

CO-MANAGED SD-WAN:

HOW GLOBAL ANIMAL HEALTH CONTRACT RESEARCH AND MANUFACTURING COMPANY, ARGENTA, ADOPTED A SHARED RISK APPROACH TO SD-WAN FOR IMPROVED PERFORMANCE.

AT A GLANCE

- Argenta's WAN-dependent critical applications were underperforming due to connectivity dropouts, latency, and bandwidth underutilization.
- Following a thorough assessment of several solutions, they selected Teneo's Co-Managed SD-WAN Service.
- Since working with Teneo, Argenta now enjoys an 80% improvement in ERP system performance across the WAN; issues relating to interconnectivity and dropouts have also improved by 90%.
- The IT team benefit from round the clock support, management expertise, continuity of service, and training and personal development from Teneo's expert Service Desk and management team.



ABOUT ARGENTA



Argenta is the world's only combined global contract research organization (CRO) and contract manufacturing organization (CMO). Specializing in the high growth industry of animal health, the company employs 500 staff across 5 locations worldwide.

Argenta's IT is primarily managed in-house by a lean team of 7 staff across 3 countries, each covering specialist disciplines. Some end-user computing support is outsourced at the company's headquarters in New Zealand.



PREVIOUS WAY OF OPERATING & BUSINESS LIMITATIONS

As a growing company, interconnectivity between locations had become critical for Argenta. However, legacy IPsec VPN tunnels, running over the public internet, often resulted in connectivity dropouts. Furthermore, unused additional disaster recovery WAN links at most sites resulted in underutilization of available bandwidth.

Many of Argenta's critical applications, hosted from their New Zealand location, were WAN-dependent, including the ERP (Enterprise Resource Planning) system and document management system.

Because these applications were serving 4 sites across the US and UK, the distance between locations was causing latency issues. Performance notably worsened when a new UK site opened in 2016, bringing 130 new users to the network.

A BETTER WAY FORWARD WITH TENEO

Although general network support was previously outsourced, the opportunity arose to improve network infrastructure when the decision was made to insource this function.

This prompted research into SD-WAN with combined WAN Optimization to help solve Argenta's global visibility, performance, and connectivity challenges.

In seeking an SD-WAN service partner, Argenta assessed both fully managed and co-managed solutions, as well as MPLS (Multiprotocol Label Switching).

In the case of MPLS, many service providers couldn't offer sufficient bandwidth, and quotes didn't offer best value. This is where Teneo came in.

Michael Meredith, Argenta UK & US IT Operations Manager, explained: "We identified that our team's main requirement was for assistance with the implementation of an SD-WAN solution, and for support around general SD-WAN knowledge."

"Following a recommendation from Silver Peak, we selected a Co-Managed SD-WAN Service from Teneo. This enabled us to not only learn the solution ourselves, but also to obtain the support we needed to ensure that it was operated consistently."



"Teneo's Co-Managed SD-WAN Service best matched what we wanted to achieve. It was important that we had access to support contacts, available to help with day-to-day management, but also a team with the appropriate level of management expertise."

> Michael Meredith Argenta UK & US IT Operations Manager



AN IMPROVED STRATEGY

Thanks to Teneo's Co-Managed SD-WAN Service and the utilization of Silver Peak's Boost WAN Optimisation feature, ERP system performance has improved by 80%. This has been achieved without the need to change the hosting location or add additional bandwidth capacity.

Plans are also now in place to move the company's document management system to Microsoft Azure. As the system needs an upgrade, the IT team will also take the opportunity to host it in the US, thus helping to solve latency issues through better geographical placement between sites.

A similar strategy exists to move their legacy file server from their New Zealand site to Microsoft Azure in Australia, which they can now leverage SD-WAN to access. They're now able to adopt a cloud-first strategy across the business, where appropriate.



