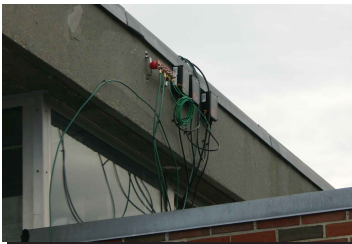


Project Overview

Fitchburg State College



Fitchburg State College (FSC) has several off campus locations which require connectivity.



The college explored several options for bandwidth including traditional T-1 lines at 1.5 Mbps and VPN connections using the local Comcast Cable Data network at 10 Mbps. The network they would choose needed to

provide enough bandwidth for voice, video and data today and be robust and flexible enough to serve the College well into the future.

FSC realized T-1 connections would not provide necessary data throughput and voice quality would be hampered by reasonable data requirements. They looked at Comcast Cable Data VPNs as their next choice and were preparing to proceed along that course.

At this point, ATS called to the College's attention the fact that voice quality on these lines can and would not be guaranteed due to design limitations of the Comcast physical network.

ATS brought FSC up to speed on current wireless options as well as the data transfer capacity which can be expected and achieved. ATS recommended an alternative wireless solution for these connections and FSC was pleased.



Originally, line of site issues were perceived to be a major problem. With the ATS solution, line of site issues were a non-factor in the project. This is a key success point as the

main hub site could not achieve line of site to all locations due to heavy evergreen tree coverage.

ATS recommended a 5 GHz non-line of site technology to provide 100 Mbps of bandwidth and allow for the prioritization of voice, video and data. ATS performed the design, equipment installation and configuration for this project.



ATS was able to complete the install without requiring any trees being cut down or the installation of expensive and large towers. Without the need for major infrastructure upgrades the network was deployed at a much lower cost than anticipated. Further, the project was complete well in advance of the move-in date for off campus sites.

Finally, ATS configured the wireless and wired network for VoIP and the College is impressed by the clarity and quality of their phone calls.

Key Project Statistics

- Buildings: 4
- Average Distance between buildings: 2 miles
- Terrain: Heavy evergreen coverage, college buildings and hilly topography
- Point to Point Connections: 3

Products Used:

- Point to Point: Alvarion BreezeNet B100
- Hardware: Non-Penetrating Mounts used on to buildings to prevent damage to rubber roofs