

Connect to Microsoft Azure Virtual WAN with VMware SD-WAN by VeloCloud



Organizations need turnkey networking solutions that are easy to deploy, use, and manage, and that offer high availability and automatically scale to maximize the value of moving to the cloud. Through this collaboration, Microsoft and VMware offer large-scale branch connectivity in a simple, secure, and unified manner to Microsoft customers.

Overview

As the migration to the cloud continues, and organizations use more software-as-a-service (SaaS) and infrastructure-as-a-service (IaaS) offerings from Microsoft on the Azure cloud, they need reliable, scalable, secure, and optimized access from their branch office locations to their cloud-hosted applications and services.

Legacy connectivity solutions are complex, time consuming to deploy and manage, and often lack enterprise-grade performance and security. Limited wide area network (WAN) bandwidth, poor network quality, and the high cost of private links impact productivity at branch office locations.

To provide optimized connections over the WAN to resources on Azure, Microsoft offers Azure Virtual WAN globally. By connecting to Azure Virtual WAN, traffic from branch office and remote locations can be connected to resources on Azure with intelligent routing over the private WAN to provide the best network performance.

VMware and Microsoft offer a joint solution that improves connectivity to Azure Virtual WAN from branch office and remote locations. VMware SD-WAN™ by VeloCloud® enables customers to build networks for optimized cloud access by creating a virtual cloud network architecture that connects all their locations to Azure.

Joint customers leverage Microsoft's global vWAN, which spans 171 countries and more than 8,000 ISP peering, together with VMware SD-WAN to greatly simplify configuration and last-mile Internet connectivity, and ensure application availability and performance.

This solution overview examines the various VMware SD-WAN use cases for connecting to Azure Virtual WAN.

Ensuring network performance

VMware SD-WAN aggregates all types of WAN connections—including Internet broadband, MPLS private lines, and wireless LTE—from branch offices and remote locations. It performs dynamic application-aware per-packet link steering and path conditioning to deliver enterprise-class network quality and performance for the most demanding applications.

Cloud is about agility, availability and speed. It's about making sure the right resources are delivered just in time without fail to drive the best possible business outcomes. VMware SD-WAN, as part of a virtual cloud network architecture, connects and protects applications, data, and users wherever they are.

VMware SD-WAN enables enterprises to rapidly and cost-effectively leverage world-class SD-WAN capabilities when connecting to Microsoft Azure Virtual WAN, including traffic optimization, link remediation, security, and simplified operations. This ensures higher application performance and an improved user experience.

The VMware SD-WAN Orchestrator provides a management and monitoring portal that greatly simplifies deployment efforts. Instead of traditional methods that require typing lines of CLI box by box, the VMware SD-WAN Orchestrator requires just a few mouse clicks on the user interface of its central console. This then distributes configurations to all VMware SD-WAN Edge devices at branch offices and remote sites.

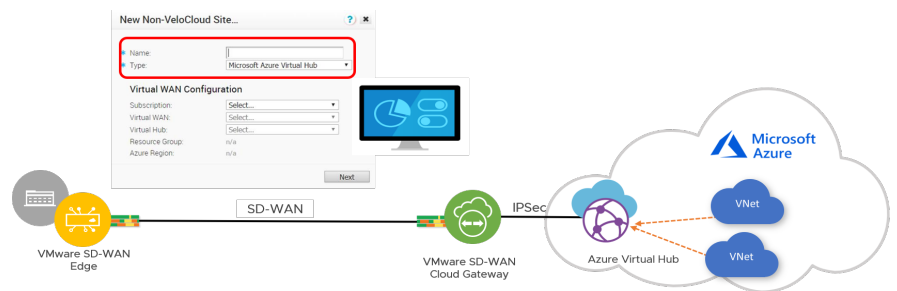


FIGURE 1: VMware SD-WAN Edge to Gateway to Azure Virtual WAN hub.

Extending VMware SD-WAN to Azure

Microsoft's Azure Virtual WAN service provides connectivity to cloud-hosted applications and services on Microsoft Azure. Using Azure Virtual WAN, organizations can connect networking devices in their remote locations to communicate with resources on Azure over high-performance links on the Microsoft global private network. Microsoft's Azure Virtual WAN accelerates content and application delivery through optimized routes within the Azure cloud, improving application performance and user experience.

