

# Growing Managed Services and Customer Satisfaction

Customer Case Study



Vtesse Networks targets new business while reducing management complexity, expense and provisioning times

## EXECUTIVE SUMMARY

**Customer Name:** Vtesse Networks

**Industry:** Service provider

**Location:** United Kingdom

**Number of Employees:** 80

### Challenge

- Grow managed WAN business
- Compete more effectively for government contracts
- Reduce cost and time-to-market

### Solution

- Cisco IP Next-Generation Network financed by Cisco Capital

### Results

- Minimal configuration requirements significantly reduce labour costs
- Ethernet VPN services can be deployed up to six times faster
- Cost of providing transmission capacity set to halve

## Challenge

UK service provider Vtesse Networks specialises in delivering resilient WAN services for heavy bandwidth users. The company manages large VPNs spanning the entire country on behalf of clients, including systems integrators, financial institutions and retailers. It also serves government organisations looking for secure connection with G-Cloud data centres.

Expensive and inefficient core network technology was hampering the company's ability to bid for new business. Its existing infrastructure was costly to operate and offered limited quality of service (QoS) and management features. It also relied heavily on old Q-in-Q tunnelling technology that had problems scaling and meeting government certification needs.

"It had become complicated and costly to provide multi-site L3 networks," says Steve Roberts, general manager of service development at Vtesse Networks. "We couldn't deliver Metro Ethernet Forum-compliant services or readily support customers with advanced QoS requirements." To help drive profitable growth, a network technology refresh was planned to improve operational efficiency and offer highly resilient Ethernet services.

## Solution

After comparing competitive offerings, Vtesse Networks chose a carrier-grade IP Next-Generation Network (IP NGN) from Cisco. "By allowing MPLS functionality to be extended to the network edge, this multiservice platform meant we could grow the range of Ethernet services we could offer," says Roberts, "while also improving time-to-market and lowering operational expenditure."



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Steve Roberts  
General Manager, Service Development  
Vtesse Networks

Comprising four high-end Cisco® ASR 9000 Series Aggregation Routers and six mid-range Cisco ASR 1000 Series Routers with around 30 Cisco ME 3600X Series Ethernet Access Switches at the edge, the multiservice platform is fully optimised to support voice, video and multicast traffic as well as services meeting Metro Ethernet Forum (MEF) standards.

The solution also helps enable Vtesse Networks to provide a full range of VPN offerings, including Ethernet Private Line, Ethernet VPN, private virtual LAN services and both managed and unmanaged MPLS-based IP VPNs. “The fact that Cisco had a wider product set provided a more complete and easily expandable solution, which cost effectively addressed all our requirements,” says Roberts.

Another key factor in the decision was that the company’s existing network management and reporting systems already supported Cisco technology, obviating the need for any costly customisation and integration work. Vtesse Networks is also in the enviable position of being able to support 100Gbps Ethernet, effectively protecting it against obsolescence. Using Cisco Secure Access Control System (SACS) technology simplifies network management, monitoring and troubleshooting through a simple web-based graphical interface.

The service provider chose to spread the cost of the network upgrade with quarterly payments over a four-year term, using a finance lease from Cisco Capital®. In addition, a flexible financial framework has been put in place to cover future requirements.

## Results

Vtesse Networks can now compete for deals previously out of reach. “Our Cisco IP NGN allows us to bid for projects from which we would previously have been excluded. For example, we can offer standards-based MEF-compliant Ethernet and, with better QoS and reporting, we can confidently offer better network performance metrics,” says Roberts.

The solution has also significantly increased the speed with which Vtesse Networks can deploy such services. “Services can be provisioned within a matter of days, because we no longer have to contend with the complex circuit planning that used to be required on our legacy network,” says Roberts. This capability, in turn, is having a positive effect on customer satisfaction. “Our customers are delighted. We’re deploying services in less than five days compared to up to 30 days previously,” he adds.

Eliminating operational complexity has also greatly reduced costs, both in terms of human resources and technology. For example, deploying Ethernet private lines no longer involves configuration of multiple switches; they can be provisioned in minutes involving just the two endpoints. “The same applies to Ethernet private virtual LAN services,” says Roberts. “Using auto-discovery we only have to provision network interfaces on edge devices. There’s no need to configure any other switches.”

Meanwhile, MPLS is allowing the company to use existing transmission mechanisms, including its meshed optical fibre routes, far more efficiently than before. Vtesse estimates this increased efficiency will halve the cost of providing underlying transmission capacity. Reduced management and maintenance burdens are also cutting costs, improving efficiency and reducing disruption for customers. “For example, ASR 9000 redundancy and its support for Cisco In-Service Software Upgrades minimise downtime through planned maintenance,” says Roberts.

In addition, the ease with which the system can be configured and extended is making the business more agile and competitive. “For example, the low cost and small form factor of the ME 3600X means we can deploy it anywhere. Similarly, the ASR 1000 is proving to be far more useful than we envisaged,” says Roberts. “We’re using these switches in many different applications to provide virtual routing and forwarding-aware VPN concentration, along with border security and MPLS at the customer edge of the network.”

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Best of all, Vtesse Networks has achieved all of these benefits without negatively affecting financial performance. “Acquiring our Cisco IP NGN via Cisco Capital makes it easier to manage cash flow by avoiding a large upfront investment and instead matching costs more closely to the arrival of anticipated revenue streams,” says Roberts.

### Next Steps

While the solution is already helping the company win business with finance and retail customers, Vtesse Networks now has all it needs to obtain the certification that it requires to extend its Ethernet service offerings to government customers. “Our underlying optical network is already CAS(T) certified, and we expect MPLS certification imminently,” says Roberts. The deployment of Cisco SACS has been critical to the company’s ability to enforce the policies required for both CAS(T) and ISO27001 security certification.

Vtesse has also recently completed tests of 100Gbps Ethernet interoperability between its existing DWDM system and the ASR9000. “The network interoperates with our optical networks perfectly at 100Gbps, so we know we’ll be able to help customers meet big data challenges,” says Roberts.

As applications demand higher bandwidth the efficiencies of 100GE become more and more appealing. Cisco innovations such as 100GE CPAK Optics, nV Optical and iOverlay will drive significant increases in 100GE density and at the same time closer integration between IP and optical equipment. This evolution will enable operators like Vtesse Networks to make operations simpler and more flexible and scalable. And a growing network means a growing business.

“We anticipate the size and scope of our Ethernet network will double within 12 months as a result of this upgrade,” Roberts concludes. “The Cisco solution does everything we expected of it, and more.”

### For More Information

To learn more about the Cisco architectures and solutions featured in this case study, please go to:

[www.cisco.com/go/serviceprovider](http://www.cisco.com/go/serviceprovider)

For more information on Cisco Capital, please go to:

[www.ciscocapital.com](http://www.ciscocapital.com)

### Product List

#### Routing and Switching

- Cisco ASR 9000 Series Aggregation Services Routers
- Cisco ASR 1000 Series Aggregation Services Routers
- Cisco ME 3600X Ethernet Access Switches



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