

FAQ

# Lumen® Private Connectivity Fabric® (PCF<sup>SM</sup>)

Everything you need to know to tailor your connectivity to your enterprise needs

Custom network architecture enhances enterprise agility and resilience by accommodating growing data and application needs. It provides secure, high-speed connectivity for real-time decision-making in a dynamic technology environment. Here's everything you need to know about Lumen® Private Connectivity Fabric® (PCF<sup>SM</sup>), including solutions for designing, installing and maintaining enterprise network infrastructure.

## Private Connectivity Fabric 101

### What is Private Connectivity Fabric?

By leveraging the extensive Lumen infrastructure, Private Connectivity Fabric allows you to tailor a network for private, high-speed connectivity. This optimization aligns with your enterprise objectives, enhancing performance, security and scalability.

- **High-performance:** High-resiliency and low-latency network with diverse physical routes and gateways
- **Connectivity:** Extensive metro footprint and on-net buildings with direct connectivity to key datacenters
- **Scalability:** Network visibility and service transparency to quickly scale your network up/down to meet business needs and growth objectives
- **Flexibility:** Unique routes and deployment needs that provide customers with consistent and uncompromised performance



### Do I need Private Connectivity Fabric?

Leasing bandwidth capacity is an ongoing expense that continues to increase as needs evolve. By investing in a facilities-based network, companies can better serve long-term needs and stay ahead of network demands. Custom network architecture is particularly beneficial for data-driven enterprises requiring ultra-high-bandwidth, private connectivity that can scale efficiently. Private Connectivity Fabric gives you control over your connectivity infrastructure. Build your own internet networks to optimize performance, security and scalability, meeting capacity demands and allowing control over infrastructure.

### Will Private Connectivity Fabric meet my needs?

Lumen Private Connectivity Fabric gives enterprises the ability to have full control and customization over their infrastructure. This allows for custom network architecture, security protocols and performance parameters to align to each enterprise's unique requirements, expediting build times and providing options for Lumen to manage your network, enhancing usability and efficiency. Utilizing our expertise, we can develop customized turn-key network solutions, including network equipment purchasing, consultation and implementation, as well as ongoing management and monitoring of network capacity and assets.

## Implementing Private Connectivity Fabric

### How complex is building a new network?

Our networking expertise provides seamless integration with various components such as hardware, software, protocols, delivering smooth compatibility and reliable operation.

### **How expensive is tailoring a network for my enterprise?**

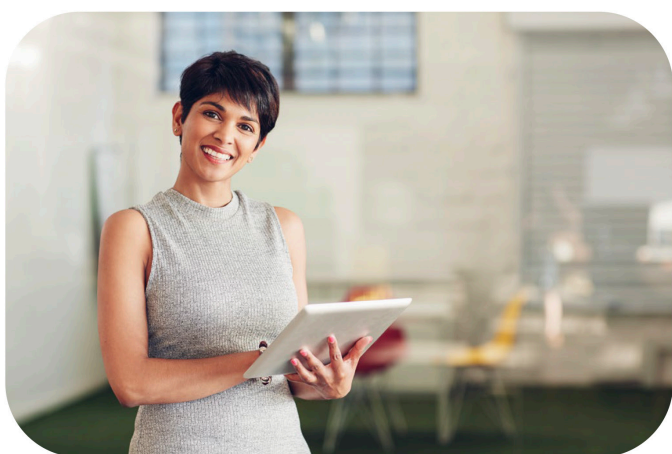
Building and maintaining network infrastructure can be expensive, especially if you've never done it before. Trust Lumen and our proven history to accurately budget for equipment, installation, ongoing maintenance and upgrades to keep your network operating at optimal levels.

### **How secure is Private Connectivity Fabric?**

Networks are vulnerable to cyberthreats. Lumen connectivity is backed by Black Lotus Labs, providing robust security measures to help protect against security breaches, unauthorized access and attacks.

### **What IT skills does an enterprise need to run a new network?**

Networks evolve rapidly, especially in the AI era. Keeping up with advancements and adapting to new technologies is critical. However, finding and retaining talented IT professionals to design, build, implement and manage networks can be a challenge. Our in-house experts help reduce this burden for enterprises.



