Connectivity

deliver data traffic quickly and securely

US Signal network services offer maximum bandwidth utilization, reduced downtime, and worry-free, secure connectivity to meet your specific business needs. Both private layer 2 and layer 3 service is available, and no fixed or permanent virtual circuits required. Managed Router, IP Monitoring, Cellular Failover, and Quality of Service (QoS) can easily be added to your service to give you greater peace of mind.

Technical Overview

US Signal offers a fiber optic network that revolutionizes how companies approach digital transformation. With unmatched speed, high bandwidth, low latency, and reliability, fiber empowers businesses to optimize operations, enhance customer experiences, and stay agile in an always-on, competitive world. Unlike cable or satellite networks, fiber excels in data security by transmitting information via light pulses, making it highly resistant to interference and cyber threats. It also supports emerging technologies like 5G, ensuring scalable bandwidth and consistently fast performance.

For tailored solutions, organizations can choose between lit fiber, which offers plug-and-play convenience managed by a service provider, or dark fiber, ideal for businesses seeking unlimited bandwidth and full network control. Additionally, robust networks should prioritize geographic reach, edge data centers for reduced latency, and access to peering points for faster connections. To ensure reliability, work with a provider offering SLA-backed uptime, redundant architecture, and control over the "last mile" connection. Fiber makes digital transformation seamless, secure, and scalable.



At-A-Glance:

- Redundant fiber connections
- Infrastructure is protected by multiple power feeds
- Cost effective monthly pricing
- Rapid, secure, always-on access
- Ability to build to suit
- Direct fiber connection provides fast and reliable connectivity

Dedicated Internet Access (DIA)

Dedicated internet access (DIA) from US Signal comes with one of the industry's most comprehensive service level agreements, ensuring continuous, secure access over our entire protected fiber network. We boast multiple Tier 1 upstream connections in major markets across the country, providing our clients with reliable connectivity and optimal latency. Continuous web-based monitoring allows you to manage your usage, while 24/7 network surveillance helps resolve issues quickly.

Advantages:

- Our DIA pairs with our optional managed router add-on to offload Layer 3 device management on-premise.
- Our network connects to the internet through multiple upstream providers for high availability and redundancy.
- US Signal's DIA connects directly with large content providers, delivering lower latency to the hosted content.
- Mesh network protection and advanced edge architecture resiliency enable path switching in less than 50 milliseconds.
- Automated network protection with dynamic border gateway protocol (BPG) routing and ringed fiber topology protects against point-of-presence (PoP) and fiber outages.
- Fiber network built on SONET and DWDM technologies with redundant upstreams for ultimate performance.
- Includes enhanced DDoS Protection to block the most advanced threats in real time.

Multiprotocol Label Switching (MPLS)

Multiprotocol label switching (MPLS) is a networking technology that uses labels to route traffic through the shortest path over private, wide-area networks (WANs). As a fully scalable solution, MPLS significantly improves traffic speed and minimizes user downtime over conventional routing methods that use internet protocol (IP) addresses.

US Signal's MPLS network utilizes proven synchronous optical network (SONET) and dense wavelength division multiplexing (DWDM) transport technologies, offering clients secure Layer 3 access between multiple locations.

Our MPLS is more efficient than traditional IP routing because it sends data directly to the destination rather than transmitting it through multiple points across the internet before delivery. It also helps clients control network traffic congestion, optimize resource pooling and quickly map incoming packets. MPLS network management resources make it easy to apply controls across an entire WAN simultaneously, regardless of the number of sites.

Ethernet Transport Services

US Signal offers Layer 2 Ethernet transport services to organizations seeking highly scalable solutions for multi-point connections. These services are among the market's most expansive, supporting the growing bandwidth requirements and application performance associated with today's ever-changing network needs.

In 2021, US Signal joined MEF, a global association of network, technology and cloud providers collaborating to advance digital transformation. We quickly achieved 3.0 Carrier Ethernet Certification for our transport services, demonstrating that our solutions meet the standards and specifications of the industry's leading authority.

Our Ethernet transport solutions are part of our extensive portfolio of switched and routed services, which include MPLS, dedicated internet access, cellular failover and virtual ethernet services (VES). We also offer top-tier direct transport services.

Features:

- Fully meshed MPLS routing
- Ability to connect any site on US Signal's dense footprint
- Private network with end-to-end security that supports the evolving hybrid cloud model
- All services meet MEF 3.0 performance metrics
- Options for private network connections to hyper-scale cloud providers through US Signal's Virtual Cloud Connect service

Virtual Ethernet Services

Our virtual Ethernet services (VES) extend Layer 2 private connectivity into your wide-area network (WAN) topology by moving large-area network (LAN) packets throughout our proprietary network. These services enable you to connect to locations across the US Signal footprint in multipoint or point-to-point configurations. Users can choose from multiple access types and various bandwidth options without needing fixed or permanent virtual circuits.

As one of the industry's top virtual Ethernet providers, US Signal has years of experience helping clients improve network operating efficiencies through VES and other switched and routed services. We strive to help you implement the solutions you need to make the most of your information technology (IT) resources and help get your IT where it needs to be.

Secure Access Service Edge (SASE)

US Signal SASE leverages cutting-edge technology, including Software-Defined WAN (SD-WAN), Firewall as a Service (FWaaS), Zero-Trust Network Access (ZTNA), Cloud Access Security Broker (CASB), Secure Web Gateway (SWG), and unified management to create a unified platform. This innovative platform allows optimal WAN management, global connectivity, WAN and internet security, cloud acceleration, and remote access to provide customers with an unparalleled level of security.

SASE eliminates the need for on-premise infrastructure, improving agility by deploying new resources effortlessly. With a simpler network and security stack, businesses can reduce upfront costs, scaling only what they need without in-house management. US Signal SASE offers full visibility into WAN and internet traffic with no blind spots, using unified policies to create a simpler, more efficient, and secure network infrastructure.

Cellular Failover

Ensure your WAN connection stays up even if the last mile access loop goes down. The service includes installing, configuring and maintaining a wireless backup-enabled router at your site.

- Each managed router set up for wireless backup is provisioned with 10 GB of data
- Fully managed by US Signal
- Lower cost alternative to redundant loops
- Peace of mind knowing your branches will be not be stranded
- Simplifies diversification by using one trusted carrier