

Smart, simple branch connectivity and security

Solution brief

Software Defined Secure Branch with Versa

The IT landscape is rapidly creating new challenges for traditional branch connectivity. Digital transformation and cloud services are driving the need to rearchitect existing wide area networks (WANs) to support digital initiatives. This growth is exposing deficiencies and challenges with existing enterprise architectures.

For example, when centralized WAN architectures backhaul traffic to a data center that's not suited for modernized cloud applications, it can impact your network performance and user experience. As you seek to increase transport bandwidth to better enable software-as-a-service (SaaS) applications, you may rapidly uncover additional risks and complexities. And organizations that lack proper network security at the branch may find managing multiple branch appliances highly challenging.

These potential issues should compel IT teams to look for WAN solutions that remove bottlenecks to their digital business initiatives while providing secure, smart and simple connectivity. That's where Verizon Software Defined (SD) Secure Branch can help.

Solution details

SD Secure Branch helps organizations overcome digital transformation challenges by combining software-defined WAN (SD WAN) capabilities, advanced security functions and centralized, full-service management into a single solution. A true software-defined network service, it uses Versa® Operating System (VOS™) software—formerly flexVNF®—at the network edge, running on universal customer premises equipment (uCPE) and Verizon's Hosted Network Service (HNS) platforms (deployed as part of a Virtual Network Services [VNS] implementation) or on a purpose-built CPE device preloaded with VOS software. Deployment is simple, featuring low-touch provisioning to help you deploy branches quickly and efficiently.

This solution also gives you the capability to perform familiar functions such as quality of service (QoS), access control lists (ACLs) and policy routing, in addition to the overlay control data plane. The uCPE hosting enabled by Versa VOS can also be used to host other VNS virtual network functions (VNFs). In these cases, Verizon will perform service chaining as necessary to help improve overall solution functionality. Each VOS device establishes secure sessions with Versa Director via IPsec and launches additional IPsec sessions with other VOS devices in the SD Secure Branch network.

Control costs and services by focusing resources where you need them the most.

SD Secure Branch gives you the flexibility to choose from multiple CPE platforms, along with a number of VOS license and service tier options to meet your specific site requirements. To help reduce the complexity of managing network resources, we also offer several management options at the network-function level, regardless of your network architecture:

- **Full Management.** We apply our world-class, end-to-end services from initial design and deployment right through to ongoing life-cycle management needs
- **Co Management.** We provide you with access to manage your own SD WAN policies
- **Monitor/Notify Management (available for select platforms).** We'll work hand in hand with you to maintain efficient network operation and uptime, while you retain management control of policies for security and privacy. Three-minute device polling, autogenerated alarms and device/service outage notifications help provide reliable network function performance while enabling you to focus in-house resources where they're most needed
- **Physical Management.** In addition to the monitor-and-notify support noted above, we will also isolate physical issues and work with your CPE maintenance provider to resolve any physical CPE issues

Finally, we offer monthly billing options to help you balance capital and operational expenses.

Benefits of SD Secure Branch

- Rapidly scale to meet evolving needs with on-demand deployment of CPE, SD WAN technology and security functions
- Quickly bring new branch locations online with low-touch provisioning
- Customize security functions at the branch level
- Can provide better control of breaches with network microsegmentation
- Choose the deployment model and services you need to meet your application and security demands
- Help control costs and capital spending
- Free up resources to focus on business objectives

Solution components

CPE

- Purpose-built CPE + VOS software (preloaded)
- uCPE + VOS software (remotely download) + additional VNF options
- Virtually on HNS + VOS software + additional solution bundles

Versa Director and SDN Controller

Versa Director establishes a secure connection to each remote VOS device in the network and administers the SD WAN overlay to share routes, security and policy information. This centralized policy engine in Versa Director provides an inbound and outbound policy mechanism to manage routing information, access control, segmentation, extranets and provisioning.

