

According to [Science Direct](#), network connectivity is based on several core technologies and protocols – network architecture. Network architecture refers to the layout and structure of a network, which directs how devices connect and communicate.

Network connectivity solutions need to have a network architecture that's reliable with high-performing connectivity. Network connectivity solution providers tend to custom-design network architectures that accommodate their customer's varying needs. Such needs include the volume of data transmitted, the required speed, security considerations, and the geographical distances involved.

“The wireless network connections of these networks are different because of the large amount of data with the short text. The design and layout of a network, including its physical and logical structure, determine how devices connect and communicate,” stated [Science Direct](#).

What are Connectivity Services?

[Connectivity](#) services refer to the services that allow authorised equipment or devices with the ability to connect to the internet. Such services equip the devices with the ability to communicate within a network and between networks too.

It includes a variety of solutions that help enterprises, individuals, and their devices to connect to the internet and other networks. These services can include broadband internet access, Ethernet circuits, leased lines, [virtual private networks \(VPNs\)](#), and wireless technologies like Wi-Fi and mobile data.

Why are Network Connection Solutions important?

Network connections have become an indispensable requirement to help organisation access digital resources for their tasks, communicate with their teams, and conduct everyday business activities in a rapidly evolving digital world.

Their services provide the necessary infrastructure enabling a seamless flow of information and data. This supports everything from basic web browsing to complex cloud-based applications. The choice of connectivity service depends on factors such as speed, reliability, security, and cost, and can be tailored to meet the specific needs of users.

Without strong network connection solutions, businesses could struggle to operate efficiently in the modern world of rapid communication and information exchange. Individuals would be cut off from the vast resources and opportunities available online.

In an increasingly interconnected global world, [network connection solutions](#) are necessary for productivity, innovation, and economic growth. They allow remote work, manage e-commerce, and assist the development of new technologies that are transforming the way we live and work.

Best Network Connection Solutions

Masergy

[Masergy](#) is a business internet provider offering network connectivity services, including SD-WAN, MPLS, and VPLS. These services can help businesses connect multiple sites, improve application performance, and enhance security.

The company was acquired by Comcast Business in 2021. Since then, it's been focused on optimising AI for top application performance in SD-WAN, Security, UCaaS, and CCaaS solutions.

Masergy's Multi-Cloud Connectivity offers secure, direct cloud connections with complete cloud integration capabilities. It customises solutions to create the right mix of access technologies, helping enterprises meet their objectives and simplify network management operations.

Cogent

[Cogent](#) is one of the world's largest Internet Service Providers, delivering high-quality Internet, Ethernet and Colocation services. This Washington-based company provides its services to more than 138,025 Enterprise and NetCentric customer connections.

It serves over 227 markets in 54 countries across its facilities-based, all-optical IP network. Cogent takes advantage of full end-to-end control over its transport and routing technology to provide reliable and scalable service. Cogent's network is IPv6 and MPLS enabled, providing top solutions for businesses.

Colt

[Colt Technology Services](#) connectivity solutions are based on their intelligent Colt IQ Network, providing enterprises with the best network and strong cloud experience. It also provides direct access to enterprise buildings and key data centres across Europe, Asia Pacific and North America.

Colt's customers benefit from expansive digital infrastructure connecting 32,000 buildings across 230 cities, more than 50 Metropolitan Area Networks and over 250 Points of Presence across Europe, Asia, the Middle East, Africa and North America's largest business hubs.

Colt provides Ethernet, MPLS, Internet, SD WAN, IP VPN and Wavelength connectivity solutions. They own their own network for quality service globally with end-to-end SLAs.

Citrix

[Citrix](#) aims to champion remote access by creating virtualisation technology that transcends the constraints of time, place, infrastructure, networks, and devices. This technology separates the operating system and applications from physical hardware, empowering enterprises to embrace flexible and secure work environments.

This allows users to access their desktops and apps regardless of the device they're using or their location. Citrix also offers DaaS solutions like Citrix Virtual Apps and Desktops, which deliver virtual desktops and applications to users over the internet.

