Leverage Azure Virtual WAN for high-performance networking

As your enterprise grows more dependent on uninterrupted, high-performance connectivity across globally distributed locations and cloud-hosted applications, Azure Virtual WAN (vWAN) provides optimized, automated branch connectivity to your Azure-resident workloads.

Barracuda CloudGen Firewall integrates SD-WAN capabilities into Azure vWAN. It lets you bond multiple, load-balanced uplinks for branch connectivity, ensuring optimal traffic routing and automatic failover for unmatched reliability and business continuity.

Traditional networks can hold you back

As you migrate applications and other workloads to the cloud, using leased lines or MPLS to route traffic to and from those cloud-hosted apps via traditional WAN architectures—backhauling through a central internet breakout—is becoming less viable. Bottlenecks and latency become intolerable, and lead to significant productivity losses. Moreover, these existing technologies are cumbersome, slow to implement, inflexible, and costly.

Microsoft’s Azure ExpressRoute targets large enterprises connecting directly to Microsoft Azure but requires partnerships with telecommunications providers’ networks to deliver MPLS. It lacks automated provisioning, and the cost makes it prohibitive for all branches. Moreover, there are regions where this type of reliable uplink, even at any price, is just not available.

The solution to all these issues is to enable direct internet access to the cloud from every branch. However, there are obvious challenges to implementing this approach. Using the wrong tools introduces very significant configuration and management complexity, placing unsustainable resource demands on enterprise networking departments.
Always-on optimized cloud access and application availability, regardless of location or significance

To provide optimized WAN connections to resources on Azure, Microsoft offers Virtual WAN (vWAN) globally. Using vWAN, your branch-office and remote-location traffic can connect to Azure with smart routing and multi-link redundancy to optimize network performance. Barracuda CloudGen Firewall lets you build virtual cloud network architectures that fully leverage these capabilities. Microsoft’s global Virtual WAN offering is available in 171 countries and can be accessed with all broadband internet providers.

Support for Azure Virtual WAN with multi-uplink capabilities is built into the core of every Barracuda CloudGen Firewall model. In addition to optimized routing and high performance, it lets you easily aggregate multiple networks into a global WAN. Barracuda CloudGen Firewall combines secure SD-WAN functionality with full next-generation firewall and Advanced Threat Protection capabilities for secure direct internet access. True zero-touch deployment for thousands of remote locations and the opportunity to minimize the hardware footprint needed at every remote location lets you deploy and configure a global high-performance WAN with perfectly secured and optimized direct internet breakout very quickly and easily.

Barracuda CloudGen Firewall with secure SD-WAN lets you aggregate all types of WAN connections—including broadband, MPLS private lines, wireless LTE, ISDN, etc.—from branch offices and remote locations. It performs dynamic, application-aware, per-packet link steering and path selection to deliver quality and performance equal to or better than private lines for the most demanding applications. With its combined best-in-class next-generation firewall security and secure SD-WAN capabilities, CloudGen Firewall lets you fully leverage the Microsoft global network via Azure Virtual WAN. This ensures peak application performance at every location of the WAN, resulting in improved user experience, reduced downtime and latency, and optimal business continuity.

Barracuda CloudGen Firewall and Azure Virtual WAN benefits at a glance:

- Automatic rollout and deployment to thousands of remote locations
- Multilink redundant access to cloud-based resources
- Dynamic traffic distribution leveraging up to four ISPs simultaneously
- Improved uplink performance and reliability in regions without access to Azure ExpressRoute MPLS lines
- Reduced total cost of ownership by replacing costly MPLS uplinks with multiple inexpensive internet links bonded together

The Barracuda advantage for the cloud generation

Barracuda CloudGen Firewall is a family of physical, virtual, and cloud-based enterprise-grade firewalls that can manage complex distributed networks while ensuring high-performance cloud and site-to-site connectivity. Full next-generation security capabilities make sure that you have uninterrupted network availability and robust access to cloud-hosted applications. Scalable central management for up to thousands of devices reduces administrative overhead while defining and enforcing granular policies across your entire WAN.

Simultaneous use of up to 4 uplinks with load balancing

Figure 2 - Multi-link branch-to-Azure connection