VMware SD-WAN with Transatel

Optimizing failover flexibility and reliability with LTE

With working from home or anywhere outside of an organization's premises becoming a norm, the main concern that keeps IT teams up at night is providing connectivity and experience at least as good as what the employees get within a company's infrastructure.

Employees working outside of enterprise premises typically use a broadband connection. On the one hand, these consumer-grade connections provide accessibility and cost benefits. On the other hand, they are prone to latency and poor quality, and often experience poor service and even brownouts, hampering application performance and user productivity. Inconsistent call quality and blurry videos are among the key issues employees face with poor networks.

VMware SD-WAN

VMware SD-WAN™ is a software-defined WAN overlay to ensure high-quality application performance and availability for end users while lowering networking costs. It is a cloud-delivered, transport-agnostic architecture supporting and optimizing any WAN link or combination of links. VMware SD-WAN includes a distributed network of VMware SD-WAN Cloud Gateways, a cloud-based VMware SD-WAN Orchestrator, and a branch platform, the VMware SD-WAN Edge.
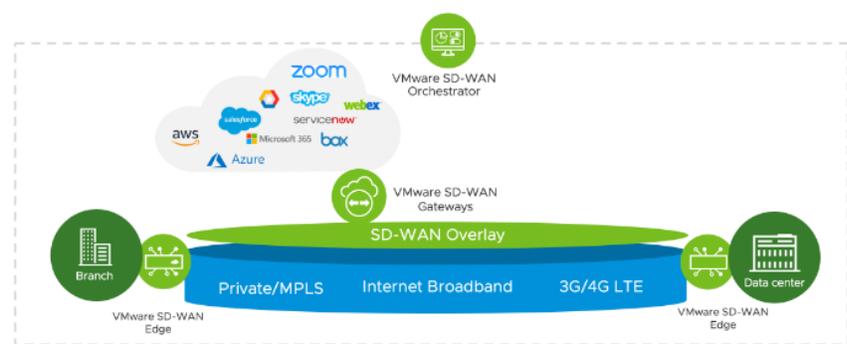

FIGURE 1: Overview of VMware SD-WAN

VMware SD-WAN Edge expands WAN bandwidth by logically combining WAN links to offer the capacity that individual applications need. These Edge devices differentiate traffic and apply customizable business policy to prioritize mission-critical applications. The VMware SD-WAN Edge devices and the VMware SD-WAN Gateways communicate with each other to deliver optimized connectivity between them. A VMware SD-WAN Edge automatically joins the SD-WAN fabric once powered on and connected to the Internet.

"By adding Transatel's SIM card to their Edge, VMware's customers will be able to connect to the best cellular networks available wherever they are."

JACQUES BONNIFAY
CEO
TRANSATEL

VMware SD-WAN Orchestrator pushes business policies to the network Edges as soon as the Edge connects to the Internet. It can seamlessly update the application recognition engine on thousands of VMware SD-WAN Edges at once. The Orchestrator is a cloud-hosted or on-premises, secure, and scalable web-based central management tool that provides simplified configuration, provisioning, monitoring, fault management, logging, and reporting. It also offers a single pane of glass for real time insights into network and application performance.

VMware SD-WAN Gateways, unique to the VMware SD-WAN cloud infrastructure, are strategically deployed and highly available. These on-ramps to the cloud offer the added benefit of Dynamic Multipath Optimization™ (DMPO) technology for real-time monitoring, dynamic traffic steering, and link remediation on the underlying single or multiple public WAN connections without adding inefficiency of the network hairpin effect.

VMware SD-WAN enables enterprises to support application growth, network agility, visibility, and simplified implementation while delivering high-performance, reliable access to applications deployed on and off cloud.

Value addition with Transatel

With Transatel's LTE/5G connectivity and VMware SD-WAN, businesses can offer their employees—working from home or remotely—a solution to provide optimal connectivity to applications, improving user experience and productivity. One of the most common use cases is reliability for real-time communication and collaboration tools such as Zoom.

VMware SD-WAN provides real-time monitoring, remediates poor connectivity conditions, and steers traffic between broadband and Transatel's LTE/5G connections to continuously leverage the best path for a reliable experience.

Whenever the home's broadband access is interrupted or browned-out, VMware SD-WAN can steer traffic on to Transatel's secure LTE/5G link to transport traffic, delivering a continuous service.

	DSL offload over 4G Pro use only - without Netflix & co	DSL with 4G backup Pro use only - without Netflix & co
Use case Commercial offer	**50GB** Before bandwidth cap	**Unlimited Data** Insurance business model
% active SIM cards	50%	50%
% bundle usage	25%	60%
Average user per SIM card	**6.3GB**	**1.5GB**
% exhausted bundles	5%	5%

FIGURE 2: Transatel connectivity plans for prosumers (business applications)

As of February 2021, the integrated service is available in the United States, the United Kingdom, France, Belgium, Italy, Spain, the Netherlands, and Switzerland.

vmware®

ABOUT TRANSATEL

Now a member company of NTT Group, Transatel offers an unparalleled, eSIM-capable, cellular solution for global and secure IoT connectivity. For more information about Transatel, please visit *www.transatel.com*

RELATED RESOURCES

- *Getting Started with Edge 510 LTE*
- *VMware SD-WAN Edge Datasheet*
- *Deploy VMware SD-WAN in 2 minutes!*
- *VMware SD-WAN Solution Overview*

VMware SD-WAN Edge 510 LTE

VMware recommends the VMware SD-WAN Edge 510-LTE to connect to Transatel cellular. The Edge comes in two models: VMware SD-WAN Edge 510LTE-AP and the VMware SD-WAN Edge 510LTE-NAEU.Specifications are in the table below.

3G/4G/LTE CAPABILITIES	510-LTE-NAEU	510-LTE-AP
Modem	Sierra Wireless EM7455	Sierra Wireless EM7430
Geography	North America and Europe	Asia, ANZ, LATAM
LTE category	Cat-6	
Carrier aggregation	Yes	
3G fallback	HSPA+	
SIM slots	2 (only 1 active)	
LTE bands	1, 2, 3, 4, 5, 7, 8, 12, 13, 20, 25, 26, 29, 30, 41	1, 3, 5, 7, 8, 11, 18, 19, 21, 28, 38, 39, 40, 41
Antennas	Main and AUX (via SMA connectors)	
Theoretical speeds	300 M down/50 up	

FIGURE 3: VMware SD-WAN Edge 510 LTE

Reliable connectivity to work from anywhere

VMware SD-WAN with Transatel LTE/5G service installed can meet requirements to quickly bring up stores, including emergency pop-up sites and other use cases that require fast enablement when there is no wired connectivity available. The solution can also provide optimal connectivity for employees working from outside their organization's premises.

For more information on Transatel LTE, please visit *www.transatel.com/partners/vmware* or contact a Transatel representative at *vmware@transatel.com*.