

USING SD-WAN TO EXPAND SERVICES AND THE GLOBAL FOOTPRINT, AND SUPPORT A REMOTE WORKFORCE

ABC

WORLDWIDE ORGANIZATION

OFFICES IN US (HQ), EUROPE, AND JAPAN

VERTICAL

BUSINESS SERVICES WITH FINANCIAL FOCUS

OFFICES

THREE PRIMARY OFFICES/BUILDINGS
SIX REGIONALLY LOCATED OFFICES

WORKFORCE

12,000 EMPLOYEES

10% - 15% OF WORKFORCE ARE REMOTE
(WORK OUT OF HOME OFFICES)

Problem Situation

ABC Inc. is a worldwide organization that currently employs nearly 12,000 people globally, offering business services to its customers all over the world. To service a customer base that includes a mix of large enterprise, SMBs, and end customers, it relies heavily on all aspects of communication including email, video, interactive chat, and the phone. The increase in demand for its services and the ability to meet those demands efficiently requires a robust network that not only allows all employees to quickly access customer data but to also ensure that all communication channels are online and available at all times with excellent quality of service (QoS).

With these goals in mind and a plan to expand services, ABC Inc. realized that its existing network infrastructure (MPLS at primary offices, Ethernet for smaller offices, and a mix of DSL, wireless, and general broadband for home offices) would not be sufficient to support existing and long-term needs. Additionally, with a large and growing percentage of its employees working remotely and increasing dependency on cloud-based applications that must be accessed quickly and securely, ABC Inc. needed a solution that was flexible, scalable, and robust.

Solution Selection and Implementation:

VMware SD-WAN™ by VeloCloud®

Following extensive research of network-enabling alternatives, ABC Inc. short-listed VMware SD-WAN by VeloCloud and proceeded to evaluate the technology against competitors to determine the best fit. Through a Proof of Concept (POC), the IT team deployed VMware SD-WAN Edges at a primary office, at a smaller office, and with a ten-person remote worker test group. The NSX SD-WAN Edges leveraged VMware SD-WAN Gateways that were co-located with the cloud applications accessed by the workforce as well as connected to the centralized VMware SD-WAN Orchestrator for full network control and visibility.

The POC proved to be extremely successful and exceeded expectations, leading ABC Inc. to initiate a full roll out of VMware SD-WAN across all properties. The simplicity of the solution and the ability to use zero touch operations to automatically configure and activate each VMware SD-WAN Edge, provided ABC Inc. with the freedom and flexibility to manage the full roll out using only its internal, dedicated IT staff.

Using a phased approach, ABC Inc. first deployed SD-WAN over the top (OTT) of its existing transport options (MPLS for example) in its primary offices, then its smaller offices, and finally to its large remote work force. The entire deployment was complete in two months and as its existing MPLS and Ethernet contracts reached expiration, ABC Inc. was able to discontinue their usage and rely entirely on SD-WAN using inexpensive broadband, DSL, and 4G connectivity.

“ABC Inc. has a very small IT team for a company of our size and has traditionally depended on third parties to manage implementations and deployments. But now with VMware SD-WAN, installations are so easy even our non-technical employees can do it in their own homes and connect directly to the corporate network.”

CTO
ABC INC.

“VMware SD-WAN is enabling us to expand our business, hire the best and brightest, and support all of our employees and customers so that user satisfaction becomes a key differentiator for us.”

CTO
ABC INC.

The zero touch deployment functionality of the VMware SD-WAN solution enabled the IT team to simply pre-configure all VMware SD-WAN Edges that would be used in the home office scenario, ship them to employees at their homes, and with a 30 minute training video have them up and running quickly and easily without depending on a highly trained and expensive IT resource.

Network-wide IP Phone System

Using SD-WAN, ABC Inc. was able to migrate to a VoIP phone system from its existing legacy infrastructure. With templates built-in to each VMware SD-WAN Edge, the IT team was able to leverage SD-WAN to behave as switches and manage the QoS from a centralized location. In addition, using the unique VMware SD-WAN Dynamic Multi-Path Optimization™ (DMPO) functionality, all voice and video traffic was prioritized over other traffic so that dropped calls were completely mitigated, regardless of the transport used and location in which it was used. DMPO improved the instance of packet loss by leveraging multiple links for sharing application performance and automatically profiles all links by measuring the performance and capacity of each and steers business critical applications the best performing link at that moment in time to optimize delivery.

Robust Analytics and Diagnostics

With VMware SD-WAN, ABC Inc. gained complete visibility into its entire network, including the VMware SD-WAN Edges, VMware SD-WAN Gateways, internet connections, and each office location, including remote home offices. This new visibility allowed ABC Inc. to very quickly identify any and all issues with carriers, which led to a lot less finger pointing as to where the problem originated. Complementing the increased visibility was the robust analytics, reporting, and diagnostics that the platform provided, enabling the IT team to set criteria, measure the impact of changes and new policies, and easily quantify the results.

Quantifying the Change

Following the implementation of VMware SD-WAN, ABC Inc. was able to realize an immediate 55% savings while introducing redundancy across the network for data and voice, change from an active-passive to active-active network, and introduce packet-by-packet prioritization. These were not possible with the previous MPLS and legacy network.

Enabling Corporate Future Growth Plans

ABC Inc. fully expects VMware SD-WAN to enable its future network and corporate growth plans. This includes an initiative to run more business services and applications in the cloud, to hire the best and brightest talents and allow them to work remotely if required, expand its footprint into formerly untapped regions, and continue to lower costs while maximizing bandwidth and customer satisfaction.

