



TSG create a secure Wide Area Network with Zen's IP VPN

About TSG

Technology Services Group (TSG) provides IT solutions to small and medium sized businesses. Specialising in Business and Accounting software, TSG employ over 500 staff in 12 locations across the UK.

Between 2003 and 2005 TSG experienced rapid growth through continued acquisition, focusing on acquiring companies that offered immediate access to key regions across the UK.

Challenge

Each site had ADSL providing Internet access with on-site firewalls for security. The firewalls were configured to create IPSec virtual tunnels over the Internet providing a basic Virtual Private Network (VPN).

The IPSec VPNs offered a secure method for transferring critical information between a small number of sites with limited bandwidth. However, these soon became unreliable and more complex when additional sites were introduced to the network.

As Internet access was provided directly to each location, managing network security was also a challenge. This subsequently made company-wide security policies difficult to implement.

“Our previous solution caused us quite a few issues in speed and reliability and new acquisitions meant that we had to re-think our WAN design.”

David Office, Group IT Manager

TSG

TSG expanded into Scotland in 2004, purchasing companies in Aberdeen, Edinburgh and Glasgow. At this point, they took the opportunity to review their Wide Area Network (WAN) requirements and contacted us to discuss possible solutions.

To fully understand TSG's issues and business objectives, our technical consultants conducted a detailed business and technical analysis.

Project Overview

- **Business Requirement**

Fast, secure, reliable network infrastructure to connect 12 sites throughout the UK.

- **Solution**

IP VPN provided a future proof network with increased security and flexibility for growth.

- **Business Value**

Improvements in security and network performance led to an increase in productivity, reliability and communication across all sites.

- **Industry Focus**

Business and Accounting software specialist providing solutions to small and medium sized businesses.



Solution

Key requirements were scalability and security, so we recommended that TSG upgrade their current IPSec infrastructure to a dedicated IP Virtual Private Network (IP VPN) solution.

This leading edge WAN solution provided a secure virtual network dedicated to TSG within our core infrastructure, ensuring secure exchange of information between sites participating in TSG's IP VPN.

We built the IP VPN within our core network before installing nine dedicated Ethernet and Access circuits and three ADSL circuits at 12 locations across the UK.

“ **Zen worked closely with TSG to understand our requirements and proposed a solution that vastly improved our inter-site communications and security.** ”

These new circuits provided access to the central IP VPN allowing traffic to be securely routed site-to-site without ever traversing the public Internet.

Cisco routers were pre-configured by our support teams to meet agreed specifications with the service extending to ongoing management for any changes to network designs or requirements.

This ensured relatively simple implementation at each site and provided immediate access to our support teams for future equipment configuration changes.

Once each site was connected and able to securely share data in confidence, the next step was to provide Internet access into the IP VPN.





A dedicated Internet access port was allocated to the IP VPN providing one central point of access for the entire network of sites connected by the IP VPN.

We installed two FortiGate 200A Unified Threat Management (UTM) firewall devices in High Availability (HA) mode to secure the connectivity. This ensured resilience in the event of firewall hardware failure.

A dedicated colocation rack enabled TSG to use centrally hosted services and a de-militarised zone (DMZ).

Locating these servers upstream within our network enabled TSG to reduce bandwidth requirements at its head office as key applications could now be accessed from our core network.

TSG was also able to benefit from our resilient network infrastructure and save costs on physical colocation of equipment.

Secure access was provided to TSG including the option to generate a range of network reports on demand.

Finally, we deployed a dedicated Network Management Server (NMS) providing 24/7 monitoring and alerting of the entire network and equipment.

“ Adding or removing sites is now much easier with no disruption to other operational sites within the group. ”



Project Management

We assigned a dedicated Project Manager who was given full responsibility for the successful installation of the IP VPN solution. It was very important that the network was implemented in an acceptable and timely manner with minimal disruption to other sites.

One of the key tasks was to liaise effectively with staff internally and at TSG to co-ordinate all aspects of the solution implementation.



Following a consultative process between us and TSG, a project plan was created and agreed.

“ **Strategic operational changes have required Zen to change the network design during and after deployment and Zen have incorporated these without any issues.** ”

Benefits

Implementation and timely delivery of the IP VPN solution vastly improved the security and performance of the network. Employees from all sites now had secure, reliable and fast access to all business critical information.

Our range of access technologies offered connectivity to suit the requirements of each location. We installed ADSL at satellite offices and dedicated Ethernet and Access circuits with Service Level Agreements (SLAs) at critical sites.

Careful planning of circuit requirements ensured that data traversed the WAN quickly whilst eliminating previous issues with dropping VPN connections and circuit congestion.

TSG could now benefit from one central point for secure Internet access. They could also make security changes to the centrally-hosted FortiGate UTM firewall that immediately impacted all 14 sites rather than configure each one separately.

The FortiGate UTM firewalls provided a multi-threat security platform offering network protection beyond that of traditional firewalls including anti-virus, Intrusion Protection System (IPS), Web content filtering and anti-spam.

Adding new sites into the IP VPN was now much easier as no complex firewalling and VPN tunnelling was required at each new site.

TSG are now able to connect additional sites within standard provisioning timeframes and these immediately have access to key company information.

“ **We found that Zen have been honest and professional throughout the relationship and the reliability and performance of the IP VPN has exceeded our expectations.** ”

Zen Internet
 Sandbrook Park,
 Sandbrook Way,
 Rochdale OL11 1RY
 Tel: 0845 058 9000
 E-mail: info@zen.co.uk
 Web: www.zen.co.uk