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Case Study

European Electronique supply Angus Council with HPE network hardware

Background

Angus Council is one of 32 Scottish unitary local authorities. providing a wide range of services for a population of 116,000 across both rural and urban communities in the North East of Scotland from Dundee to Aberdeen.

Operating from their headquarters in Forfar and their sites and offices throughout Angus with a team of 5,500, Angus Council is the region's biggest and most varied employer. As an organisation trusted with delivering essential services to the local community, they are committed to their vision of creating a first-class quality of life for the local population and a positive contribution to the culture and economy not just in and around the local area, but to Scotland as a whole.

The Requirement

In 2013, Angus Council released a public tender to refresh the current hardware and supply network switches at a number of Core Sites and Edge Sites across the county. Already a trusted supplier and wireless LAN provider to Angus Council, European Electronique has played a strategic role in the development of a mobile working and learning platform and has gained an in depth understanding of the Council's key business drivers and educational aims and aspirations.

This understanding, coupled with our end to end integration of best-of-breed technology solutions enabled European Electronique to deliver exemplary service across solutions from the data centre to mobile devices. Our vast experience in the integration of the proposed HP LAN solution with the Council's WLAN system, meant European Electronique was able to take a holistic view of the Council's wired and wireless infrastructure going forward, ensuring full integration and maximum return on investment.

"Our investment in our infrastructure was significant and we needed to ensure we were working with the right partner. We are really pleased with the impact of the technology – it just works!"

Steve Roud, Service Manager Information Technology, Angus Council

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Existing Situation

The Angus Council network consisted of 140 sites servicing everything from schools, council building, libraries and sports centres. The core of this network was split across 12 sites in a partial mesh connected across 1Gbps leased lines. Generally each core node services all sites in the same time across 100Mbps or 1Gbps connections. Each edge site was allocated its own subnet with no segregation between any connected devices. As a result there was no true separation between corporate and education data with school and council devices often sharing the same physical network hardware. Essentially the network was not PSN compliant.

The Solution

After working with EE through a number of detailed designs, meeting a solution was determined using VRF's across the network. Initially three edge-site VRFs were implemented using MPLS L3VPN covering corporate computers, education computers and public network computers (open access). Alongside this, a new IP address schema was implemented that allowed summarization of IP addressing for an entire VRF in a particular core node, scope to add additional VRFs without duplicating address usage, and the ability to ensure every edge site could have a secure VLAN topology implemented.

In order to implement the solution a range of new HPE Comware switches were supplied. For larger perimeter sites the 5500-HI switch was used whilst smaller perimeter sites used the 5500-EI switch. At the edge sites 5120 -EI and 5130-EI switches have been implemented to support the new functionality. To avoid unnecessary expense, EE has also provided consultancy to reconfigure existing Nortel and Alcatel edge switching to support the new multi-VLAN HPE solution.

The Result

Angus Council now have a network that is easily scalable and highly secure and that still provides optimal performance. Perhaps most importantly it is now fully PSN compliant having passed the latest PSN audit. We are currently continuing our partnership with Angus Council to look at their datacentre networking with a view to implement HPE Comware 5700 and 5900 switches.