



BLACK BOX[®]

NETWORK SERVICES



Industry: Education

Thiel College

Project: Plan, design, and install a campus-wide fiber optic network

Major Challenge: Perform multiple installations before students returned for fall semester

The background

With a 98% career placement rate, 12-to-1 student/faculty ratio, and recognition by Peterson's Guides as one of the top 200 undergraduate institutions in science and mathematics, Thiel College in Greenville, PA has steadily increasing enrollment. More than 1000 liberal arts students now attend the school and take full advantage of the campus-wide network installed by Black Box.

Fiber first

After assisting Thiel College for several years in the planning and designing stages of a campus-wide network, Black Box was awarded a contract to implement a fiber optic network. We also installed two UNIX[®] servers and various network electronics and workstations. This fast-track project was completed in less than 60 days during the college's summer break.

All of Thiel's main college buildings were connected in a star fashion with multimode fiber optic cables running back to the main data center. Black Box installed, terminated, tested, and labeled approximately 5000 feet of multimode fiber optic cable, as well as some Category 5 UTP horizontal cabling in several locations. For the fiber backbone design, we used 10-Mbps Switched Ethernet technology. The entire network is certified as a structured cabling system.

Black Box engineers supplied, configured, and set up two high-end Compaq[®] file servers. One server is Thiel College's Internet server. It supports both external and on-campus Internet connections and uses server software at the front end. The second server handles e-mail for the school's internal communications.

Ongoing client support

During our first project, Thiel College informed us of its plans to bring the dormitories on-line and implement campus-wide voice and data switches within three years.

Recently, Thiel awarded Black Box the contract to complete its campus-wide network. Thiel's network expansion required faster backbone technology to support the additional bandwidth demands. We designed and built a Gigabit Ethernet-ready network infrastructure. It connects approximately 2000 user locations (cable drops) as well as ATM-ready Fast Ethernet components. Another partner installed the underground conduit system. Following performance tests on the rest of the installation, the project was completed just three months after work began.

