A well-known hospitality company with over 500 sites significantly simplifies management and configuration of their network by leveraging a cloud-hosted SD-WAN solution. They boost the efficiency of firewall service delivery, streamline traffic steering configurations, and ensure 100%-uptime delivery of voice with excellent MOS scores.

**WAN Challenges**

This large North American brand-name hospitality company has more than 500 sites, MPLS-connected, with regional hub locations providing firewall services and Internet access.

All branch office traffic was backhauled via the data center for firewall services, but this is wasteful of bandwidth and the company desired instead to have firewall services delivered closer to the branch offices out of the regional hub sites. While this change would significantly improve traffic efficiency for firewall services, the company was reticent to add the complexity of installing yet another on-premise controller to manage this configuration, or to use their existing management solution that required thousands of lines of CLI specifying PBR (policy-based routing) rules to direct traffic to the appropriate regional hub site.

Voice was also critical to this customer with zero tolerance for voice going down. While all sites have MPLS connectivity with a 99.9% availability SLA, they realized that this measurement was not sufficient to guarantee or monitor the required voice uptime and quality. To see how their voice traffic actually behaved on the links, they collected MOS scores on an ongoing basis, and these numbers were not where they needed them to be.

**SD-WAN Solution Choices**

A cloud-delivered, hosted management SD-WAN solution—the orchestrator and controller hosted in the cloud while all data traffic continues to flow on-premise—met their dual needs of simplified management of configurations (no CLI or administration of complex, site-specific PBR rules), and enabling them to implement the network changes to steer branch office traffic to regional hub sites for firewall services instead of to the data center, thereby freeing up bandwidth. They leveraged the cloud-delivered SD-WAN business-quality framework to implement the rules for all the sites with just a few clicks and policy changes.
At the branch office, an Internet link was added to the already-established MPLS service, and with the transport-independent VMware SD-WAN™ by VeloCloud® solution they gained the ability to guarantee voice traffic uptime with sub-second black-out/brown-out protection. If a problem should occur with a voice call on an MPLS link, the SD-WAN solution moves the call seamlessly to the Internet link without any downtime or impact to the MOS score of the active call. VMware SD-WAN’s unique real-time link performance awareness, on-demand remediation, per-packet steering, and packet replication technologies ensure superior MOS scores on all calls.

The company started an SD-WAN trial with five sites, captured and compared the before-and-after MOS scores, and based on the strength of these results deployed the solution across all 500+ sites.

Benefits and Results
This company realized the following benefits from choosing the VMware SD-WAN solution:

• Leveraged a cloud-hosted solution, obviating the need to install and manage their own on-premise controllers and orchestrator.
• Ensured that they were well-positioned for a smooth migration to subsequent cloud applications and services.
• Dramatically simplified their PBR rules—and eliminated the need for CLI configuration—to steer traffic efficiently and correctly to regional firewall services.
• Increased data center bandwidth efficiency due to no longer having to backhaul branch office traffic via the data center to the regional hub-site firewall.
• Guaranteed the required 100% uptime for voice applications.
• Maintained excellent MOS scores on all voice calls, regardless of occasional glitches in link availability or quality.
• Gained increased visibility into real-time application performance across links.