

# Bigger than bandwidth

Realize the full potential of a network upgrade with tailored, high-performance solutions from Spectrum Enterprise®.





Hyper-personalized customer service. Seamless remote work. Advanced supply chain automation. The initiatives that are powering many organizations' growth require advanced network connectivity.

IT leaders' top tech initiatives — cybersecurity, cloud migration and digital transformation — require highly reliable, high-performance network technologies.<sup>3</sup>

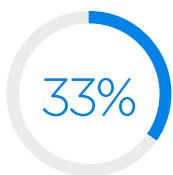
To meet the expectations of both customers and employees, IT leaders need to rapidly increase bandwidth across applications, network resources and WANs. In industries as diverse as financial services, retail, hospitality, manufacturing and transportation, businesses are processing vast quantities of data to help improve customer experience and streamline their operations. Additionally, employers continue to say that accommodating in-office, remote and hybrid work is a leading concern.<sup>1</sup>

IT leaders' top tech initiatives — cybersecurity, cloud migration and digital transformation — require highly reliable, high-performance network technologies.<sup>2</sup> These projects are being impacted by an environment of economic uncertainty, leading companies to scrutinize their budgets and demand greater efficiency from any solution they adopt.

### Driving performance with complex networks

To help control costs and offer easy access to resources, organizations have adopted increasingly complex cloud deployments. These solutions require new levels of interconnectivity — and the expertise to support it.

The ability to provision applications and store data in multiple locations — on-site, off-site and in the cloud — and to replicate data efficiently and reliably helps build organizational resilience. And, with data breaches costing an average of \$4.9 million globally, being able to prevent cyberattacks and recover from them is critically important.<sup>4</sup> Organizations are also realizing the benefits of moving applications into the cloud to reduce dependence on in-house resources. In response to the Google Cloud Brand Pulse Survey, 41% of business and IT leaders said they are increasing their use of cloud-based services and products, 33% plan to migrate from legacy enterprise software to cloud-based tools and 33% are migrating on-premises workloads to the cloud.<sup>5</sup>



of business and IT leaders plan to migrate from legacy enterprise software to cloud-based tools.<sup>6</sup>



Investing in the bandwidth that underpins these initiatives is essential for success. To meet their goals and build a strong foundation for future enhancements, organizations will likely need connectivity that offers substantially more bandwidth than they currently use.

### Accelerating high-performance networks for a better experience

Redesigning an organization's network infrastructure is complicated and demands a significant investment of time and resources. Also essential: a partner with a deep understanding of sophisticated technologies such as hybrid clouds and the high-capacity networking solutions that support them.

As cloud applications become standard for organizations across industries, meeting customer and employee expectations will require capabilities many service providers lack. In healthcare, for example, patients want a more customized digital experience, as well as ongoing support for telehealth. Processing the data required to provide a seamless video experience as more patients consult with doctors remotely will require high-performance connectivity greater than 10 Gbps for many providers. Likewise, in education, students and instructors have come to expect digital learning in traditional, remote and hybrid environments. Scaling to meet these demands calls for more performance from connectivity services.

When applications are spread among data centers and public clouds, adjacency and interconnectivity become vital if a cloud strategy is to meet customer and employee requirements. Organizations that need the lowest latency possible turn to service providers with infrastructure located adjacent to key data centers.

Given the cost constraints faced by many organizations, dark fiber leases may seem enticing but can prove complex to manage and costly to upgrade. Instead, sophisticated cloud computing can offer an opportunity to manage infrastructure costs more efficiently by moving IT spending from capex to opex — something over half of businesses said they are doing.<sup>7</sup> Working with the right managed services partner can reduce capex spending even further in areas like network management and security.

### Establishing a secure and reliable network

Modern, high-capacity networks offer the opportunity to simplify deployment, management and troubleshooting across network components and locations. They can also help streamline network security operations.

Cloud-based security solutions extend protection to remote workers, branch locations and headquarters with easier policy enforcement than premises-based solutions. The latest next-generation firewalls (NGFWs) can help protect the growing amount of traffic between network locations, the internet and cloud service providers with throughput speeds up to 100 Gbps.

The growth of consolidated, forward-looking security technologies is well founded. Organizations with financial, health, intellectual and government information are most at risk of cyberattacks.<sup>9</sup> In 2023, for example, there were 26 data breaches of more than 1 million records and four breaches of more than 8 million records. The largest data breach of the year affected 11,270,000 individuals – the second-largest healthcare data breach of all time.<sup>9</sup> Threats like these will continue to grow, increasing the demand for automated security workflows and threat intelligence sharing to support limited IT resources.

In addition to security, the right solutions provider can help engineer networks with more resilience against natural disasters, fires and other service interruptions. Business continuity for large organizations requires path diversity and redundant connections for fiber and broadband service at critical locations. Direct cloud and data center connectivity can also facilitate fast data transfer and replication for backups that speed recovery.



Redesigning large networks requires a partner with high-capacity connectivity and the solutions to customize each deployment.

## Why the right partner is essential

No organization can upscale its network on its own — redesigning large networks requires a partner with high-capacity connectivity and the solutions to customize each deployment.

