Warehouse Wireless

Bias Technology were contacted by Pitacs, an existing customer, who had ongoing wireless issues over a considerable amount of time. Their site consisted of a warehouse span of 110,000 square feet, with the facilities able to store over 16,000 pallets of products. With a fleet of 30 mobile terminals consisting of a mix of Zebra MC3190's and Newer Zebra MC3300's connecting to a server via a web-interface. The terminals were running very slow and would hang regularly.

A few other companies had already been onsite and performed multiple wireless surveys and suggested a completely new system with cabinets and cabling. The quotes received were in the region of between £23,500 (Cisco Meraki, but a 3-year reoccurring license fee at £4000) and £35,000 (cnPilot Enterprise). There were know issues with the current wireless AP's (Dell SonicWALL) that would be resolved by replacing the aging equipment with more modern technology.

BIAS examined all the wireless survey ever performed and realised that the current backbone and AP placement were perfectly adequate to supply good signal strength and full coverage across the site.

The prerequisites for the site wireless were as follows: -

- Must be compatible with all devices.
- Provide coverage in the warehouse, office, and boardrooms.
- Provide and easy to use interface for management.
- Provide multiple wireless networks for applications.
- Provide a guest network.
- Have automatic updates and wireless optimisation.
- Unobtrusive AP's in public areas
- Install over a weekend.

After some investigation it was found that an Ubiquiti solution would meet all the prerequisites This consisted of an onsite controller which could be controlled via a web interface or phone app with good insights on activity. Plus a mixture of AP Lite's, Long range and standard pro's depending on location and application.

The installation started on the Friday consisting of the controller, switch, fibre links, and configuration. The office and boardroom AP's were also fitted and tested as these were not mission critical. Some of the AP sites were also prepared to make ease of fitting, two sites were moved due to new racking. It was found at the time due to removal of a router/gateway that the IP structure would also have to be modified, this was an easy fix by changing the subnet and a few static IP devices. A pre-survey was performed which when compared to all the other surveys matched completely.

Over the weekend the AP's were fitted and each one tested. Channel optimisation was performed, and auto optimisation and updates enabled. Multiple tests were performed on the network as well as coverage and throughput. Another survey was performed, and it was found that the site did indeed have full coverage with no dead spots. The handheld terminals were tested, and they worked perfectly.

BIAS stayed onsite on the Monday to fix any issues that may arise, test/monitor handheld performance and to provide training on the system. There were no issues reported with the users very happy with the increased performance and reduced downtime.

BIAS left the site but have followed up on regular occasions to make sure there have been no issues and any help with configuration is required.

What does our customer think? See below for their testimonial: -

"Having been a long-standing customer of BIAS and having been enlightened regarding the companies Wi-Fi install capabilities we contacted them and detailed the issues we were experiencing with our Wi-Fi system which included the warehouse staff constantly losing signal on the Zebra scanners throughout the Warehouse which resulted in picking a complete order in one go almost impossible and putting stock away via the scanners very unpredictable.

BIAS agreed to come to site and do a full survey, they found low/non coverage over various areas and after a short period of time produced an Ubiquiti solution to replace the aged Sonic Wall AP's and remove the old APs from the complex Sonic Wall Firewall.

Due to time restraints the Warehouse Wi-Fi project needed to resolve over a single weekend, BIAS promised this could be done and it was, the engineer was on site Monday morning after the installation for when the 6.00 am shift started so he could resolve any unexpected issues of which none happened.

We now have a pretty much perfect Wi-Fi system in the Warehouse and offices which has made for a much-improved environment to work in."

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