

# INNOVATION MINDSET DRIVES THE MOVE TO REPLACE MPLS WITH INTERNET SD-WAN

SD-WAN delivers multiple cost reduction, network agility, and cloud connectivity benefits to ModusLink, thanks to Expereo SD-WAN managed services and AMD Communications project management expertise.



## Case study: ModusLink

ModusLink initially went to market looking for a reliable and cost-effective WAN connectivity service between its central data centre location in Somerville, Massachusetts, its many clients, and its 25 regional offices and sites around the world. Their initial requirement was for a Public Internet based VPN solution, to replace their legacy MPLS VPN network.

*“Our primary goal, to reduce costs, we have clearly achieved. Our secondary goal, not to lose any existing functionality, was exceeded, because we’ve increased our functionality, flexibility and agility within the network and with Cloud and SaaS adoption”*

**Ted Holland**

Director, Global IT Infrastructure and Operations.

### Challenge

**As a large Global third-party supply chain and logistics provider, a flexible, agile network was essential to meet increasingly complex customer requirements, related to the evolving needs of global Digital and Physical supply chains.**

MPLS wasn't helping ModusLink achieve the network flexibility they needed or achieve a speedy move to the cloud. These limitations were made worse by the high overall costs of MPLS.

### Goals

**The goal was to reduce overall costs by implementing a cost-effective alternative to MPLS, without losing any existing functionality.**

Another driver for their move was the adoption of Cloud services such as Office 365 and other cloud based solutions, and the need for reliable, performance-enhancing bandwidth to achieve this. ModusLink wanted to move fast, setting an aggressive timeline for the project completion.

### Solution

**Expereo and AMD Communications responded with a proposal that showed the cost savings and performance potential of SD-WAN, replacing MPLS with internet connectivity.**

Combining AMD's project management experience with Expereo's Cisco SD-WAN and Internet Connectivity expertise gave ModusLink the confidence to move to SD-WAN for its 26 sites in 10 countries; the USA, Mexico, China, Japan, Malaysia, Singapore, Australia, Ireland, Netherlands, Czech Republic.

Cisco was the preferred equipment vendor as they are the only SD-WAN provider with the global footprint and reliable supply chain in all the locations ModusLink needed to connect.

Expereo also had the design and engineering capability ability to build a custom solution on SD-WAN for site-to-site connectivity from the ModusLink Disaster Recovery site to their main site utilising an existing fiber link.

 Benefits	 Challenge	 Solution	 Impact
✓ <b>Cost reduction</b>	MPLS too expensive	Replace with Cisco SD-WAN over dual internet; mix of DIA and broadband	>35% cost savings;
✓ <b>Performance</b>	Bandwidth for cloud China performance	Move to dual circuits Move to China premium DIA	Required Office365 and overall performance achieved for all locations
✓ <b>Availability</b>	Achieve 100% availability	Expereo Proactive Support	84% of tickets opened proactively (before the issue can affect availability) by Expereo. 1.5hrs was the average TTR (Time To Repair) for Priority 1 tickets
✓ <b>Network Design</b>	Connectivity resilience; if one link goes down the other circuit can handle the traffic	2 active/active circuits from different providers	Diversity ensures increased availability
✓ <b>Global Provisioning</b>	ModusLink needs the flexibility to turn up new locations, and also to shut down locations quickly	Expereo provides one point of contact for network services in 190+ countries	New sites can be added, and old sites decommissioned in the most efficient way
✓ <b>Network Management</b>	Project demands meant internal resources over-stretched  Remove the need for ModusLink to manage physical hardware requirements	Expereo and AMD staff working closely with ModusLink, involved in network planning, migration project, and support / operations  Direct access to Azure - move away from their collocation DC to Azure	Expereo supporting the Azure integration
✓ <b>Network Resiliency</b>	Increase of resiliency requirements; moved from tolerating a loss of WAN transport to tolerate the loss of either an edge router or a WAN transport  Considering dual DIA for many crucial sites to ensure BGP operates on failover	Moving to Expereo PRM Model; 2 CPE 2 links - dual router/dual link	Advanced performance based routing possible; business critical applications protected from fluctuating WAN performance plus load-balancing of traffic to reduce overall costs

# ZERO TOUCH DEPLOYMENT; DON'T BELIEVE THE HYPE



## Zero Touch Deployment; don't believe the hype

You need to get the right hardware to the right place first. After that, the team effectively employed a "minimal touch deployment" strategy, utilising Expereo's Xpertise services for SD-WAN hardware delivery and installation, working with ModusLink on-site engineers wherever possible. Where this wasn't possible, Expereo used engineers from in-country partners.

## Global needs to be truly Global

For global SD-WAN deployments you need a provider who has a proven, effective supply chain to get equipment and smart hands to the right place at the right time.

## You need an innovation mindset

Even today, most thinking around the WAN is quite conservative. There's fear around moving away from MPLS and truly embracing the cloud. What we've shown is that there is life after MPLS and with the right partners and an innovation mindset you can power a high performing, cloud-first network, with internet.

## Not all internet is created equal

Broadband looks cheap, but the real costs of maintaining reliable network connectivity are not found on ISP price pages. Internet connectivity should be selected based on specific customer requirements, plus the strongest possible knowledge of factors including local supplier quality, last mile access methods, redundancy options, routing/peering options, and overall limitations of connectivity in certain geographies, to choose the best connectivity underlay options.

## Working with AMD Communications

AMD Communications is a telecommunications consulting agency specializing in helping companies acquire and implement enterprise-grade communication services. Our purpose is to provide our customers with niche and traditional telecom and cloud solutions that best suit their needs.

Since 2009, we've helped countless companies save millions of dollars in IT expenses. Employee-owned and operated, our team knows the telecom industry. We pride ourselves on creating long-lasting relationships with our customers. When they talk, we listen. When they have questions, we provide comprehensive answers. Our commitment to solving the specific business issues that affect our customers can't be overstated.

AMD works as a trusted advisor to bridge the gap between client and service provider. Customers can leverage AMD's expertise and experience in the telecommunications industry to find a telecom solution that meets and exceeds their expectations. We take the hard work out of finding a reliable partner and, through our telecom expense management (TEM) and project management offerings, keep critical projects on-track and under budget.

# WORKING WITH EXPEREO

During the project Expereo support processes were enhanced to meet the required resolution times, and are now permanent. The Expereo Global NOC takes day-to-day responsibility for the ModusLink network under a Pro-active Support contract.

The standard Expereo migration process was also accelerated to ensure cost savings could be achieved more quickly. For example, SD-WAN equipment was installed first on existing links where possible, with Expereo managed links replacing these later.

“Our last major technology refresh took far longer than was promised or expected. For this refresh, moving from MPLS to SD-WAN, Expereo promised and delivered the project in six months, and delivered immediate benefits to our business.”



## Who is ModusLink?

**ModusLink provides digital and physical supply chain solutions to many of the world's leading brands, including Cisco, Fitbit, GoPro, and HP, across a diverse range of industries, including consumer electronics, telecommunications, computing and storage, software and content, consumer packaged goods, medical devices, retail and luxury, and connected devices.**

With a global footprint spanning North America, Europe and Asia-Pacific, the Company's solutions and services are designed to improve end-to-end supply chains to drive growth, lower costs, and improve profitability. IWCO Direct, another wholly-owned subsidiary, is a leading provider of data-driven marketing solutions that help clients drive response across all marketing channels to create new and more loyal customers. It is the largest direct mail production provider in North America, with a full range of services including strategy, creative, and production for multichannel marketing campaigns, along with one of the industry's most sophisticated postal logistics strategies for direct mail.