Connectivity to Azure Virtual WAN over the last mile can be enhanced by using VMware SD-WAN to provide better control over and visibility into network connections and link remediation. This ensures reliable, high-performing access. VMware SD-WAN Gateways are deployed at interconnect points around the world to provide scalability, redundancy, and flexibility in traffic steering. VMware SD-WAN Gateways optimize connections to Azure from branch locations and enable delivery of services from the cloud.

VMware SD-WAN has been integrated with Microsoft Azure Virtual WAN to provide a secure and reliable connection for organizations as they move to SaaS and IaaS offerings on the Azure cloud.

Offering a simple design with easy deployment

With the integration of VMware SD-WAN and Azure Virtual WAN, organizations can experience an easy deployment that doesn't require changes to their networks. Customers benefit from the simplified network design and reduced complexity by using custom configuration templates for their branch office devices.

Through this combined solution with Microsoft, IT organizations can automate connectivity into Microsoft cloud environments as new branches get added through VMware SD-WAN—without having to go through manual complex routing. This fundamentally changes the economics and operating model for building global, highly available, and distributed networks.

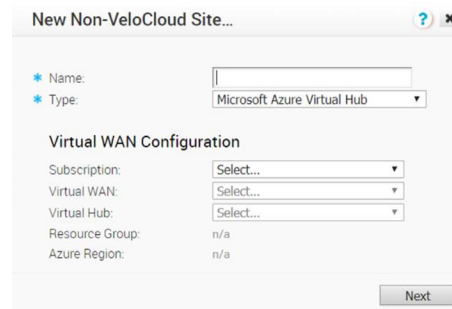


FIGURE 2: Creating a connection to a vNet hub via the VMware SD-WAN Orchestrator GUI.

Key benefits:

- VMware SD-WAN delivers last-mile secure, optimized, and reliable connectivity to Azure Virtual WAN from branch office locations.
- Customers with workloads in Azure get simple-to-deploy, automated, high-performance connectivity from their remote locations.
- Customers no longer have to redesign their network to access Azure workloads; they simply leverage the VMware SD-WAN overlay that automatically connects into Microsoft Azure Virtual WAN.
- Customers deploy a globally distributed network of VMware SD-WAN Gateways.

Enabling seamless cloud migration

As customers plan their cloud strategy and migrate workloads to Azure, secure and reliable connectivity into Azure is necessary. VMware has partnered with Microsoft to optimize last-mile access to Azure.

Connecting via a VMware SD-WAN Gateway

VMware SD-WAN has a globally distributed network of managed gateways that interconnect with Microsoft Azure Virtual WAN. This network brings SD-WAN optimized branch office traffic to Azure over the Microsoft virtual network (vNet).

With this deployment method, traffic from a VMware SD-WAN Edge in a remote location is terminated on the VMware SD-WAN Gateway hosted in a network interconnect point, then routed to Microsoft Azure Virtual WAN and on to Azure.

The VMware SD-WAN Gateway provides optimized branch-office connectivity to the entire suite of Microsoft SaaS offerings, including Bing, Dynamics 365, Office 365, and Xbox on Azure.

Using VMware SD-WAN Orchestrators and Edges

For every deployment, orchestration, management, and monitoring are critical aspects. VMware SD-WAN Orchestrators provide users with simple configuration and management of their VMware SD-WAN Edge devices.

Summary

This combined solution from VMware and Microsoft enables organizations—across all industries and around the globe—to gain simple-to-deploy, secure, high-performance connectivity from branch office locations to Microsoft Azure without having to redesign their networks.

VMware SD-WAN enables enterprises to support the migration to Microsoft SaaS offerings, including Bing, Dynamics 365, Office 365, and Xbox, and to use IaaS

infrastructure on Azure to host their own applications with high performance and reliability.

Organizations can automate connectivity through VMware SD-WAN to Microsoft Azure as new branches get added. They will benefit from custom configurations that reduce complexity and automate business policy and control to ensure the best user experience.

The cloud-hosted VMware SD-WAN Orchestrator allows for ease of configuration of the VMware SD-WAN Edge devices in branch locations to Azure Virtual WAN. It provides the capability to apply business policy-based application prioritization for traffic as well as the ability to directly break traffic out from the branch to Azure without backhauling using costly links through the enterprise data center.

No other SD-WAN vendor offers the range of flexibility and choice of connectivity options into Azure Virtual WAN. The simple, automated deployment method allows customers to scale across thousands of branches easily and reach their goals of migrating to the Azure cloud.

For more information see, www.velocloud.com.