BUSINESS OUTCOMES DRIVEN BY TENEO

Teneo's Co-Managed SD-WAN Service has contributed towards significant outcomes for Argenta as follows:

- Improved visibility: End-to-end network visibility ensures that slow performance can no longer be blamed on the network. Such visibility has enabled the IT team to realize how bandwidth-heavy some applications were and has helped them to discover application dependencies.
- Simplified traffic analysis: With Silver Peak's dashboard, traffic analysis is much easier to interpret, especially when it comes to information about firewalls, previously obtained by sifting through logs.
- Informed structural decisions: Argenta has been able to gain evidence on why some applications weren't suited to its business model. This enabled structural decisions that were based on clear justification.
- Improved interconnectivity: Issues relating to interconnectivity and dropout have improved by 90%. On the rare occasion, if they experience a FEC (Forward Error Correction) blip, they now receive an SD-WAN alert to notify them, but the issue never hits the end user.
- **Optimized applications:** Thanks to Silver Peak's Boost WAN Optimization feature, issues caused by latency have been alleviated.

Additionally, critical applications have seen a 40% performance increase, and Argenta has been able to bundle links and leverage dynamic path selection.

- Reduced outages: Support tickets due to outages have also decreased, reducing administration and improving productivity.
- **Minimal network changes:** Time savings in terms of network changes have also been realized. Previously, most overheads were taken up by the company's 7 on-premises firewalls. This has been reduced with SD-WAN. While firewalls are still scanning traffic, a plan to investigate a Secure Access Service Edge (SASE) framework is the next step.
- **Better user experience:** SD-WAN now forms an essential part of the IT team's strategy to provide a positive user experience. This has been particularly relevant during remote working as a result of the Covid-19 pandemic.
- **Reduced risk:** The implementation of internet connectivity has reduced risk significantly. Previously some sites had no backup and failovers were not robust. Sites now have at least 2 internet links, which has delivered a positive return on investment in circuit costs.





SERVICE VALUE

Since implementing Teneo's Co-Managed SD-WAN Service, Argenta has realized further added value in several key areas:

• **Support and expert knowledge:** Argenta can now rely on round the clock support and appropriate management expertise through the Teneo Service Desk, available 24x7x365.

Michael Meredith explained, "Teneo's team is responsive, has helped to further the internal IT team's knowledge and at the same time, provides outside support to ensure that best practice configurations are followed."

- **Minimum disruption:** The team experienced minimal downtime during deployment, estimating to have only lost one ping per migrated site.
- **Shared risk:** The IT team has been able to leverage Teneo in terms of workload, especially when already overburdened with maintenance, release notes, or rudimentary changes.
- **Continuity of service:** Teneo has been proactive in providing responses to alerts and reports and making change recommendations. Further reassurance comes from the retention of deployment knowledge should an in-house employee move on.

Michael added, "With such a small IT team, it was important that we could rely on 24x7x365 support through the Teneo Service Desk. If any team members should leave, it's reassuring to know that Teneo will retain the knowledge of our deployment, therefore minimizing the risk of knowledge leaving along with an Argenta employee."

• **Training and personal development:** The IT team took advantage of free Silver Peak training, bringing them a full understanding of SD-WAN's value. Additional value is found in terms of personnel development, exposing team members to new technologies, while maintaining an appropriate level of support.

Michael commented, "We always try to use the newest technologies where possible. This approach gives Argenta's employees the ability to access those technologies to help further their careers, but in a shared risk model that gives us someone to fall back to."

• Value for money: Teneo offered flexible financing options to help fund the project, meaning Argenta could access SD-WAN without a high capital outlay.



KEY LEARNING POINTS

In terms of key learning points, Michael stated, "It was important to sell the benefits of SD-WAN internally to the business and the IT team. My strategy for bringing them on board by teaching them key vocabulary, such as Business Intent Overlays (BIOs) and adaptive Forward Error Correction (FEC), as well as explaining what level of the OSI (Open Systems Interconnection model) they were operating at, worked especially well."

He added, "And, while the proof of concept took us a considerable period of time, the results in the real world have fully matched that concept. It was a highly valuable exercise that was well worth doing."



"Teneo's Co-Managed SD-WAN Service has beaten all expectations, which doesn't happen often! That's the biggest compliment I can give."

Michael Meredith Argenta UK & US IT Operations Manager

NEXT STEPS

For more information about Teneo's Co-Managed and Managed SD-WAN Services, visit: <u>www.teneo.net/sd-wan</u>

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