Spectrum Enterprise has the infrastructure and expertise to meet even the biggest challenges in network modernization:

- **Support for sophisticated architectures:** Not all connectivity is the same. Organizations need a WAN transformation that will take full advantage of multi-cloud architecture, with network designs that increase cloud performance. Facilitating interconnection between data centers is also critical for efficient distribution of cloud workloads.
- **National reach:** It's important to be able to rely on a single partner to reach all branch locations and scale in the future. Organizations that choose Spectrum Enterprise as a partner benefit from the reach of our national fiber network, with 300,000+ fiber-lit buildings, 230,000+ fiber-route miles and dense metro interconnectivity. The wide reach of Spectrum Enterprise also provides adjacency to key data centers, which supports latency-sensitive use cases.
- **A better experience for customers and employees:** To do their jobs, employees increasingly depend on cloud-based applications. In many sectors, customers have become accustomed to instant and often personalized service from digital interfaces. Dedicated Fiber Internet and Ethernet Services, with speeds up to 100 Gbps and service-level agreements (SLAs) that guarantee 100% uptime, can power networks that keep user experiences seamless — even as bandwidth needs grow.
- **Security and reliability:** For a secure, resilient network, organizations can count on Spectrum Enterprise security solutions. Our cybersecurity services comprise solutions from network access to advanced firewalls to DDoS protection and much more. Automated updates are supported by our U.S.-based networking operations centers working 100%, 24/7/365 to help monitor threats. Additionally, these services are engineered to protect the entire organization without compromising performance.
- **Efficiency:** IT departments are frequently under pressure to provide improved network performance without adding layers of complicated management or increasing costs. As a managed services partner, Spectrum Enterprise can design solutions that are simple to configure, manage and troubleshoot. Managed and co-managed services give you the level of control you're comfortable with. Your organization can also depend on us to handle routine maintenance and upgrades so your IT staff can refocus on more important goals. Working with a single partner across high-performance bandwidth and networking solutions offers better integration of complex systems and a single source for support.



### The Spectrum Enterprise advantage

Choosing a partner with a national presence and ongoing investment in high-capacity infrastructure means that your network will be able to scale as your organization's needs evolve, allowing you to add future locations and adjust connectivity speeds.

In addition to the reach of our connectivity, our experts take a collaborative, customized approach to network upgrades. Dedicated project managers, certified engineers and round-the-clock U.S.-based support help implement the best solutions from design to implementation and ongoing operation. We offer proactive monitoring for critical services, and local technicians, who are ready to quickly resolve any issues that arise.

#### Spectrum Enterprise provides multiple options for high-performance connectivity with scalable bandwidth up to 100 Gbps:

**Dedicated Fiber Internet** is a fast, symmetrical service with speeds up to 100 Gbps that delivers a dedicated internet experience to keep up with the high demands of your network. The service is backed by a 100% uptime SLA guarantee all the way to the hand-off point at your location.

**Ethernet Services** allows you to meet ever-growing data needs by connecting locations with a fast, reliable wide area network (WAN) solution backed by a 100% uptime SLA guarantee and built on a dedicated fiber infrastructure. Bandwidth up to 100 Gbps is available.

**Wavelength Services** is a high-availability, secure and dedicated solution, that delivers consistent, ultra-low latency performance to support data-intensive applications at speeds up to 100 Gbps.

**Spectrum Enterprise also provides managed solutions engineered for high-capacity bandwidth:**

**Enterprise Network Edge** improves the network experience for your teams with an enterprise-grade managed solution that brings together connectivity, equipment and network management to support both hybrid networks and workforces. Powered by Fortinet, the solution simplifies IT operations by providing networking with security features and optional integrated WiFi and switching in a multi-cloud-ready platform.

**DDoS Protection** helps guard against malicious volumetric attacks designed to overload your network and prevent access to applications, systems and information with fully managed distributed denial of service (DDoS) threat identification and mitigation.

**Secure Access with Cisco Duo** helps protect your organization from unauthorized access to sensitive systems, regulatory violations and data loss that can disrupt your business. Capabilities that include multi-factor authentication (MFA) and identity management allow IT to set access policies by user and device, regardless of location.

**Cloud Security with Cisco+ Secure Connect** allows remote users to access cloud SaaS applications and the internet securely and directly without reliance on a traditional centralized or premises-based security solution. This feature-rich cloud-based security service includes secure web gateway, cloud access security broker, identity management, zero trust network access (ZTNA) and more.

IT decision makers need a partner capable of building an advanced network infrastructure that can meet their organization's growing and diverse needs — including remote workforces, multisite and multi-cloud connectivity and advanced security — without limiting performance or stretching budgets.

Spectrum Enterprise has the specialized expertise, nationwide connectivity and comprehensive solutions for the most sophisticated hybrid networks. We can help your organization with cost-effective, tailored solutions to realize the true potential of high-performance networking.

[Learn more](#)

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2. ["Flexera 2022 Tech Spend Pulse,"](#) Flexera, 2022.
3. Ibid.
4. ["Cost of a Data Breach Report 2024,"](#) Ponemon Institute and IBM Security, 2024.
5. ["Survey says: Leaders are doubling down on cloud for stability and financial resilience,"](#) Google Cloud, February 3, 2023.
6. Ibid.
7. ["More Than Half of Enterprises Confirm Cloud is Essential to Balance IT Spending, Couchbase Research Finds,"](#) Couchbase, June 21, 2023.
8. ["5 Industries Most Vulnerable to Cyber Attacks,"](#) Ekran, July 19, 2023
9. Steve Alder, ["Healthcare Data Breach Statistics,"](#) HIPAA Journal, September 24, 2024.

**About Spectrum Enterprise**

Spectrum Enterprise, a part of Charter Communications, Inc., is a national provider of scalable, fiber technology solutions serving many of America's largest businesses and communications service providers. The broad Spectrum Enterprise portfolio includes [networking and managed services solutions: Internet access, Ethernet access and networks, Voice and TV solutions](#). The Spectrum Enterprise team of experts works closely with clients to achieve greater business success by providing solutions designed to meet their evolving needs. For more information, visit [enterprise.spectrum.com](#).

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