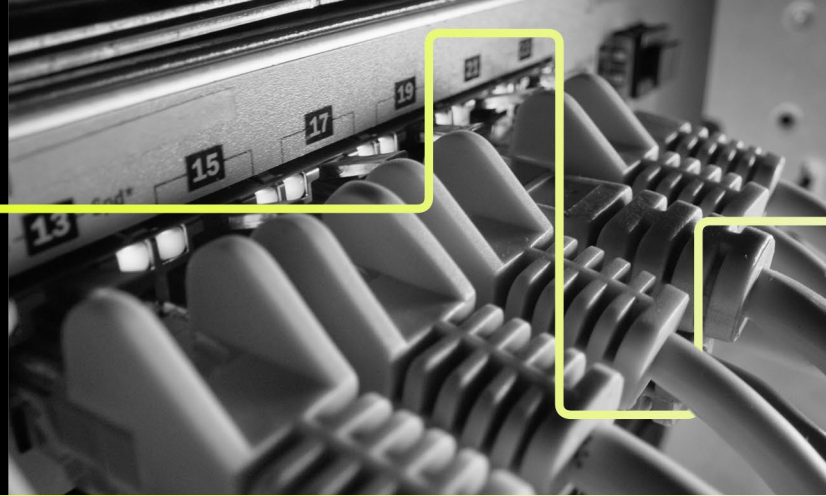# Lightpath

Ethernet

Ethernet gives your organization the benefits of traditional private lines with added flexibility of scalable bandwidth options from 20 Mbps to 100 Gbps that can evolve along with your business. Lightpath Ethernet solutions are built on our reliable 100% fiber network and include 24/7 support for reliable and secure connectivity to data centers, landing stations, Cloud providers, and all your digital destinations.

- **Unsurpassed reliability:** High-performance fiber-to-the-premises network architecture protects your critical data and provides superior availability and resiliency.

- **Easy scalability:** Ensured capacity at the point of installation to meet your current and future data needs. As your business grows, a simple software change is all it takes to upgrade, with little or no downtime.

- **Valuable security:** Lightpath protects and segments all customer traffic on our network.

- **True simplicity:** Seamless installation and winning Customer Care make it easier to manage your network.
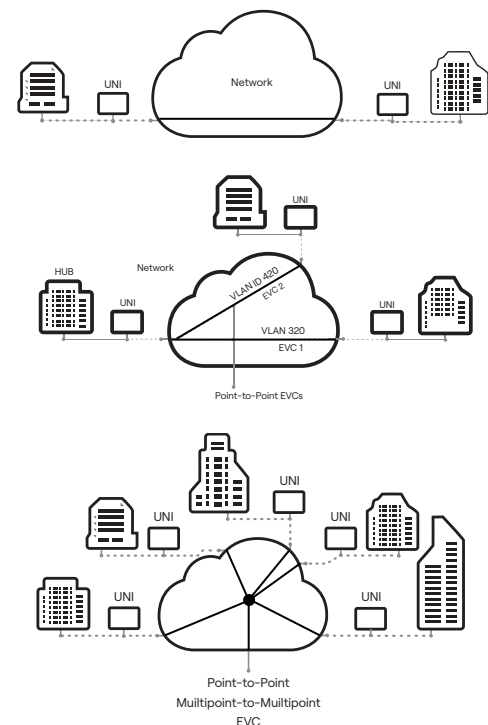
Choose an existing Lightpath Ethernet solution or build a custom solution to meet your exact needs.

E-Line: Layer 2, point-to-point connectivity between 2 locations over a single, scalable Ethernet connection for high-bandwidth connectivity at a price point well below traditional TDM services. Supports ever-changing business requirements over a single, scalable Ethernet connection.

V-Line: Layer 2 point-to-point connectivity between your locations with flexibility to support multiple applications via a single multiplexed port. Reduces costs by lowering overhead associated with managing multiple ports on your network. Support multiple applications over a single interface and extend the shelf life of your investment by leveraging existing equipment ports.

E-LAN: Integrate 3+ locations with Layer 2, any-to-any connectivity via a single Ethernet port. Share information across locations without purchasing multiple point-to-point services or having to replicate and resend data.

Burstable Ethernet: Add Burstable Ethernet for E-Lines and V-Lines to get additional available bandwidth up to your port capacity (1 Gbps or 10 Gbps) for intermittent periods when needs increase. It's a cost-effective option to get the speed you need during peak usage.

Point-to-Point EVCs

Point-to-Point Multipoint-to-Multipoint EVC

To learn how your organization can benefit from Lightpath Ethernet, call **877-544-4872** or visit **lightpathfiber.com.**

Ethernet

UNI (User Network Interface) Attributes			
	E-Line	**V-Line**	**E-LAN**
Physical Interface	1 Gbps, 10 Gbps, 100 Gbps	1 Gbps, 10 Gbps, 100 Gbps	1 Gbps, 10 Gbps, 100 Gbps
Speed	20 Mbps – 10 Gbps, up to 100 Gbps as needed	20 Mbps – 10 Gbps, up to 100 Gbps as needed	20 Mbps – 10 Gbps, up to 100 Gbps as needed
Mode	Full Duplex	Full Duplex	Full Duplex
Service Multiplexing	No	Yes	No
All to one bundling	Yes	No	Yes
CE-VLAN ID for untagged and priority tagged Frames	NA	2-4094	NA

EVC (Ethernet Virtual Connection) Service Attributes and EVC per UNI Service Attributes			
	E-Line	**V-Line**	**E-LAN**
Maximum Number of UNIs per service	2	2	>2 - 25
EVC Type	Point to Point	Point to Point	Multipoint to Multipoint
Class of Service Offerings	5 = Realtime CoS 3 = Business Critical CoS (Default) 1 = Normal CoS	5 = Realtime CoS 3 = Business Critical CoS (Default) 1 = Normal CoS	5 = Realtime CoS 3 = Business Critical CoS (Default) 1 = Normal CoS
Ingress Bandwidth Profile Per EVC	CIR = 20 – 1000 Mbps, increments of 100 Mbps; 1 – 10 Gbps, increments of 1 Gbps EIR = 1 Gbps or 10 Gbps (Burstable only)	CIR = 20 – 1000 Mbps, increments of 100 Mbps; 1 – 10 Gbps, increments of 1 Gbps EIR = 1 Gbps or 10 Gbps (Burstable only)	CIR = 20 – 1000 Mbps, increments of 100 Mbps; 1 – 10 Gbps, increments of 1 Gbps
CE-VLAN ID & CoS ID Value Preservation	Yes	Yes	Yes
Unicast, Multicast, & Broadcast Frame Delivery	Yes	Yes	Yes

Supported Protocols/Standards	
Protocols Supported	Ethernet IEEE 802.1p/q/Q, MPLS, IP and TCP/IP
Certifications, Standards	MEF 9, MEF 14, ITU

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