

Infrastructure Design



.....

A global asset management business with assets under management in excess of £230 billion across a range of funds. The company employs 1,300 people in 20 locations around the world.

Building Enterprise-Wide Wireless Solutions

Challenge

Having initially engaged Zymbian to deliver a elementary single Wireless solution in 2008 Aviva Investors decided it was time to extend and enhance this basic offering to service all their London offices, and given the faultless operation of the service over the intervening years Zymbian were readily engaged to design and deliver the solution, to be

- Available across all 4 floors of London head office, with seamless roaming
- Provide approximately 9000 square foot of coverage
- Capable of sustaining up to 1000 users
- Fully secure, standalone and auditable
- Provide a strategic roadmap for future integration into the internal network.

Solution

Hardware was selected leveraging Zymbian's existing partnership with Cisco to provide best of breed, reliable enterprise technology, while also considering redundancy and cost.

It was imperative to provide a scalable solution for future enhancement and integration.

The solution consisted of these core components.

- Cisco Wireless LAN Controller to manage multiple Wireless Access Points , capable of providing Mac Filtering and traffic prioritisation.
- Power over Ethernet switches and access points to allow greatest flexibility in placement and coverage.
- 20 Cisco Access Points deployed over 4 floors using signal mapping to ensure maximum coverage and no black spots

- Fibre interconnectivity between floors and switches to provide maximum bandwidth and minimum attenuation.

The Wireless network was configured to provide for

- Multiple SSID networks with different security and traffic priority levels, for Guest, standard and Executive users
- Configuration with security, anonymity and simplicity in mind. WPA/WPA2/AES/TKIP and MAC Address filtering implemented where appropriate.
- Multiplexing Four ADSL WAN Connections with outbound load balancing, redundancy and capacity for an additional three WAN connections in the future.
- Remote management and access capability without exposing the management interfaces to the wireless or corporate networks. Using a SSL VPN Remote Administration Portal
- Traffic Shaping to ensure efficient bandwidth usage.

Benefits

The solution provides an efficient and low maintenance managed Wireless solution covering the entire building. The key benefits are:

- Open and Audited Wireless Internet access to employees and visitors
- Secure Wireless Internet access to select employees and visitors
- A strategic upgrade path available at minimal further cost.