key locations, helping protect against cyber threats and maintain uninterrupted service.

UPSTACK's supplier-neutral consulting and project management expertise optimized network design, consolidated vendors, and enabled smooth deployments, saving \$85,000 per month (over \$1M annually). Together, the partnership delivered scalable infrastructure, simplified operations, and future-ready performance.

Solution Set

- [Lumen® Wavelength Services](#)
- [Lumen® DDoS Mitigation](#)
- [Lumen® Dedicated Internet Access](#)

"Lumen allows us to stretch the limits around innovation. Their responsiveness and route diversity have been vital to our ability to scale quickly and maintain service excellence—even as our infrastructure footprint expands."

– **Sean Stenger**

Chief of Staff, Lightedge Solutions

Results and Future Plans

Built for growth, ready for transformation

With Lumen's support, Lightedge now operates on a resilient, scalable foundation that empowers clients and supports long-term innovation.

The transformation delivered measurable outcomes, including significant cost savings through optimized circuit design and vendor consolidation, improved connectivity with secure IP backbone and wavelength services enabling high-performance interconnects between markets, and enhanced network design with diverse routing and zero downtime.

Security posture was strengthened through DDoS mitigation and DIA to help support compliance and uninterrupted service for regulated industries. Operational efficiency improved as UPSTACK's technical expertise freed Lightedge's lead architect to focus on strategic initiatives.

Positioned for future growth, Lightedge now offers AI-ready infrastructure, industry-specific compliance controls, and workload portability, reflecting the power of strategic collaboration and readiness to meet the evolving demands of the digital economy.