

Fast Tenant Delivery for Data Center Operators

Fast Onboarding. Flexible Bandwidth. Confident Growth.

As tenant demands evolve, data center operators are being asked to do more than provide space and power—they're expected to enable speed, flexibility, and scale from day one. Tenants want to move in faster, scale bandwidth on demand, and support cloud-centric, data-intensive, and AI-driven workloads without friction. Yet legacy network models, manual provisioning, and operational complexity often slow onboarding, limit agility, and increase risk just as tenants are accelerating growth.

Lumen infrastructure and connectivity is designed to simplify and accelerate tenant activation while enabling consistent performance at scale for fast time to revenue, lower operational overhead, an improved tenant experience, and greater readiness for high-growth workloads.

Challenges

The moment a tenant signs, execution speed matters. Connectivity delays, limited scaling flexibility, and operational friction can quickly erode tenant confidence and slow growth, turning onboarding into a bottleneck instead of a differentiator.

Slow and complex tenant onboarding

Manual, multi-step network provisioning and coordination across providers delay tenant activation, extending time to revenue and impacting tenant satisfaction.

Inflexible bandwidth scaling

Traditional fixed-capacity models make it difficult to quickly increase, decrease, or burst bandwidth—especially for tenants with variable or unpredictable demand.

Unpredictable demand and capacity planning

AI, cloud-centric, and data-intensive workloads create uneven growth patterns, increasing the risk of over-provisioning, under-provisioning, or constrained expansion.

Operational complexity across providers

Supporting tenants across multiple clouds, ecosystems, and interconnection points adds operational overhead. Complexity increases operational risk and slows response to tenant needs.

Performance, security, and SLA risk at scale

As tenants scale dynamically, maintaining consistent performance, secure segmentation, and SLA adherence becomes more difficult, raising operational and reputational risk.



Data center interconnect bandwidth demand is expected to increase 6x over the next five years.¹

To keep pace, data center operators must enable scalable, on-demand bandwidth that can grow with tenant workloads without redesigning the network.

¹Ciena, AI Workloads are Reshaping Data Center Landscape, March 2025

Solutions - Infrastructure

Lumen® Wavelength Solutions

High-capacity optical transport service that delivers dedicated connectivity across metro and long-haul routes, enabling scalable data center, cloud and AI workloads on the Lumen ultra-low-loss fiber network. Ideal for east-west workloads.

Lumen® Wavelength RapidRoutesSM

Prioritized 100G and 400G connectivity between high-demand markets and data center hubs. Built for AI-scale east-west traffic, these predefined routes offer predictable performance and delivery in as little as 20 days on qualifying site pairs. RapidRoutes corridors are enabling up to 2x faster deployment timelines versus Lumen traditional delivery models.¹

Lumen® Managed Optical Fiber Networks (MOFN)

MOFN is well-suited when the DCO wants fiber ownership advantages (control, scale, economics) while relying on Lumen to monitor, manage, and maintain the physical network, helping to reduce operational burden.

Lumen® Dark Fiber

Dark fiber gives DCOs dedicated, unlit optical fiber they fully control. It's ideal when traffic demand is high and predictable, performance must be ultra-deterministic, and the DCO wants maximum control, long-term cost efficiency, and the ability to monetize interconnection at scale.

Solutions - Connectivity

Lumen® On-Demand Services

Flexible, scalable internet and network services with options for consumption-based pricing models and self-service adjustability. Ideal for dynamic north-south workloads.

- **Internet On-Demand** to rapidly deploy dedicated internet connectivity across locations
- **IP VPN On-Demand** for multi-site and cloud connectivity using SLA-backed MPLS with on-demand scalability
- **Ethernet On-Demand** to connect point-to-point locations and clouds with private bandwidth up to 400 Gbps

Lumen® Dedicated Internet Access

DIA is recommended for fast, reliable, and cost-effective public internet access for operations, tenants, or edge sites without the scale, control, or performance requirements of private optical infrastructure.

Lumen® IP VPN

Secure, SLA-backed private network service that delivers high-performance, managed routing. Consider for secure, segmented connectivity between data centers, enterprise customers, or remote sites. Designed to reduce the cost and complexity of dedicated optical infrastructure while still ensuring traffic isolation, reliability and performance.

Lumen® Ethernet

High-performance, SLA-backed Layer 2 connectivity service. Use Ethernet for simple, scalable, and cost-effective private connectivity between data centers, cloud on-ramps, or customer environments, without the complexity or long-term commitment of optical infrastructure.

¹ Based on Lumen internal data of deployment timelines for complex wavelength builds vs. Lumen traditional delivery models, March 2026.

Results

Lumen helps data center operators accelerate tenant onboarding, scale bandwidth on demand, and operate with greater confidence as tenant needs evolve.

Fast tenant activation and quick time to revenue

Dynamic bandwidth, pre-engineered connectivity options and simplified provisioning designed to reduce on-boarding overhead and compress timelines.

Bandwidth that scales with tenant demand

Lumen On-Demand connectivity helps DCOs support burst, variable and short-term capacity needs, helping to improve tenant satisfaction and retention.

Greater confidence in growth planning

By aligning network capacity more closely to real tenant demand, DCOs can reduce the risk of stranded assets, constrained expansion, or reactive network builds.

Simplified operations and reduced risk

Consolidate connectivity across clouds, ecosystems and interconnection points into a more unified, managed network model with clearer accountability.

Consistent performance for reduced SLA risk

Lumen provides a resilient connectivity foundation with robust SLAs, proactive monitoring, and built-in security, helping minimize downtime and performance disruptions for a strong tenant experiences.

Why Lumen?

Lumen is a trusted connectivity partner, operating one of the world's largest and most secure networks with 24/7 monitoring and threat mitigation powered by Black Lotus Labs®. With direct on-ramps to 2,200+ third-party data centers and 125+ cloud providers, Lumen simplifies network ecosystems and delivers performance customers can rely on. Built for demanding environments, Lumen provides scalable connectivity with near real-time visibility and consistent, reliable performance

[Connect with a Lumen representative](#) to explore flexible solutions for your evolving needs.