



Application Development



Collaboration



Data Center Virtualization



Infrastructure & Security



Managed Services



Network Infrastructure



Unified Facilities

Case Study - Wireless Infrastructure

The Challenge

IFAB's growth created the need for improved wireless communications between its various sites: the North Plant, the Rauch Plant and the South Plant. Network performance and throughput was a huge concern. Existing outdated equipment, older switches and hubs, had to be updated, repurposed, or replaced. The company's growth also created an increased demand for bandwidth between the 3 sites. This enhancement had to provide improved wireless communications utilizing a platform that would be both flexible and scalable. IFAB hired AT-NET to design & implement a wireless backbone solution (a wireless conduit to carry network traffic between sites) to enhance their current network.

The Solution

The project encompassed 3 of IFAB's plants (North, Rauch, and VC) and an existing Cisco wireless bridged infrastructure. AT-NET constructed a tower on IFAB's North Plant. DragonWave equipment was added to both the North and Rauch plants. The existing Cisco equipment on the VC plant's tower was repointed to the Rauch plant's tower. All other preexisting equipment from the plants will be repurposed for a backup network. Gigabit switches were added to the three plants to eliminate any potential network bottle necks. A 400 Mbit link was established between the North and Rauch Plants which increased network performance and throughput.

The Impact

With the installation of the carrier grade DragonWave Horizontal Compact microwave system, a very successful 400 Mbit wireless backbone was connected to the 1-Gbs network LAN. The wireless network was tested and certified to be at the optimal 400 Mbit rating. The link's signal strength for the 1.2 mile distance between sites was initially expected to be -49dBm. At-Net Services was able to achieve a stable -45dBm link strength, much better than anticipated. The new network will be consistent to a five 9 (99.999%) reliability standard, which means virtually no wireless downtime.

"We are extremely pleased with the performance of our wireless network. We can now transfer large CAD files between plants. The new network saves us hours per day in lost productivity."

-Jody Outlaw, Information Technology Manager



The Client

Industrial Fabricators (IFAB) is one of the largest suppliers of metal parts and assemblies in the Southeast. They have over 700,000 square feet of facilities & manufacturing space. Their equipment and capabilities include fabricating, machining, stamping, ductile & gray iron casting & finishing.

AT-NET Services

Founded in 1999, AT-NET Services has grown into the premier risk management and technology integration firm of the Southeast. With a consultative, "solutions-focused" approach, best-of-breed vendors, and the industry's most talented sales & engineering force, AT-NET Services offers complete engineering services for the life cycle of your system; design, build, secure and manage.