



BETTER SERVING THE COMMUNITY WITH CLOUD SERVICES AND SD-WAN

MISSION AUSTRALIA

INDUSTRY
NON-PROFIT

HEADQUARTERS
AUSTRALIA

CHALLENGES

- High cost of MPLS and bandwidth support
- Lack of visibility across the network comprised of locations in major cities and very remote areas

RESULTS

- 30% savings in transport costs
- 5 times increase in bandwidth across the network
- Expanded availability of cloud services to all sites

Problem Situation

Mission Australia is a national organization that seeks to help disadvantaged children and families. Through a collection of government agencies and churches, it supports homeless shelters, and provides child care, legal services, and education. Its network consists of central corporate offices, state offices and numerous sites that include child care facilities, learning facilities and charity shops, located in either big cities or remote locations.

Each of the 210 countrywide sites were connected via MPLS, with very small capacity and low bandwidth, all backhauling to the data center and utilizing 4G for redundancy. The head office had the highest bandwidth of all locations at 100MB. The combined need to traverse the entire MPLS network to access and transmit data was both expensive and inefficient. Because it was difficult to manage and not dependable, Mission Australia's use of broadband for redundancy was inconsistent.

Mission Australia was heavily dependent on its existing service provider to maintain the MPLS and manage performance to meet corporate network demand. However, the existing management functionality provided very little visibility into the network, inhibiting the ability to clearly and quickly identify the root cause of problems and remediate when an issue occurred.

Mission Australia made a strategic decision to transform its network to support a shift to cloud applications and increase the bandwidth available to all sites. Quality of service (QoS) and ensuring the security of data transfer was imperative to the business, especially as content traversing the network was often from and between government agencies and highly confidential.

With a goal of moving its ERP system to the cloud, and more specifically into Azure and AWS, Mission Australia needed a new, dynamic, and robust system that could provide all users across 210 sites with a standard, high-quality user experience when accessing cloud applications.

Solution Selection: The Right SD-WAN

In evaluating all potential solutions, Mission Australia concluded that a software defined WAN (SD-WAN) platform was the right fit in enabling its strategic goals. However, as it began its research of potential providers, it was actively discouraged by carriers and Cisco to choose an SD-WAN implementation. However, Mission Australia was not deterred and continued to seek out a service provider that shared its forward-looking vision about adopting SD-WAN and an SD-WAN vendor that would provide the service it required to support its initiatives.

“To best serve those that cannot help themselves, our organization needs to be fully connected. SD-WAN allows all our offices, regardless of location, to be connected and work together.”

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Following a nine-month evaluation period of various vendors, Mission Australia narrowed down its SD-WAN vendor list to Viptela and VMware SD-WAN™ by VeloCloud®. Ultimately, Mission Australia chose VMware SD-WAN because of its robust platform, security ecosystem, positive reviews, and a shared long-term vision for support of evolving technology. Coevolve was chosen as the service provider partner to replace the existing MPLS structure with VMware SD-WAN and then manage the entire platform on a day-to-day basis.

Implementation: Coevolve and VMware SD-WAN

The entire roll-out of the SD-WAN platform was planned and driven by Coevolve. The scope of work included replacing all MPLS circuits and infrastructure across the LAN WAN with VMware SD-WAN. It also included replacing all telephones, switches, and mobile devices with brand new devices across all sites.

Replacing the MPLS backbone was an entire SD-WAN platform that included:

- VMware SD-WAN Orchestrator in the cloud that centralized the monitoring and management of the entire network from a single pane
- VMware SD-WAN Gateways located near cloud applications that optimized traffic across all available channels and enabled sub-second delivery
- VMware SD-WAN Edges at each branch office that optimize traffic delivery, firewall functionality for security, and routing functionality.

Additionally, Coevolve was able to utilize VMware SD-WAN's established security ecosystem, deploying integrated security cloud capabilities from Zscaler for content filtering.

The entire SD-WAN deployment process took seven to eight months, with the longest time constraint resulting from delays in obtaining broadband lines from carriers. Deployment was conducted in waves, with high value sites converted first due to complexity and anticipated cost savings.

As network conversion and deployment continued to smaller branches, learnings obtained from previous locations accelerated the time-to-live process with seven to 15 sites converting per week. Significant cost savings was realized when deployment reached the 30 microsites in the network as installation of VMware SD-WAN Edges was completed by site level resources rather than highly skilled technicians. Simplified packages included a VMware SD-WAN Edge with dongles and instructions and required very little time to connect and implement.

Best Cost Strategy: 30% Reduction

SD-WAN is substantially more cost-effective than MPLS due primarily to the cost of bandwidth and network management. With Mission Australia's focus primarily on serving its community, it ensures that its constituents receive the services they need by pledging to shift as much of its operating capital to funding activities rather than funding a costly network.

SD-WAN enables Mission Australia to leverage a continuous buying strategy to optimize bandwidth costs across various carriers. Using this strategy, Mission Australia (through Coevolve) holds a long-term position with VMware as its SD-WAN vendor and takes a short-term position on circuits by shifting carriers by branch site depending on the best available price. Mission Australia's shift to a purely Internet based SD-WAN and this best cost bandwidth buying strategy facilitated primarily through Coevolve has reduced its network costs by upwards of 30%.

“As a non-profit, we need to watch our costs so now we always buy the least costly connections available. With VMware SD-WAN it doesn't matter because they all operate as if they are the most expensive on the market.”

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Accelerated Application Access

To accelerate transactions and support a true shift to the cloud, Mission Australia moved its ERP system to AWS and Azure. With MPLS, the path to access to an IAAS network would have been nearly impossible, but with SD-WAN, the entire organization regardless of branch location is able to access the centralized system quickly, easily, and securely.

Bandwidth Increased by 5x

Mission Australia's legacy MPLS required that all network traffic backhaul to the primary data center, creating delays in data delivery and increasing the instance of packet drops if connections were unavailable or compromised. With SD-WAN, sites could connect seamlessly and quickly through Internet connections to each other or to cloud-based applications and services. Dynamic multipath optimization (DMPO) enables ideal delivery of all content across all available transport channels. Following full deployment of SD-WAN, bandwidth increased by five times what was previously available with MPLS.

Network Visibility and Management

With over 210 sites countrywide, management of the MPLS was difficult, complex, and costly. Following the Coevolve-maintained VMware SD-WAN platform, Mission Australia was able to leverage the VMware SD-WAN Orchestrator to centrally manage and monitor all aspects of the network on both the LAN and WAN side, as well as remotely remediate issues without a costly truck roll or highly trained technicians.

