

Solutions brief

Migrate to an intelligent hybrid network with ease.

Virtual Network Services – SD WAN



that integrates broadband or other network services into your corporate WAN.

The solution allows you to easily take advantage of application routing and path selection to use both public and private IP services together. With its automated route changes, you can send data over the available transport service best suited for each application. This helps you improve the use of your network resources to get better network and application performance. It also simplifies your management efforts too. And since you're using virtual SD WAN services to create your hybrid network, you can easily and dynamically:

- Shape your WAN to handle changes in internet traffic.
- Maintain the performance and security of real-time and sensitive applications.
- Automatically measure and monitor performance of multiple services in your hybrid network.
- Use application routing to get granular control over when an application transaction should use a specific service.
- Keep private WAN services available for your mission-critical applications and help improve overall traffic flow by offloading internet-bound traffic.

As the flow of digital information continues to rise, the demand for cloud and mobile technologies has risen too. With this surge, application performance and public cloud access have become top priorities for businesses. Not only are you expected to reach more people in more places – you need to do it more cost-effectively and without sacrificing performance.

To overcome these challenges, businesses are turning to a software-defined WAN (SD WAN) hybrid networking approach to help balance the cost benefits of using the public internet with the performance of MultiProtocol Label Switching (MPLS). Premises-based SD WAN hardware can help you by routing traffic across different network paths based on changes in demand, application needs and network quality. It also lets you set quality of service (QoS) thresholds that use public and private WAN traffic without sacrificing performance or security.

While QoS allows you to prioritize applications within a specific WAN circuit, hybrid networking lets you select paths at the application level. To get this level of flexibility you need application visibility, path instrumentation and dynamic path routing. These all require new intelligence and network management approaches. Virtual Network Services – SD WAN all that, giving you the agility, routing intelligence and control your business needs.

Make the move to SD WAN with Verizon.

As the demands on networks evolve, networks evolve too. The virtualization that happened in the data center is now happening in the network. That's how Virtual Network Services – SD WAN from Verizon can give you an alternative to proprietary, appliance-based SD WAN services. It lets you use virtual network functions (VNFs) to simplify your ability to migrate to an intelligent hybrid network

Verizon is recognized as a leader in delivering networking, security and cloud solutions that can help you with game-changing virtualization initiatives.

An easier approach to hybrid networking

Virtual Network Services – SD WAN comes with easy-to-deploy universal customer premises

equipment (uCPE) that lets you easily and dynamically serve up the SD WAN services you need. With a single uCPE per site, you can choose to run multiple network services, such as routing, security and WAN optimization in plug-and-play fashion. Our automated orchestration and service chaining link all the different services so they work seamlessly together as a unified service. The ability to spin up those services on demand gives you the agility and control you need. And you get integrated, full management capabilities.

- Deploy quickly instead of weeks or months.
- Select from up to five different sizing models with flexible, pay-as-you-go pricing models.
- Get integrated full-service management and world-class transport services like Private IP and Internet Dedicated Services, plus support for Verizon Wireless 4G LTE.
- Boost agility by changing service tiers and even vendors quickly and efficiently – plus automatically update these changes across your VNFs with integrated service chaining.

And since the solution is vendor neutral, you have the freedom to shop from a rich ecosystem of leading vendors, mixing and matching the best-in-class services that are the right fit for your needs, including the following:

- Essential and application-aware routing (NAT, split tunnel, DPI and URL-based)
- Security and encryption (AES-256)
- QoS (classification, policing, remarking and scheduling)
- Service-side routing and multicast
- Advanced policies (service chaining and extranet)
- VPNs up to system scale

visibility, control and performance – regardless of changes in your network traffic.

- Make better use of your network with more granular control over where and under what circumstances an application transaction uses a specific service.
- Improve traffic flow by offloading internet-bound traffic, keeping WAN services available for real-time and mission-critical applications.
- Create routing policies on an app-by-app basis to make sure each workload uses the best available transport.

Quickly and easily spin up the network services you need from the vendors you want.

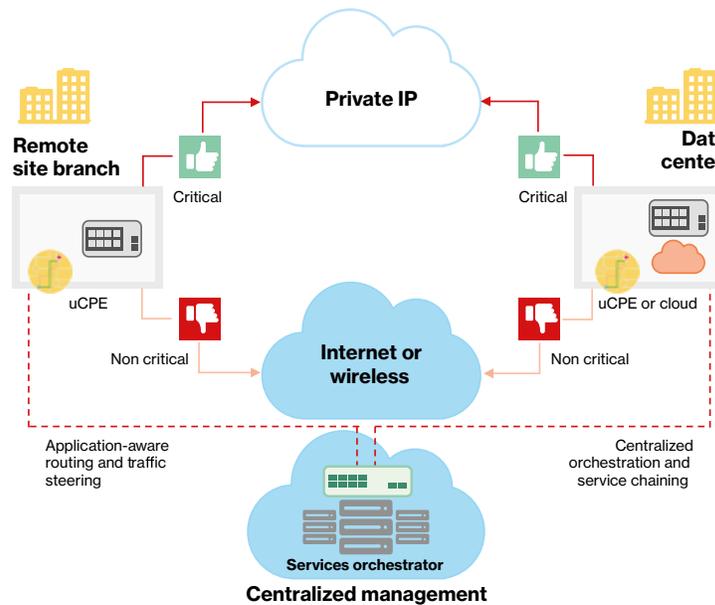
Get better visibility and control over your network.

Verizon gives you the tools, monitoring, oversight and life-cycle support you need for application

Benefits of Virtual Network Services – SD WAN

Our comprehensive solution delivers a range of benefits for your business, including:

- More efficient operations, with managed orchestration of VNFs tied together into a unified service
- Better control over costs and capital expenditures
- Better network and application performance with on-the-fly resource availability
- Greater ability to distribute traffic across multiple available paths



- Ability to add cost-effective broadband circuits to dedicated WAN circuits where needed
- Better routing decisions automatically made based on application requirements and actual network conditions
- Fewer human errors, simpler configuration and faster provisioning with automation
- Better user experiences with critical applications due to corrective actions based on performance monitoring
- Higher business agility due to flexible network load balancing and backup
- Greater ability to avoid downtime with proven change-management processes
- Easier migrations using standardized SD WAN operational practices
- Simplified management with end-to-end managed services
- Scalable network resources allocated on the fly as per application needs

Take the complexity and difficulty out of moving to a hybrid SD WAN approach.

Why Verizon

As your one-stop shop for managed virtual network services, we make it easy to get the agility, flexibility and performance you need to help secure your network and meet the fast-changing demands of business. Verizon is recognized as a leader in delivering networking, security and cloud solutions that provide game-changing virtualization initiatives for the modern, hyper-connected world.

We have a rich ecosystem of partners for providing the VNFs you need. With our experience managing over 300,000 security, network and hosting devices, and over 4,000 customer networks in 142 countries, you can have confidence in our ability to smooth your transition to

virtual network services and deliver the end-to-end managed services that will help you protect your mission-critical data and your business. And 98 percent of the Fortune 500 rely on our services and technologies.

Learn more.

Your network and mission-critical applications need a better approach. To find out how you can get the agility, flexibility and high performance of a hybrid network, contact your Verizon account representative.