

SOLUTION BRIEF

Easily Deploy Fortinet Secure SD-WAN with Flexible Provisioning Options

Executive Summary

Simplifying deployment and management of SD-WAN networks is a key consideration for all organizations when evaluating a WAN edge solution. However, not all organizations will require the same approach. Smaller organizations with limited technical expertise may need a different method than large enterprises or managed service providers (MSPs). Fortinet Secure SD-WAN offers a suite of provisioning solutions to fit a wide range of user expertise and requirements.

The Fortinet operating system, FortiOS 7.2.4, introduced industry-first self-orchestration capabilities using the Fortinet Security Fabric. This powerful orchestration capability makes it easier than ever to set up and manage new SD-WAN regions. And our new purpose-built Overlay-as-a-Service (OaaS) enables lean organizations to efficiently handle setup and management through our FortiCloud cloud-hosted service. These functionalities add to our existing offerings of advanced provisioning capabilities across Fortinet platforms. These advanced provisioning capabilities include SD-WAN Overlay Orchestration to simplify and automate connectivity between sites, and Fortinet-recommended templates that offer customization to fit virtually any deployment.

SD-WAN Regions

SD-WAN regions are typically used to refer to a group of locations that need to communicate securely across the WAN. The communication is often accomplished by creating secure overlay networks across their respective public or private WAN connections. Setting up secure overlay networks may require a variety of technologies like Internet Protocol security (IPsec) and Border Gateway Protocol (BGP) to facilitate communication across the WAN.

Previously, SD-WAN region deployments relied on complicated do-it-yourself approaches to setting up these overlay networks. However, the introduction of new Fortinet provisioning tools and features simplify the process and minimize the technical expertise that was previously required.

Accelerated Secure SD-WAN Deployment

To help reduce configuration errors and IT team workload, Fortinet provides flexible deployment and provisioning options. These fit a variety of needs and accelerate the deployment of Fortinet Secure SD-WAN with minimal IT expertise. Our latest offering is built directly into FortiOS, removing the need for FortiManager. Our deployment and provisioning options include:

■ Fabric Overlay Orchestrator on FortiOS

Our unique Fabric Overlay Orchestration feature is built directly into FortiOS. This means it's now possible for devices integrated with the Fortinet Security Fabric to automatically interconnect and self-form a new SD-WAN region. In just a few clicks, these devices can share telemetry data to self-orchestrate and interconnect with SD-WAN overlays, allowing seamless connectivity between remote devices, no matter where they are located.

■ Overlay-as-a-Service

Overlay-as-a-Service is a new SaaS-based offering available in FortiOS 7.4.1 that provides SD-WAN region provisioning and monitoring directly from FortiCloud. This service includes a pair of Fortinet-owned and managed FortiGate Hubs, which can be deployed in georedundant data centers. This model provides a unique advantage in provisioning time and cost for organizations looking to quickly set up inter-site connectivity without having to purchase and manage a FortiGate Hub or FortiManager solution.



60% of organizations struggle to recruit cybersecurity talent and 52% struggle to retain qualified people.¹

■ SD-WAN Overlay Orchestration in FortiManager

With FortiManager 7.2, SD-WAN overlay templates simplify and automate the inter-site connectivity between your corporate locations. This enables you to build out large-scale redundant SD-WAN networks in minutes using the easy-to-follow, four-step process.

■ Fortinet-Recommended Templates in FortiManager

FortiManager 7.0.3 introduced Fortinet-recommended IPsec and BGP templates to facilitate the setup of new SD-WAN regions. These templates come preconfigured on FortiManager 7.0.3 and above with Fortinet best practices for BGP and IPsec provisioning of new overlay networks. This option provides alternative provisioning choices that can be customized to fit virtually any deployment.

Key benefits of each option

Each of the above options are intended to support specific environments. The key benefits of each are:

- Fabric Overlay Orchestrator delivers the easiest setup in the industry with no licensing cost, no FortiManager required, and minimal technical expertise.
- Overlay-as-a-Service is a cloud-hosted service that facilitates the rapid deployment and seamless inter-connection of locations.
- SD-WAN Overlay Orchestration includes an intuitive GUI designed for users of all technical expertise levels and rapid deployment time compared to competitors.
- Fortinet-Recommended Templates enable full control and powerful templates to customize any complex environment.

Parameter	Fabric Overlay Orchestration	Overlay-as-a-Service	SD-WAN Overlay Orchestration	Fortinet-Recommended Templates
Target Environment	Small	Small/Medium	Medium to large	Custom or very large
Scalability	Low	Medium	High	High
Requires FortiManager	No	No	Yes	Yes
Supports SASE Secure Private Access	Yes	Yes	Yes	Yes
Centralized SD-WAN Rules	No	No	Yes	Yes

Table 1: Comparison of the provisioning options

Summary

Network environments vary greatly between organizations so one management tool does not fit all. In addition, many organizations do not have fully staffed IT teams or IT teams with a great deal of experience and technical expertise. With flexible management options for Fortinet Secure SD-WAN management, we offer solutions to fit the needs of every organization.

¹ ["Cybersecurity Skills Gap Global Research Report,"](#) Fortinet, April 2022.