Embracing Digital Transformation Through SD-WAN

WHAT IS SD-WAN?

Software-Defined Wide Area Networking (SD-WAN) enables organizations to more efficiently utilize bandwidth and improve application performance, availability and visibility on their WAN.

It simplifies the delivery of WAN services to branch sites by orchestrating a range of underlying networking technologies (such as the Internet, IP VPN and LTE) for transport-agnostic connectivity, simpler deployment and central management.

Critically, it adds the intelligence to automatically adjust traffic flows between multiple links based on application and link performance. Traditional MPLS-based WAN has been the cornerstone of enterprise connectivity for the last decade. However, branch networking requirements are changing with the widespread adoption of cloud services that are connected over the Internet. In effect, businesses are driven to rely more heavily on public Internet, as opposed to private MPLS, to support their cloud-based applications, while at the same time they're constrained by decreasing IT budgets, and the need to do more with less.

The need for change and the drive towards digital network transformation is clear, with significant uptake in SD-WAN expected in the next three years. Gartner underlines this trend, noting that more than 90 percent of WAN edge infrastructure refreshes will be on SD-WAN or vCPE platforms by 2023, up from just 40 percent in 2018.¹

To meet the changing technology needs of customers, VMware and Telstra have partnered to help enterprises reduce network complexity and enable digital transformation into networks that are Cloud-ready by design. This partnership helps businesses to remove the current legacy inefficiencies that impact application performance, optimize network costs and dramatically reduce the complexities of enterprise networking.

VMware SD-WAN™ by VeloCloud®, named a Leader in Gartner's 2018 Magic Quadrant for WAN Edge Infrastructure, works in concert with Telstra's proven extensive network coverage, implementation and consulting services. This powerful combination gives access to more than 2,000 points of presence (PoPs) in more than 200 countries and territories globally, allowing businesses to connect smoothly around the world.

Working together, VMware and Telstra provide a complete, end-to-end SD-WAN solution. By enabling business agility and empowering users, VMware SD-WAN and Telstra can help improve customer loyalty, help create and maintain competitive advantage, and assist in driving revenue growth.

¹ https://www.sdxcentral.com/articles/analysis/gartner-report-highlights/2018/11/



Why Telstra and VMware?

Leading Edge Technology

Reliable, resilient and dynamic SD-WAN offering increased network visibility, and near real-time optimization, delivered across a global network.

Innovation Leadership

Thought leadership on technology and SDN innovation, coupled with a robust product development roadmap, enables new feature development and integration with existing hardware.

Global Reach

Offering a range of rapid deployment options across a global Tier-1 network, with access to more than 2,000 PoPs and connectivity in more than 200 countries and territories globally.

Network Agility

The ability to proactively address customer needs, offering the flexibility to grow, adapt and scale as the business evolves.

Channel Partnership

VMware solutions running over Telstra's network helps drive business success. VMware and Telstra have agreed to be part of a global joint model, working together to help deliver greater value for enterprise business.

VMware SD-WAN with Telstra Managed Services

VMware SD-WAN, provided by Telstra, is a pioneer in branch networking with a solution that combines the economics and flexibility of multiple WAN transports with the deployment agility of a cloud-based service. VMware SD-WAN provides a cloudready solution delivered over Telstra's global network as a comprehensive managed WAN service.

Check out https://www.velocloud.com/ for more information.

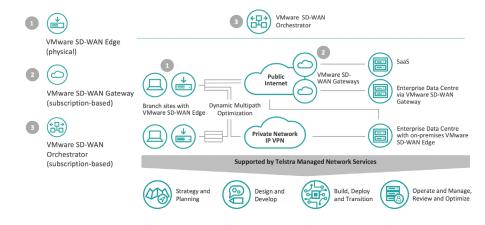


FIGURE 1. VMware SD-WAN technology consists of 3 key components.



