

Customer Success Story Global agricultural merchant successfully deploys global SD-WAN in China

A leading agricultural merchant faced the challenge of navigating complex regulatory environments in China when it was rolling out its global SD-WAN and Internet network. It was also working with multiple Internet service providers and deploying multiple SD-WANs in different regions, resulting in a lack of visibility across its global infrastructure. To address these issues, the company leveraged Singtel's deep local knowledge and its SD-WAN and global Internet service to simplify infrastructure deployment and management.

Executive Summary

Company Global agricultural merchant

Industry Agriculture

Business Challenges

- Dealing with highly-regulated environments
- Complex connectivity requirements including integration with legacy systems
- Handing multiple SD-WAN deployments across different providers
- Ensuring security compliance between edge and public cloud
- Limited visibility into global infrastructure

Singtel solutions

- Managed SD-WAN (Secure SD- WAN, SD-WAN gateway and co-managed SD-WAN)
- Managed CPE (Firewall, LAN, SD-WAN)
- Global Internet
- ConnectPlus IP VPN

Outcomes

- Successful migration of cloud workloads in highly-regulated markets
- Simplified SD-WAN deployment and management with integrated cloud connectivity and security solutions
- Improved network visibility across the Internet and public cloud

Customer Success Story: Global agricultural merchant

About the Singtel customer

The Singtel customer is a leading merchant and processor of agricultural goods whose activities span the entire value chain for key business lines including coffee, cotton, grains and oilseeds, juice, rice and sugar. The company, which was founded in 1851, is also involved in international shipping and finance. It is active in over 100 countries and employs about 17,000 people worldwide.

Challenges

1) Dealing with complicated regulatory environments

While rolling out its global SD-WAN and Internet network, the merchant faced difficulties navigating the regulatory environment in China. Having sites in the country made it more challenging when migrating workloads to the public cloud. The company encountered network issues and application performance challenges, and needed to ensure security compliance between the edge and public cloud.

2) Complex connectivity requirements including integration with legacy systems

With sites spanning Asia, Europe, the United States and Latin America, the merchant faced problems trying to replicate its SD-WAN deployment and ensure consistent policy configurations throughout its global network. Multiple SD-WAN interface profiles had to be created to support fully-meshed regional traffic for global host and cloud applications. The network also had to support different environments including branch offices, manufacturing plants and the merchant's data centre hub. To further complicate matters, the deployment was taking place at the same time as the company's LAN infrastructure upgrade and had to take into account integration with legacy systems.

3) Handing multiple SD-WAN deployments across different providers

From a global perspective, the merchant had to deal with the complexity of using different Internet service provider (ISP) networks and multiple SD-WANs across different regions to connect its offices. Lack of visibility into how Internet traffic was being routed across different ISPs' peering points made it difficult for the company to select the right ISP from the start.

4) Limited visibility into global infrastructure

Having disparate networks from multiple ISPs also presented a challenge in infrastructure management because the merchant had limited visibility into its global infrastructure. It had to deal with multiple service level agreements (SLAs) involving different parties, which hindered effective monitoring of network performance across its SD-WAN.

Solution

To address these challenges, the company leveraged Singtel's deep local knowledge and experience for a single point of contact to design, deploy and support its SD-WAN with a unified SLA, and to achieve better visibility into real-time network performance in complicated regulatory environments.

The underlay network is designed to address the merchant's network performance requirements. With Singtel's Global Internet service, enhanced Internet performance is delivered via the Singtel backbone through partnerships with regional ISPs. Using an Internet visibility tool, the merchant is also able to access real-time data on Internet performance and traffic paths between sites and key cloud providers.

For the overlay, a single SD-WAN solution is implemented with consistent policy configurations across the merchant's global network. Templated configurations and policies are applied to achieve consistency in network design while allowing the network to be tailored to the specific needs of each region. Standardised processes ensure that the network is deployed only after pilot site testing, with a consistent review process to ensure that the design is fit-for-purpose from the start to the go-live state.



To enhance in-country connectivity and reduce latency, SD-WAN gateways are deployed in key cities in China to provide optimal network performance from the merchant's offices to the cloud. The gateways are also integrated with Zscaler secure access service edge (SASE), a cloud-based service to secure Internet breakout with full security controls, ensuring compliance with IT and security policies.

The Singtel solution also includes co-managed customer premises equipment which gives the merchant access to self-service capabilities for improved visibility across the network. This simplifies infrastructure management and allows for performance optimisation. Singtel also provides pro-active monitoring services and ensures that the merchant receives up-to-date information on any network performance changes

Outcomes

Consistent and scalable deployments with standardised and repeatable templates

The use of standardised and repeatable site types coupled with region-specific templates makes it easy to scale the network, allowing for network growth and changes.

Smooth migration of cloud workloads in highly-regulated markets

Singtel's deep local knowledge of network policies and configurations in China enables it to deliver consistent network performance via its SD-WAN gateways in the key business cities of Beijing, Shanghai, and Guangzhou. This paves the way for smooth migration of workloads to the public cloud and optimises traffic delivery to the SASE.

Simplified deployment and management of SD-WAN, cloud connectivity and security solutions

The integration of cloud connectivity and security solutions with the SD-WAN under a single lead operator, eliminates the need to deal with multiple local ISPs, or with multiple SD-WAN brands and vendors for network deployment and management.

Improved global network visibility across the Internet and public cloud

Network tools provide real-time traffic path visibility and insights into global network performance between ISPs and public cloud, enabling the merchant to make sound decisions in ISP selection.

Consistent user experience and optimised network performance across global offices

A unified SLA and real-time visibility into network performance enable the company to improve traffic flows and optimise network and application performance across its global offices. Centralised support and a unified process for contracts and billing simplify network deployment. Singtel is Asia's leading communications technology group, providing a portfolio of services from nextgeneration communication, technology services to infotainment to both consumers and businesses. For consumers, Singtel delivers a complete and integrated suite of services, including mobile, broadband and TV. For businesses, Singtel offers a complementary array of workforce mobility solutions, data hosting, cloud, network infrastructure, analytics and cyber-security capabilities. The Group has presence in Asia, Australia and Africa and reaches over 740 million mobile customers in 21 countries. Its infrastructure and technology services for businesses span 21 countries, with more than 428 direct points of presence in 362 cities.

For more information, visit www.singtel.com Follow us on Twitter at www.twitter.com/SingtelNews and LinkedIn at www.linkedin.com/showcase/singtelenterprisesolutions

Awards

Frost & Sullivan Best Practice Awards 2021 2021 Asia-Pacific Managed SD-WAN Customer Value Leadership Award

2021 Singapore Managed Security Services Company of the Year Award

IDC MarketScape: Asia Pacific Next-Gen Telcos: Telecom Services 2021 Vendor Assessment Leaders Position (Singtel)

IDC MarketScape: Asia/Pacific Communications SP SD-WAN Managed Services 2020 Vendor Assessment Leaders Position (Singtel) Asia Communication Awards 2020 Best Enterprise Business Service (Operator) – Singtel Software-Defined Network

Telecom World Awards 2020 Best Enterprise Service – Singtel Software-Defined Network

Carrier Community Global Awards 2020 Best WAN Solution Provider



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