

Michigan Tech

Michigan Tech Goes IP for Video Surveillance

Located in Michigan's upper peninsula, Michigan Technological University is one of the premier engineering schools in the country. Founded in 1885, the school serves over 6,700 students. Like all universities, Michigan Tech considers campus safety of paramount importance. Michigan Tech has its own 24/7 security force staffed by trained certified State of Michigan police officers.

The Problem

The University's Department of Public Safety already had two small analog digital surveillance systems in two buildings on campus; several other independent security systems existed around campus. After experiencing problems with these antiquated systems, the DPS realized that they were not the ideal group to address these problems. The campus Head of Public Safety worked closely with campus IT staff to transition responsibility for implementation of all surveillance hardware and software to the IT department. Having worked together in the past on some cyber crime issues, DPS and IT already had a very good working relationship. Coincidentally, the IT department was in the process of selecting a video surveillance system for their new data center. Clearly, the time was right for the two groups to join forces.

The Solution

Many educational institutions either have or are in the process of implementing new state-of-the-art networks. Michigan Tech is no exception; the IT department already had in place a campus-wide, high-speed Ethernet network as well as an IP phone system. Says Dan deBeaubien, Director of Information Technology Services and Security, "With this type of quality network in place, it was a perfect fit for IP based video surveillance". IP cameras could be installed easily throughout the campus.

The IT department investigated various products and selected Video Insight because of its ability to support both analog and IP cameras, support single management of multiple servers, and support a wide variety of IP based camera technology. The project will eventually convert the University's surveillance system to an all IP based solution, but wanted to retain some analog cameras until they need to be replaced.

Michigan Tech installed cameras at key locations throughout the campus including building entrances, residence hall entryways, the Library, laboratories, building rooftops, ski trails. The system also manages cameras in place in University payment kiosks. The cameras support high quality images with a minimum 640 x 480 resolution, several cameras record mega-pixel images. PTZ cameras were strategically installed on building rooftops. Approximately 120 cameras now keep a watchful eye on the campus.

For security reasons, all servers are located in the campus data center and all data is stored on large, central, disk arrays. Both the data center and the DPS center have a four screen monitor in place for viewing live and recording video using the Video Insight Network Client. There are five servers, two hybrid servers that support both analog and IP cameras and 3 IP-only servers supporting 100 IP cameras. 32 analog cameras are also still operational. With the Video Insight Network Client, IT and DPS can view images from both IP and analog cameras in a single display. The Video Insight Health Monitor checks the operational status of all cameras and servers and notifies IT personnel when a camera is down or a server has stopped recording. To maintain privacy, only DPS and IT can view video footage. If an incident occurs in a particular building, University personnel make a request for DPS who work with IT staff to view the pertinent video.

Results

Michigan Tech has seen a dramatic reduction in campus crime, especially vandalism. At one time there were frequent incidents of elevator crime and vandalism. After the video surveillance systems were installed, the number of incidents involving this type of crime has been reduced, nearly to zero. Digital, IP-based surveillance systems have proven to be both a powerful deterrent and an effective investigative tool at Michigan Tech. After a three year deployment of the system, their flexibility and ability to function on the campus data network has made them both cost effective and quickly deployable.

The Future

Michigan Tech is moving towards a total IP camera environment. Says DeBeaubien, "IP is definitely the choice for us going forward - We can take advantage of our existing network and bandwidth. The world of analog cameras is past." Michigan Tech will continue to expand their use of IP based surveillance cameras and the Video Insight solutions. They believe that their relationship with Video Insight is a true partnership. Being a relatively small company, Video Insight can quickly react to the needs of Michigan Tech. deBeaubien has direct access to the Video Insight CTO and they frequently discuss ideas for future product innovations. In fact when Video Insight was looking for a good Beta customer for their latest release of their Version 4.0 IP product, Michigan Tech was a logical choice.

For more information about Michigan Technological University, visit www.mtu.edu

