

Improve Digital Experience with Advanced SD-WAN Monitoring

Business success today depends on application uptime and digital experience. With digital transformation, however, applications may no longer run in environments or over networks your IT operations teams control. But those teams must still ensure optimal application uptime and digital experience, whether your applications are SaaS-based, hosted in the cloud, or reside in a data center.

Digital experience can be affected by many variables, including the performance of end-user devices, Wi-Fi, LANs, WANs, ISPs, cloud service providers, infrastructure, applications, and more. Early insight into performance degradation of any variable in the chain can spell the difference between addressing an issue before your business is impacted or suffering the loss of employee productivity, customer satisfaction, and revenue.

End-to-End Performance Monitoring

Your operations team must resolve issues quickly to minimize their business impact. Granular visibility must provide insight into your network's full stack, as well as application-layer performance, to quickly pinpoint the nature of a technical issue. It must also supply incident data to engage the responsible party so they can take ownership and proactively address the issue.

[FortiMonitor](#) is Fortinet's holistic SaaS-based digital experience and network performance monitoring solution. It helps operations teams address monitoring challenges and consolidates monitoring and incident management.

FortiMonitor Integration with Fortinet Secure SD-WAN

One of the significant challenges organizations face with an SD-WAN solution in place is that many of the components needed for managing operations are isolated. FortiMonitor addresses these issues by combining [digital experience monitoring](#) (DEM) and FortiOS SD-WAN monitoring capabilities into a unified solution that enables you to:

- Gain better end-to-end visibility of application performance over your SD-WAN deployments
- Efficiently pinpoint the root cause of performance issues and respond to incidents
- Better meet end-to-end application performance objectives

Granular Network and Application-Layer Visibility

Solving a problem early in the event cycle ensures uptime and digital experience. Proactive insight into performance degradation enables a response before your business can be impacted. FortiMonitor augments and complements Fortinet Secure SD-WAN monitoring with per-application synthetic transaction monitoring over SD-WAN underlays. In addition to monitoring SD-WAN link level metrics, such as jitter, packet loss, latency, and bandwidth, FortiMonitor can execute continuous, application-specific, and synthetic tests over all available SD-WAN links.

FortiMonitor synthetic checks simulate a connection to an application and provide real-time metrics for critical network and application-layer performance indicators. This adds visibility into DNS lookup time, TCP connection time (NTT), TLS handshake time (if applicable), and time-to-first-byte (SRT), in addition to your traditional SD-WAN monitoring metrics (jitter, packet loss, and latency), which are critical to distinguishing server response issues and total transfer time.

These additional metrics provide greater visibility into user experience overall available SD-WAN underlays, including visibility into network and application-layer performance. This allows your operations team to gain early insight into performance degradation and proactively address those issues before your business is impacted.

Performance

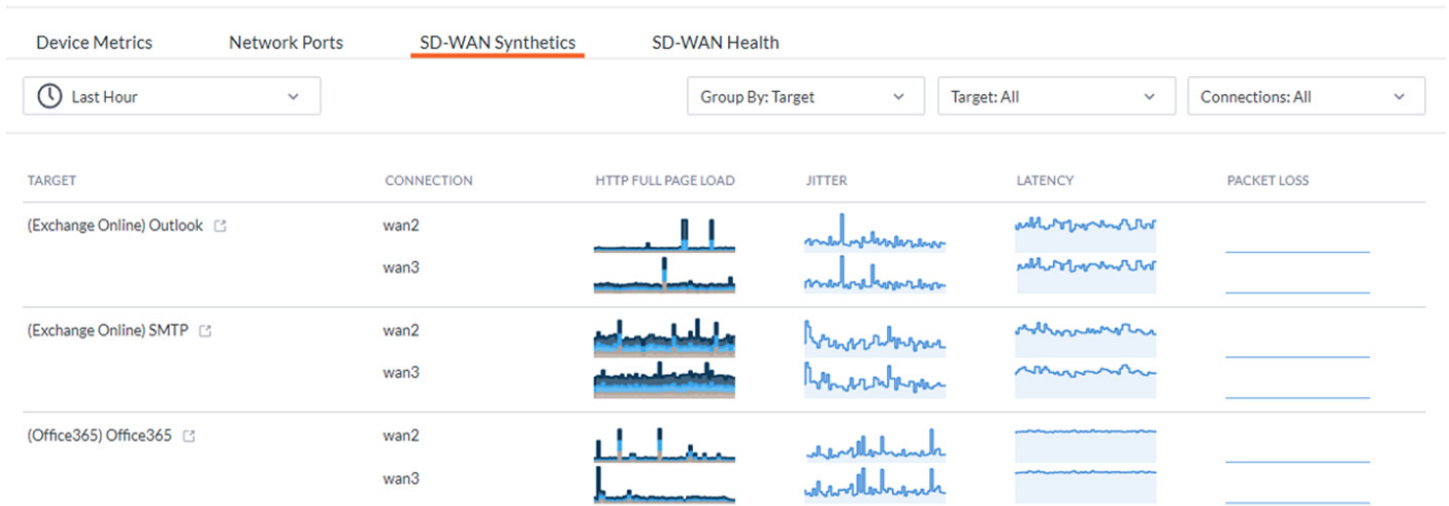


Figure 1: Example of FortiMonitor synthetic checks that provide real-time monitoring metrics

Actionable Insights

It's vital to your business that your operations team can efficiently pinpoint the root causes of issues and respond appropriately. Application performance problems can result from issues related to the network, the internet, a cloud service provider, the application, or the underlying infrastructure an application runs on. And increasingly, your operations teams may not control the source of the issue.

Beyond helping your operations team proactively identify performance degradation and system problems, the combined network and application-layer performance visibility provided by FortiMonitor can quickly capture all the incident data needed to demonstrate the nature of an issue to the responsible party. And its synthetic checks provide application-layer performance metrics that will help them more quickly diagnose issues when correlated with network metrics. For example, server response time can be compared to [network latency](#) to determine the root cause of poor application performance.



FortiMonitor Advanced SD-WAN Monitoring Eliminates Blind Spots

Running an SD-WAN solution over a distributed network using point solutions can create blind spots, making performance issues difficult or impossible to assess. FortiMonitor eliminates those blind spots by providing end-to-end performance monitoring capabilities from multiple vantage points from a single platform. With its capabilities of providing network and application-layer monitoring over SD-WAN links, FortiMonitor enables your IT team to:

- Proactively identify performance degradation
- More efficiently troubleshoot issues
- Reduce resolution times
- Better meet application SLAs

FortiMonitor enables your IT team to efficiently observe, correlate, and respond to issues in your network, your service provider's environment, on a device, or due to issues with applications, whether deployed in a cloud, on-premises, or hybrid environment.

[Learn more](#) about how FortiMonitor enables end-to-end visibility into the overall user experience.



www.fortinet.com