### **Will a new network meet industry standards and regulatory compliance?**

Building a Private Connectivity Fabric helps enterprises to meet complex regulatory compliance requirements and protect user privacy. With Lumen's extensive experience in constructing fiber networks, you have the tools and support needed to align your network with industry standards and regulations.

### **What physical infrastructure do I need for new connectivity fabric?**

Installing fiber, routers, switches and other hardware requires physical space and planning. With a multi-conduit duct system,

Lumen can take care of the construction to deploy a tailored network for your enterprise.

## **Purchasing Private Connectivity Fabric**

### **What kind of flexibility will I have with Private Connectivity Fabric?**

Private Connectivity Fabric allows you to build your connectivity infrastructure to best meet your needs:

- Digitization integrates public and private IP domains to support gateways, peering, NAT, On-Demand networking and security solutions
- Ethernet provides flexibility, rapid deployment, cost control and high performance without traditional networking complexities and easily integrates with existing infrastructure and security products
- Pre-lit waves offer reliable, cost-effective 10 Gbps+ networking without fiber ownership complexities and secure, uncontended transport
- Fiber infrastructure supports high-end networking needs and cloud services and provides redundancy, control, security and cost efficiency

### **How is Private Connectivity Fabric priced?**

Lumen can customize the pricing components for Private Connectivity Fabric including IRUs or lease terms for infrastructure components, and multiple management and equipment options.

## The Lumen Difference

### How is the Lumen Network different?

- #1 most peered network enabling low latency and enhanced user experiences<sup>1</sup>
- 15,000 North American route miles and 156,000 on-net buildings
- 450+ Tbps of total global IP ingress/egress capacity to support efficient data transfer and network expansion
- The largest ultra-low loss network worldwide with diverse fiber routes across an extensive U.S. footprint
- Lumen has Dark fiber with upgraded optical technology that can extend signal reach to help reduce equipment costs and increase bandwidth capacity
- Custom-designed Dark fiber solutions that specify routing and optical characteristics to the most demanding requirements
- Extensive experience in all aspects of network design and management from Lumen available via Professional Services
- Multi-conduit infrastructure that allows for the latest fiber type to be quickly and economically installed as demand for optical fiber increases
- Customized turn-key network solutions, including network equipment purchasing, consultation and implementation, as well as ongoing management and monitoring of network capacity and assets

### Why should I partner with Lumen?

We have built and continue to invest in the largest ultra-low-loss fiber network in the world, setting us apart from other network providers. The U.S. intercity network was built for diversity, through the amalgamation of assets acquired and organically built, architected with Dual Gateways within Tier 1 and Tier 2 markets so there are diverse/tri-verse paths. The capillarity of the metro network, which serves 156,000 on-net buildings, is an important extension to the intercity network and is becoming increasingly important with edge compute. We have deployed 6.2M fiber miles of ULL fiber and are installing 5.8M more to substantiate the intercity network. In addition, we build locations where our enterprise customers want to go (new public and private data centers). As demand for optical fiber increases and technology evolves, Lumen multi-conduit infrastructure allows for the latest fiber type to be quickly and economically installed. With over 20 years of experience managing these fiber routes, Lumen is uniquely positioned to help you design and implement the custom network that meets your needs.

### How do I get started?

Discover your growth potential with a Private Connectivity Fabric for your business. Connect with our sales team for a personalized consultation by visiting our website today.

<https://www.lumen.com/en-us/networking/private-connectivity-fabric.html>

## Why Lumen?

Lumen is on a mission to unleash digital potential by connecting people, data and applications quickly, securely and effortlessly. As the provider with the largest ultra-low-loss fiber network in the world, Lumen is positioned to guide you through your digital transformation with ease, for a future-ready network infrastructure with flexible, scalable and secure connectivity.

<sup>1</sup>CAIDA AS Rank, March 2024

866-352-0291 | [lumen.com](https://www.lumen.com) | [info@lumen.com](mailto:info@lumen.com)

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