Recently, Citrix acquired Unicon with an ambition to expand its focus on secure, cost-effective endpoint management and an enhanced VDI experience.

Extreme Networks (EXTR)

[Extreme Networks \(EXTR\)](#) is a cloud networking company with a focus on providing high-performance, AI-driven networking solutions, particularly for industries with demanding requirements like education, healthcare, and hospitality.

The company has been leveraging the power of machine learning, artificial intelligence, analytics, and automation. They emphasise on delivering superior user experience by deploying their cloud-managed Wi-Fi and edge networking solutions, often incorporating advanced features like location services and network analytics.

More than 50,000 customers worldwide rely on our comprehensive cloud networking solutions, exceptional service, and expert support to drive their digital transformation and achieve unprecedented progress.

Riverbed Technology

[Riverbed Technology](#) is known for providing detailed visibility into network performance, application performance, and end-user experience due to its comprehensive telemetry across the entire digital ecosystem.

The company focuses on leveraging network connectivity by providing solutions for WAN optimisation and application acceleration. This helps businesses improve the performance of applications across geographically dispersed networks, particularly for remote users and branch offices.

They can do this through features like data compression, traffic shaping, and intelligent path selection; essentially ensuring smooth and fast application delivery over potentially congested network connections

It's two leading solutions are – the Riverbed Unified Observability portfolio, which integrates data, insights, and actions across IT to enable customers to deliver seamless digital experiences; and Riverbed Acceleration, which offers fast, agile, and secure acceleration of any application over any network to users, whether they are mobile, remote, or on-premises.

Juniper networks

[Juniper Networks](#) is a leading networking company in Silicon Valley that's known for its high-performance network infrastructure solutions, particularly its routers and switches used by internet service providers and large enterprises.

The company's mission is to create innovative products and solutions that meet the growing demands of the connected world. Juniper claims to take a new approach to the network — one that is intelligent, agile, secure and open to any vendor and any network environment.

Headquartered in Sunnyvale, California, Juniper Network has over 9,000 employees in 50 countries and nearly \$5 billion in revenue. Their customers include 100 global service providers and 30,000 enterprises, including the Global Fortune 100 as well as hundreds of federal, state and local government agencies and higher educational organisations.

Lumen Technologies

[Lumen Technologies](#) has a diverse portfolio of networking connectivity services designed to meet the needs of businesses of all sizes. It connects people, data, and applications quickly, securely, and effortlessly.

Lumen's foundation is a massive fibre optic network spanning approximately 450,000 route miles, providing high-bandwidth, low-latency connectivity. It provides dedicated internet access, ethernet on-demand, wavelengths, SD-WAN, and fibre-based internet access, all built on what's claimed to be one of the world's largest and most interconnected fibre optic networks.

This paves the way for high-speed, secure, and scalable connectivity across various locations and cloud providers; essentially offering a comprehensive suite of network services for businesses of all sizes to manage data transfer and access the internet with high reliability and low latency.

CommScope

[CommScope](#) is an American network company that connects enterprises and individuals through innovative network infrastructure solutions. The North Carolina-based firm's goal is to create the world's most advanced wired and wireless networks.

The company stated that its global team of employees, innovators and technologists empower customers to anticipate what's next and invent what's possible.

CommScope provides a wide range of network connectivity solutions designed to support various applications and industries. These solutions are catered towards broadband networks, including fibre optic cables, connectors, and accessories, as well as in-building wireless and venue connectivity solutions.

It also provides data centre solutions, including structured cabling and intelligent infrastructure management. Their focus is on delivering high-performance, reliable, and scalable network infrastructure to meet the changing needs of enterprises and service providers.

[GTT](#) provides enterprises with a range of network and security services. Some of their notable solutions include SD-WAN, SASE, security, internet, and voice services, all managed through their GTT Envision platform.

The GTT Envision platform equips organisations with the capability to seamlessly orchestrate, virtualise, and automate network functions. This helps businesses best optimise their network performance and security posture.

The Virginia-based company is a leading networking and security as a service provider for multinational organisations, simply and securely connecting people and machines to data and applications anywhere in the world.