Creating Greater Customer Value Together

Telstra and VMware have worked in partnership to ensure customers gain the greatest value from the end-to-end capabilities of their SD-WAN solution. This includes:

Strategy and planning: Consultants can assess the feasibility of your organization adopting VMware SD-WAN and outline strategies for optimizing SD-WAN within your environment.

Design and development: Experts develop a proof of concept by defining architecture principles, application portfolio and roadmap, services framework, vision, and service level needs. Solution architects and designers can help you integrate new network technologies and simplify the architecture of large and complex multi-site environments.

Build, deploy and transition: The team will help determine the value of integrating legacy network assets with new technologies, prioritize key components to integrate, highlight issues, and demonstrate the best approach to mitigate risk.

Operate and manage, review and optimize: Skilled program and project managers offer end-to-end project delivery in line with industry-standard methodologies to support the successful implementation and integration of solutions in your environment.

Customer Use Cases

Fast deployment and simplified management

Telstra has the capability to deliver and support VMware SD-WAN globally. This means that you get one supplier for your network needs, making it easier for you to optimize performance, reduce complexity and deploy new technologies that empower your organization to thrive into the future. Telstra offers greater value by integrating services, including VMware SD-WAN, to better leverage customers' existing infrastructure, along with Telstra's market-leading security offerings, all in one solution.

Cloud and Software as a Service (SaaS)

VMware SD-WAN Gateways provide optimized access to SaaS applications and Enterprise applications that are hosted in the Cloud or in Telstra data centers, improving performance and availability. The VMware SD-WAN Orchestrator, Gateways, and Controller are hosted in the Cloud or by Telstra and provided as a service, while VMware SD-WAN Edges are provided through a subscription. Customers need only have virtual edge devices deployed in their branch office locations. The VMware SD-WAN Edges are auto-provisioned, so the entire service can be deployed rapidly with minimal IT resources required and no upfront costs.



Simplified network security

Offering a view of how SD-WAN can affect the security environment, as increased dependence on the Internet at branch sites can expose the business to new threats and vulnerabilities. VMware SD-WAN sets up a simple and secure VPN. It provides outcome-driven network segmentation, service chaining to hosted security services, and can be used to provide local firewall services. In addition, Telstra managed services can review and provide advice on your security posture to help ensure your organization has the right levels of protection throughout your SD-WAN enabled network. Telstra has expertise in managing cyber risks across some of the largest and most complex networks in the Asia Pacific region. You also have the option to be supported by 24/7 monitoring via the Telstra Global Security Operations Centre and get the latest global threat intelligence.

Optimized network performance in China

Combining local delivery with international experience, Telstra's core focus on service excellence means that we work in partnership with our enterprise and carrier customers and partners to co-create the future of enterprise business in China. Telstra was the first foreign company licensed to provide connectivity and network services via the joint venture with Telstra PBS and has been operating for the longest, with a proven track record. Telstra is also one of the few foreign service providers to offer support for a VMware SD-WAN reference architecture within China, including locally hosted VMware SD-WAN Orchestrator and partner VMware SD-WAN Gateways in China.

High quality unified communications

Voice traffic is more sensitive to the quality of the network conditions than conventional web traffic. VMware SD-WAN has the capability to prioritize VoIP traffic over other traffic to ensure quality of service. Voice traffic can be directly routed between remote locations eliminating the need for backhaul through the data center, reducing latency further. VMware SD-WAN Gateways can provide direct access to cloud-hosted UCaaS managed by Telstra for better performance.



VMware SD-WAN by VeloCloud simplifies branch WAN networking by automating deployment and improving performance over private, broadband Internet and LTE links for today's increasingly distributed enterprises, as well as service providers. VeloCloud.com



Telstra is a leading telecommunications and information services company. We offer a full range of end-to-end solutions including managed network services, global connectivity, cloud, voice, colocation, and satellite solutions. We bring innovative technology, capability and talent from around the world to enable our customers to thrive. Telstraglobal.com

