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Wabtec

Client success story

“Lower per user bandwidth cost and superior performance showed commitment to our bottom line.”

The Company

Something was putting the brakes on Wabtec’s wide area network. Senior management of this publicly-traded, worldwide leader in the development of brake subsystems and related products for rail and passenger transit vehicles, was stymied in its efforts to improve performance, reduce costs, and facilitate the free flow of data between its dozens of global locations.

The Challenge

A transit industry leader with nearly 10,000 employees and an underperforming IT network infrastructure, Wabtec needed help. Costs were out of control, multiple telecommunications vendors were creating global inefficiencies, and an aggressive corporate growth strategy had created the need for an information technology system that would expand along with the company.

Wabtec’s network was unique, but its challenges were not. In simple terms, it wasn’t fast enough, wasn’t robust enough, and cost too much. By 2011, the company had 85 manufacturing plants, service centers and sales offices in the United States, Canada, Mexico, Europe, Asia, Australia and South America. End users were equally diverse with many running applications and transmitting large files that were dependent on a low latency, high bandwidth infrastructure. Complicating matters even more, the company had patched its global network together using several telecommunications companies that were proving to be inefficient and very costly.

The Wabtec IT team turned to [Advanced Technology Consulting](#), a national telecom services firm and a long-time partner of [VertitechIT](#).

The Solution: VertitechIT and ATC

“We needed a small team that was very agile to help us design a global network to meet our rapidly changing business demands,” says Doug Salah, Manager of Information Security and Networking Information Technology at Wabtec. Salah oversees a global network IT department of just five people and was fearful of engaging a large, mega-engineering firm that might put his needs behind those of a larger client. “They needed to take an intense interest in our processes *and* our people. This wasn’t just about technology. It was about helping our employees do their jobs efficiently and profitably.”

The VertitechIT team began with a thorough evaluation of the existing network. Senior engineers interviewed key stakeholders and defined requirements for a new global MPLS network capable of running Microsoft Lync, Exchange, and Sharepoint, as well as video conferencing and Oracle applications. The team separated the Wabtec network into “three buckets” (small, medium, and large), developing a matrix to define each location based on size, type of data transfer, and relative importance.

VIT engineers created redundancy and added capacity using Cisco Systems Dynamic Multipoint Virtual Private Network (DMVPN), creating an automatic failover from



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MPLS to VPN in the event of a VPN circuit failure. Additionally, Cisco's Performance Routing was leveraged to selectively route non-critical traffic over the DMVPN cloud, making use of otherwise unutilized VPN bandwidth while keeping business critical traffic on the QOS enabled MPLS circuits. DMVPN also allowed the company's branch sites to speak to one another and access the Internet directly over the VPN cloud, rather than routing through MPLS connection to a central data center. VIT also installed Wabtec-purchased routers at each location, providing customer-managed redundancy and savings on recurring rental costs.

Once the basic design was complete, ATC took the plan, vetted a number of telecommunications companies that could meet the requirements, and selected Massergy, a global managed cloud networking company, to deploy the new MPLS network and be the central point of contact for MPLS and broadband services.

As Massergy brought sites on line, VertitechIT oversaw the entire migration of the global network in "rolling" fashion, guaranteeing virtually no down time, and working with Wabtec's internal IT staff at reasonably scheduled intervals.

The Future

Today, VertitechIT manages and monitors Wabtec's entire worldwide network, including the local router system, 24/7/365. MPLS bandwidth needs have been reduced by nearly 30%, network speed has nearly doubled, there has been a dramatic improvement in reliability as well.

Wabtec's global footprint has grown from 85 to 134 locations in 2 ½ years and continues to expand through mergers and acquisitions. But thanks to ATC and VertitechIT, network expense is holding steady with a decidedly better user experience. "We're growing 15 percent a year while our network costs are increasing just 1 percent," add Salah. "Lower per user bandwidth cost and superior performance is testament to the commitment of VertitechIT and ATC to our bottom line."