

Case Study

Global water provider strengthens their network and improves customer service with SD-WAN

All the expertise and experience in the world can only take you so far when outdated technology and a short-handed staff start to impact customer satisfaction. One international corporation learned this the hard way and struggled to modernize before finding the right partner to help it correct course and adapt for the future.

Client: **Water and wastewater treatment solutions provider**

The client is a leading provider of water and wastewater treatment solutions that has served more than 38,000 municipal, recreational, and industrial customers from 170 offices, plants, factories throughout Australia, Canada, China, Germany, Italy, Singapore, the United Kingdom, and the United States.

Challenge	CBTS solution	Results
<ul style="list-style-type: none"> The client required greater performance and resilience in its existing network. 	<ul style="list-style-type: none"> CBTS worked closely with the client to implement a customized SD-WAN solution. 	<ul style="list-style-type: none"> Through its new SD-WAN architecture, the client can now control deployments through a single interface.
<ul style="list-style-type: none"> A small, understaffed IT team exacerbated the outdated network's issues. 	<ul style="list-style-type: none"> This network transformation included features such as security assessment, dedicated project management, and much more. 	<ul style="list-style-type: none"> CBTS is also able to manage the client's connectivity with centralized project, network, and vendor management.
<ul style="list-style-type: none"> An expensive legacy MPLS led to higher costs and longer lead times, and also performed poorly over Skype. 	<ul style="list-style-type: none"> The SD-WAN solution was designed to enable direct routing into reliable and secure WANs, automatically maintaining connection through VPN and similar functions. 	<ul style="list-style-type: none"> A tailored SD-WAN solution enhances the client's proven digital water services and cultivates a more satisfying user experience for the client's customers.

Challenge

The client is a digital management system providing customers dependable water quality alongside a 24x7 remote monitoring service. A global leader in its industry, the company boasts over a century of know-how in water treatment innovation, application, and service.

The client's nation-spanning service network is manned by professionals managing water systems with the latest high-tech tools, supported by real-time data analytics to improve customer water use, system status and maintenance. As the client continued to enhance its patented "Water One" solution, it required increased network performance and resiliency without a hike in OpEx costs.

The leading water treatment company faced numerous challenges in bettering a customer experience marred by outdated networking technology. For example, the firm's global network was connected by expensive legacy MPLS that resulted in high costs and long lead times. The system performed poorly over Skype, frustrating users due to poor voice quality and little support from the provider.

Additionally, the client's legacy platform backhauled Internet across expensive MPLS to a central Internet, while threaded MPLS connections to each site defeated any ideal of network resiliency. These problems were exacerbated by a small, understaffed IT team, meaning customers searching for top-notch network and voice technology had fragmented local support at best.

CBTS solution

The client engaged CBTS in implementing a software-defined wide area network (SD-WAN). This innovative technology abstracts network hardware and application transport characteristics to simplify supervision and enhance digital operations. The system also allows businesses to replace expensive private WAN connections like MPLS, utilizing low-cost Internet access to create higher-performance WANs.

SD-WAN harnesses intelligent control to direct public and private network connectivity into secure, reliable WANs, automatically deploying and maintaining the WAN through VPN and other technologies. Use cases for SD-WAN comprise on-premises, cloud and hybrid deployment models requiring a quality of experience (QoE) for transmitting telephone calls over a computer network. SD-WAN is a perfect fit for organizations that, like the client, offer a 24x7 customer assistance line.

The CBTS suite of SD-WAN solutions navigates the client through network preparation, planning, design, implementation, operation and optimization. Services and products provided through the solution include:

- Network assessment.
- Security vulnerability assessment.
- IT staff augmentation.
- Dedicated project management via a service delivery manager (SDM) that identifies client needs and provides high levels of customer service in a cost-effective manner.
- Cutting-edge network architecture and WAN design for simplified branch office communication and best-in-class application performance.
- VMware SD-WAN that allows the client to build global branch connectivity in minutes.
- Zscaler ZIA Cloud Security.
- Fully managed and monitored DIA and Broadband Internet across North America.
- Cisco Switch Refresh – VAR and Professional Services.
- Rebuilt VMware Gateway architecture to optimize Zscaler global tunneling.

Results

The CBTS next-generation SD-WAN platform centralizes control and policy deployment through a graphical user interface (GUI). CBTS skillfully manages the client's connectivity, offering a triple bill of centralized project, network, and vendor management.

Bolstered by superior engineering, SD-WAN from CBTS also increases the client's network capabilities and addresses any lingering latency problems within the system. Reduced OpEx savings can be used to fund a core Nexus refresh, while branch performance optimization utilizes the closest VMware Gateway and Zscaler ZEN.

Ultimately, SD-WAN from CBTS boosts the client's proven digital water solution, cultivating a stronger, faster network, a better user experience, and a seasoned network team able to tackle any technological obstacle.

Contact us for more information on how CBTS can implement SD-WAN solutions to modernize your network environment.

