

Australian energy supplier improves application performance, assures network uptime for widely dispersed business offices

Company optimizes access to data center applications and SaaS with Unity EdgeConnect SD-WAN Edge Platform, elevating productivity and quality of experience

Distributing energy— electricity, natural gas, and water—across thousands of miles, much of it remote, can be challenging. One energy supplier in Australia has taken on this challenge by transforming to a digital business to support its engineers, customer service staff, and business managers in more than 50 remote locations.

The company's digital workforce relies on modern on-premises and cloud applications, including SAP

enterprise resource planning (ERP) and Microsoft Office 365. Assuring access to these applications is paramount. However, the energy company's MPLS network lacked resilience and was vulnerable to outages, disrupting productivity and causing service delays to customers. The quality of voice and video calls was also often poor, and accessing SaaS applications required long, inefficient backhauling to the company's centralized data centers for egress

LEADING AUSTRALIAN ENERGY SUPPLIER BOOSTS APP PERFORMANCE



ASSURES NETWORK UPTIME



REDUCES DATA ON WAN through its internet gateways. Moreover, the company's legacy Riverbed WAN optimization devices were at end-of-life, making change imperative.



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 IT Infrastructure Program Manager, Leading Australian Energy Supplier

To deliver a higher quality of experience for its digital workforce, as well as improve efficiency and customer responsiveness, the energy company looked to SD-WAN. The company's IT manager, says, "We knew that a modern SD-WAN solution could address our need for greater network efficiency and resilience, and in some cases also provide the WAN optimization we needed. However, the vendor we chose would have to offer a solution that's simple to deploy and manage."

# Bringing a new level of network efficiency

The IT manager and his team issued a public tender spelling out the key requirements for the SD-WAN, including having centralized management, dynamic routing across multiple physical links, assured resilience, quality of service, built-in firewall capabilities for perimeter enforcement, and integrated WAN optimization. After conducting an intensive evaluation of responses, the team selected the Silver Peak <u>Unity EdgeConnect™</u> SD-WAN Edge Platform. The infrastructure team then quickly rolled out the EdgeConnect platform to its 50-plus business office locations across Australia. The IT manager notes, "Configuring and deploying the EdgeConnect appliances was very simple. That's the key with the Silver Peak solution—it's so easy to deploy, we didn't need assistance."

The new, business-driven SD-WAN now brings together the company's existing MPLS network with broadband, as well as 4G LTE at many sites, enabling a new level of network flexibility, application performance, and uptime assurance. The IT team also configured an initial set of business intent overlays with quality of service (QoS) policies to ensure that each class of application is guaranteed the network resources needed to meet business priorities.



### Improves application performance and quality of experience

For branch office users accessing SAP enterprise resource planning (ERP) applications running in its data centers, the energy company leverages advanced SD-WAN capabilities such as **path conditioning** and **dynamic path control** provided by the EdgeConnect platform to ensure high performance and reliability. By doing so, application performance has improved dramatically for office staff. In addition, with automated, sub-millisecond circuit failover, branch offices are assured of high uptime even in the event of circuit brownouts or outages. "Recently at one of our sites a backhoe cut through the main MPLS connection, but the office just continued on seamlessly," the IT manager shares. "Traffic failed over to the 4G LTE circuit, which comfortably handled the volume, and the users continued working without disruption. They weren't even aware there was a problem."

In addition, the company has retired its traditional edge routers, opting to use the built-in routing interoperability and stateful firewall within EdgeConnect to provide local breakout to trusted SaaS applications, including Microsoft Office 365, SharePoint, Skype for Business, and ServiceNow. The IT manager says, "Local breakout to SaaS allows us to optimize the performance and quality of experience for our end users. The ability to do this automatically and securely is another huge benefit we get from the EdgeConnect SD-WAN Edge Platform."

With the new levels of application performance and network efficiency enabled by SD-WAN, the energy company can now apply WAN optimization to just those applications that benefit from it. For example, instead of accelerating everything as in the past, IT can selectively apply the optional <u>Unity Boost™</u> WAN optimization software at larger office locations where the size and volume of data traversing the network benefits from the performance acceleration and data reduction Boost provides.

# Detailed SD-WAN insights to drive business decisions

Having transformed its IT network with the EdgeConnect SD-WAN Edge Platform, the energy company continues to refine and optimize the network based on the insights available through the centralized <u>Unity Orchestrator™</u> management interface. In the past, a highly skilled network engineer would need many hours each month to generate the kind of detailed reports that now anyone on the operations team can obtain from Orchestrator in minutes.

The IT manager says, "That single pane of glass Orchestrator gives us has opened up a whole new realm of capability that previously was hidden from our operations team. They can easily drill down to see where traffic is flowing, how it's flowing, if it's flowing as expected—and then use that information to analyze circuit utilization, better understand what our bandwidth requirements are, and bring about tangible savings to the business. Orchestrator provides a wealth of information we can use to drive business decisions. It is quite impressive."

Looking out toward the future, the energy company is now considering how to leverage SD-WAN to improve uptime and assure quality of service for its small, remote sites running critical supervisory control and data acquisition (SCADA) systems that manage its vast pipelines and electrical transmission assets. The IT manager says, "With Silver Peak continually developing new capabilities, we're excited about the amount of control we've gained over our networks, and where we could take that next."

The IT manager concludes, "Vendors will say a lot of things when pitching their solution. But actually seeing what it can do in the real world, that's when it hits home. We've seen that EdgeConnect really does what Silver Peak says it can do. It's been a great success story for us in IT."

For more information on Silver Peak and our solutions, please visit: **silver-peak.com** 



### Customer

This leading energy company operates a diverse portfolio of electricity, gas, and water transmission and distribution assets across Australia, supplying millions of households and businesses with essential energy and water services every day.

## Challenge

The energy company needed to modernize its WAN to support a digital workforce requiring fast, reliable access to both data center applications and a growing number of SaaS applications. The company's legacy MPLS network lacked resilience, so circuit outages could bring down an entire site, preventing access to applications and impacting customer services. Accessing SaaS required backhauling to the company's centralized data centers, which was slow and inefficient. The company wanted to reduce dependence on MPLS and adopt broadband and wireless technologies for greater network agility in accessing applications in the cloud and data center. As the company's Riverbed WAN optimization devices were going end of life, it also required a solution that could accelerate applications where needed.

#### Solution

After evaluating several SD-WAN vendors, the energy company selected the Unity EdgeConnect SD-WAN Edge Platform and deployed it across its 50-plus branch office locations. The SD-WAN bonds MPLS, broadband, and 4G LTE circuits, providing high-performance and highly available access to data center applications such as SAP ERP. In addition, the energy company retired its traditional routers, using the routing interoperability within EdgeConnect to enable local breakout to trusted SaaS applications, including Microsoft Office 365, SharePoint, Skype for Business, and ServiceNow. The company selectively applies Boost WAN optimization at larger office locations to handle increased data volumes, and manages its SD-WAN centrally through Orchestrator.

#### Results

- > Improves application performance dramatically
- Assures network uptime with sub-millisecond circuit failover
- Reduces data on the network with compression from Boost
- Allows branch offices to break out locally to SaaS applications
- Improves application performance and enduser quality of experience
- Supports higher productivity and more responsive service to customers
- Simplifies SD-WAN administration, freeing staff for other projects
- Provides valuable insights into application traffic to drive business decisions



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