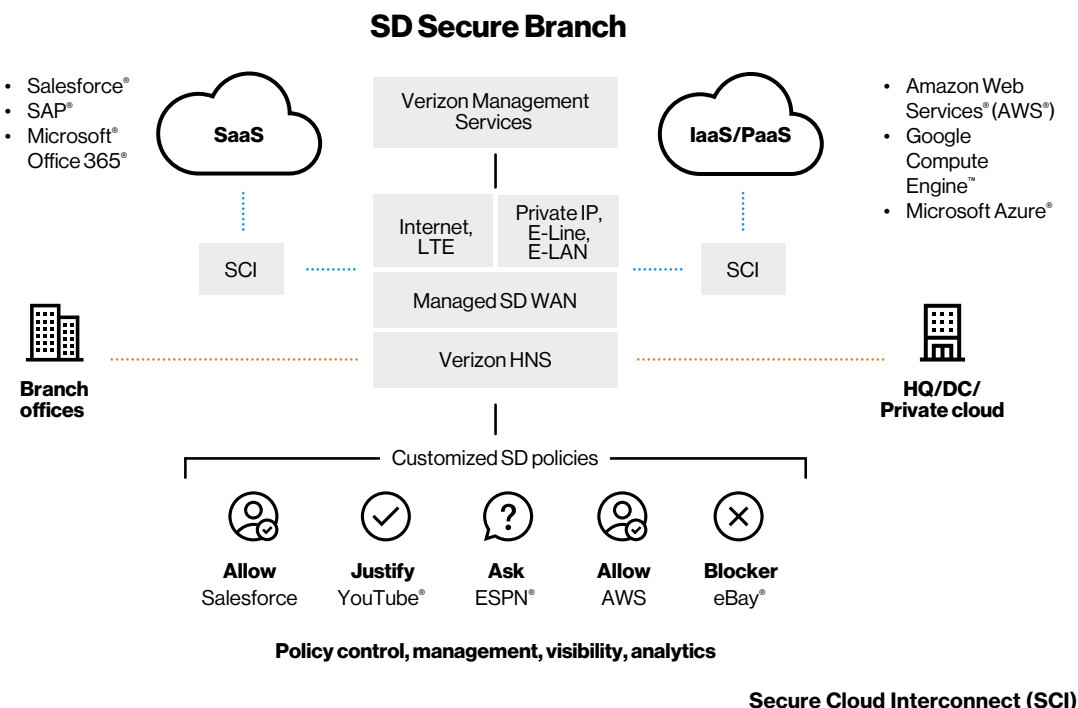
Through our Hosted Network Services, Versa Director works in conjunction with Software Defined Networking (SDN) controllers, providing the key orchestration and controlling elements in a Versa SD Secure Branch configuration. The SDN controller is basically a Border Gateway Protocol (BGP) route reflector and Internet Key Exchange (IKE) server for the data-plane mesh of the IPsec- Encapsulating Security Payload (ESP) tunnels, providing support for a network of up to 2,500 VOS devices.

Security

As optional add-ons, Advanced Next Generation Firewall (NGFW) and Unified Threat Management (UTM) licenses are available.

Analytics

Depending on the service option selected, reporting and statistics are provided using our WAN Analysis reporting service, available to customers via the Verizon Enterprise Center, supplemented with direct access to the Versa Analytics dashboard.



Why Verizon

As your one-stop shop for managed services, we make it simpler to get the agility, flexibility and performance you need to help secure your network and adapt to the rapidly 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, hyperconnected world.

We've helped 97 percent of the Fortune 500 solve some of their biggest challenges, and we can help you, too.

We have a rich ecosystem of VNF providers so you can select the services you need. With our experience managing more than 500,000 security, network and hosting devices, as well as over 4,000 customer networks in 150-plus countries, you can rely on 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.

Learn more:

To find out how you can deploy and manage a more efficient, intelligent network with Virtual Network Services, contact your Verizon Business Account Manager or visit [verizon.com/business/products/networks/managed-network-services/software-defined-secure-branch/](https://www.verizon.com/business/products/networks/managed-network-services/software-defined-secure-branch/)