

SOLUTION BRIEF

Fortinet SD-Branch Secures the Network Edge at the Branch

Executive Overview

Digital transformation (DX) has made branch networks much more complex—and therefore vulnerable to attack. In response, many organizations have deployed multiple point products to address new threat exposures as they appear. But this approach further complicates branch infrastructures—adding greater cost, complexity, and vulnerability. To address these issues, branches should integrate networking and security capabilities across the WAN edge, access layer, and endpoints. The solution, **Fortinet SD-Branch**, consolidates the network access layer within a secure platform that provides visibility and security to the network and all devices that connect to it.

Addressing an Expanding Attack Surface

Rapid adoption of DX technologies—including Internet-of-Things (IoT) devices, Software-as-a-Service (SaaS) applications, digital voice/video tools, and bring-your-own-device (BYOD) endpoints—has caused an increase in the number of network edges that need to be secured at a given branch. Both the networks themselves and the point solution security products used to protect branch infrastructure have become difficult and costly to manage.

The rise of IoT in particular—from connected office appliances, to efficient lighting and climate controls, to employee-owned personal fitness products—represents many more devices coming onto the network, often with questionable security and unreliable visibility.

Fortinet SD-Branch Solution

Fortinet delivers a broad, integrated, and automated approach to network security at an unmatched price-performance ratio. Fortinet SD-Branch seamlessly expands to the new edges of the network and delivers unparalleled performance and reliability, while at the same time providing centralized control and visibility across the entire branch attack surface.

SD-Branch consolidates networking and security capabilities into a single solution that provides seamless protection of distributed environments. It covers all critical branch exposures—from the WAN edge, to the branch access layer, to a full spectrum of endpoint devices. It extends Fortinet Secure SD-WAN capabilities across wired and wireless networks while simplifying branch infrastructure management.

Fortinet SD-Branch offers several key differentiators over competitive options. First, it enables **security-driven networking** by using the FortiGate next-generation firewall (NGFW) and broader Fortinet Security Fabric architecture to extend security throughout the network access layer. This includes Fortinet solutions like FortiAP (secure wireless access points) as well as FortiSwitch with FortiLink (secure Ethernet). The FortiNAC network access control (NAC) adds visibility, detection, and control of IoT devices—along with the added ability to track anomaly detection via traffic analysis.⁴

Fortinet SD-Branch also includes single-pane-of-glass management of security, network access, and SD-WAN. Our FortiManager solution enables extensible management at scale with zero-touch deployment. Its combined interface for security and networking helps to ease the burden on limited IT staff while minimizing TCO.

64% of IT decision-makers believe their organization's SaaS adoption is outpacing their ability to secure it.¹

While more than 25% of cyberattacks will target IoT by 2020, less than 10% of IT security budgets will be spent to protect these devices.²

FortiGate NGFW Featuring Secure SD-WAN—Recommended by NSS Labs³:

- Blocked 100% of evasions and achieved 99.9% security effectiveness
- Industry-best total cost of ownership (TCO)—10x better than the competition
- Highest quality of experience for VoIP and video applications among all solutions tested

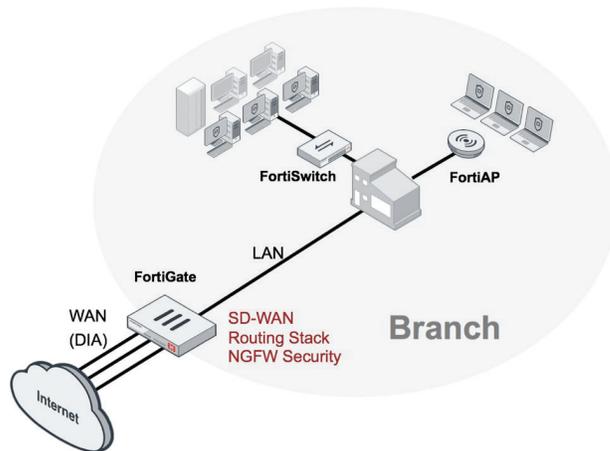


Figure 1: Fortinet SD-Branch consolidates WAN and LAN infrastructures.

Fortinet SD-Branch Benefits for Network Engineering and Operations Leaders

The lead benefits of the Fortinet SD-Branch solution come from improving security at the branch. Global policies are enforced at all WAN edges, at the branch access layer, and across all endpoint devices. It extends both security and network performance to the access layer by unifying WAN and LAN environments. It automates discovery, classification, and security of IoT devices when they seek network access. It also automatically provides anomaly detection and remediation processes based on defined business logic. Finally, it allows distributed organizations to rapidly scale their operations across new offices and geographic locations.

Fortinet SD-Branch also helps to reduce the need for onsite resources, which lower TCO. SD-Branch integrates firewalls, switches, and APs into a single, consolidated solution. Its single-pane-of-glass management capabilities combine security and network layer visibility to optimize staff efficiency while enabling proactive risk management. Zero-touch deployment features reduce the burdens associated with initial setup and business growth over time.

Defining a Security-driven Approach to Branch Networking

The continuing evolution of branch networks makes them a security challenge. Remote locations need their own defenses that conform to the unique risks they present. As a natural extension of the Fortinet Security Fabric, SD-Branch provides security-driven networking. In doing so, SD-Branch consolidates the network access layer within a secure platform that provides visibility and security to the network and all devices that connect to it.

Security-driven Networking

- Security not as an afterthought
- Built into the network from the start
- Part of an integrated platform solution

The worldwide SD-Branch market is estimated to reach **\$3.27 billion by 2023.**⁵

“The most compelling argument for SD-Branch is operational agility. IT organizations can rapidly deploy and provision a network branch-in-a-box solution for new locations.”⁶

¹ Conner Forrest, [“Businesses are adopting SaaS too fast to properly secure it,”](#) TechRepublic, April 10, 2018.

² [“25% Of Cyberattacks Will Target IoT In 2020,”](#) Retail TouchPoints, accessed March 21, 2019.

³ Nirav Shah, [“Fortinet Secure SD-WAN Gives the Performance of a Lifetime. Recommended by NSS Labs,”](#) Fortinet, August 9, 2018.

⁴ Available with FortiNAC version 8.6 release.

⁵ [“Worldwide SD-Branch \(Fixed Site, Mobile Office\) Market 2018-2023 - Market is Estimated to Reach \\$3.27 Billion,”](#) PR Newswire, August 21, 2018.

⁶ Lee Doyle, [“SD-Branch: What it is and why you’ll need it,”](#) Network World, January 23, 2018.