Expansion of Global Network with SD-WAN

A prestigious manufacturing company employing over 7,500 staff at approximately 80 locations across six continents was grappling with an existing infrastructure, primarily built over the years in isolated silos. While this diversified infrastructure was able to tackle individual challenges at each location, it became increasingly complex to maintain. As a result, they engaged comdivision to design an IT environment that would be future-proof, secure, and easy to manage.

In analysing the existing sites, services, data centres, and connections, comdivision architects identified several challenges to be addressed to realise a truly multi-cloud and edge-capable IT architecture. The primary goal was to consolidate the data centres into a strategically conceived combination of on-premises and cloud infrastructure covering America, EMEA, and APAC.

The challenge

To successfully transition to the new data centre and location concept, they first needed to address several central issues with their existing SD-WAN infrastructure:

- The current SD-WAN did not provide comprehensive connectivity at each location, posing a significant problem given the company’s need to fully network all sites, not just partially
- The company needed to extract the maximum potential from each available internet connection, which had previously been impossible
- The transition phase required a segmentation of the new and old network, with the ability to enable dedicated and secure traffic between these segments
- Regulation of traffic on edge devices needed to be optimised
- The customer required settings on each SD-WAN appliance to enable and secure traffic to and from various locations, and the possibility to...
add third-party VNF security to the same device, especially for smaller sites
- Connections had to be established to the Horizon Cloud Datacenter with Horizon on Azure and the Azure VMware solution, which operates on three to four continents

These challenges informed the design for the future-proof, secure, and easy-to-manage IT environment to be created.

the solution

With these and several other requirements, comdivision developed a cd:managed SD-WAN offering, providing a managed VeloCloud SD-WAN environment globally. In addition, virtual VeloCloud SD-WAN appliances were installed in the Azure data centres, with administrators still having access via the orchestrator to resolve issues and support their internal customers and networks.

Given the client’s time pressure to introduce the new VeloCloud SD-WAN solution, comdivision commenced the global implementation of virtual appliances on ESX hosts at key locations. A team of consultants was deployed to remotely support the IT staff at various sites. Yves Sandfort, CEO of comdivision, flew to the UK to set up a VeloCloud appliance. On the same day, when a problem arose in Singapore, Sascha Schwunk, Lead Architect on this project, travelled to Singapore and established a connection between the Singapore and Malaysia sites with the new VeloCloud SD-WAN environment.

the result

A secure and future-oriented IT environment was created to meet the complex challenges the client faced. A global SD-WAN solution was implemented, providing two separate and secure network segments at each location. This solution was endorsed by security officers and met all security settings and regulations required for connections between various sites and even to cloud data centres.

The newly designed VeloCloud SD-WAN infrastructure provided comprehensive connectivity at all locations, effectively utilising every available internet connection. Smaller sites were further supported by the integration of VNF security features directly onto the SD-WAN appliance, negating the need for additional firewall clusters.

solution

comdivision implemented a global SD-WAN solution that optimised connectivity, security, and cost-efficiency at all locations, enabling a seamless transition to their new IT infrastructure.

business benefits

The client greatly benefited from the implementation of the global SD-WAN solution and observed enhanced connectivity and increased security at all locations. The solution proved to be cost-effective and easy to manage, facilitating a smooth transition to the new system and ensuring the necessary scalability for future growth.

"With these journeys, comdivision has demonstrated they are willing to go the extra mile for their clients’ success!"

Customer's CIO
Through rapid global implementation and a robust remote support offering, comdivision not only resolved immediate concerns but also facilitated a smooth transition to their new data centre and location concept. This has resulted in a more cost-efficient, reliable, and manageable IT environment.

Would you like more details about this or other projects by comdivision? Please contact us by email at info@comdivision.com, by phone at +49 251 703839 0, or check out more case studies at https://www.comdivision.com/cd-solutions/software-defined-datacenter#Case-Study-Section.