Magnum 6K Switches Network Seminole State College of Florida Code Blue Security Systems

A Surveillance & Security Application

ABOUT SEMINOLE STATE COLLEGE OF FLORIDA AND ITS SECURITY SYSTEM

Located in central Florida, Seminole State College is the fastest growing college in the state. With four campuses, the largest of which is Sanford/Lake Mary, Seminole State has recently become one of the top thirty colleges in the United States in terms of Associate Degrees awarded in Liberal Arts and Sciences.

To keep the expanding student body and faculty safe, the college recently began deploying an enhanced security system. The focus of this note is the deployment of IP video surveillance for the Sanford/Lake Mary campus. The college has other campuses in Altamonte Springs, Heathrow and Oviedo.

THE CHALLENGE

Seminole State began the deployment of IP video surveillance in the parking areas of the Sanford/Lake Mary campus. The areas of coverage consisted of the South, North, and Public Safety 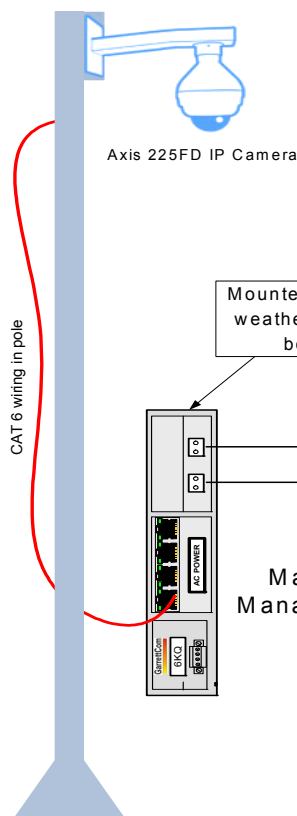(PS) parking lots. The surveillance system included Code Blue CB1 emergency phone towers (see diagram below and photo next page), Axis fixed day/night IP cameras and Ethernet switches for the networking system. The IP cameras were positioned so that all the Code Blue phones are covered and monitored in addition to the parking areas.

The network needed to be IP-based to support all of the video cameras, their high-bandwidth images and the growth of Seminole State College. The applications use multiple VLANs over fiber cables. Due to the lightning threat in central Florida, fiber optic cable was also required. In the past, equipment had been damaged due to proximity lightning land strikes. Using fiber cabling and installing more aggressive grounding has saved a lot of money and time for equipment replacement.
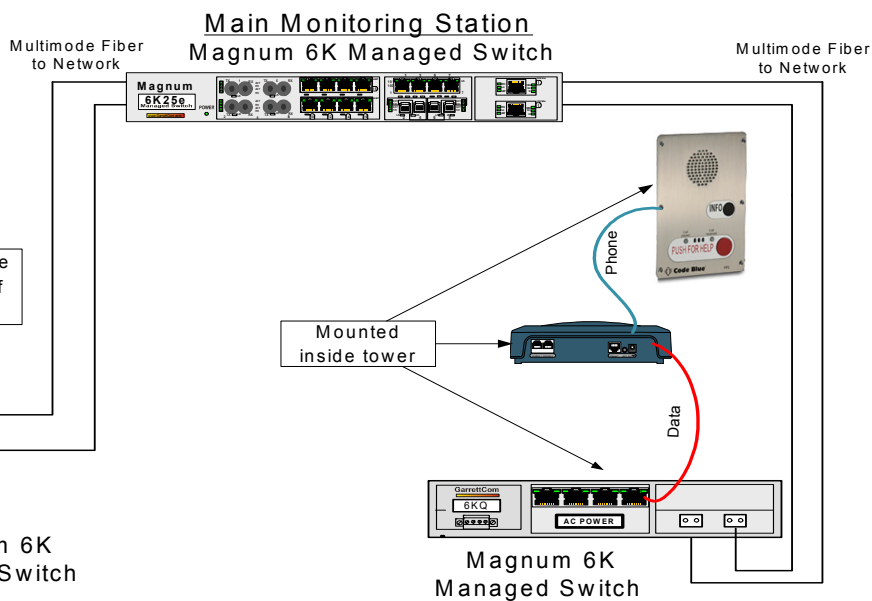
Perhaps the key to the network was the Ethernet switches. The switches deployed out in the campus by the Code Blue phones and IP cameras needed to have the following characteristics: small size, wide temperature rating, be fully enclosed, have robust management capabilities, and be flex-

CODE BLUE SECURITY NETWORK AT SEMINOLE STATE COLLEGE SANFORD/LAKE MARY CAMPUS

Typical light pole with IP camera

Axis 225FD IP Camera

CAT 6 wiring in pole

Multimode Fiber to Network

Main Monitoring Station
Magnum 6K Managed Switch

Mounted inside weather proof box

Magnum 6K Managed Switch

Typical emergency phone tower

Multimode Fiber to Network

Phone

Mounted inside tower

Data

Magnum 6K Managed Switch

Emergency

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THE CHALLENGE (Cont.)

ible enough to handle 100Mb, and Gigabit fiber in the same package.

THE SOLUTION

GarrettCom's Magnum 6KQ Industrial Ethernet Switches were chosen because they met all of Seminole State's requirements including "hardening." The 6KQ is designed for heavy-duty outdoor applications such as video surveillance that require hardening--one reason why the switches proved to be a natural fit for the application. Indeed, the Magnum 6KQ units were mounted inside weatherproof boxes. It was essential that the switches could not only fit into the boxes but that they were designed to handle the hot temperatures of the Florida summers. Inside the boxes, the units would have to survive "oven-like" conditions.

Switch configurability was another important requirement for the switches. The campus north parking lot was networked with Gigabit (Gb) fiber and copper while the south parking lot and the public safety (PS) lot were networked with 100Mb. The Magnum 6KQ can be configured with both 100Mb and Gb as well as an unparalleled breadth of fiber modules. The 6KQ Switches were then connected to the backbone at the main campus monitoring station where a Magnum 6K25e was also deployed.

Seminole State College is pleased with the performance of the Magnum 6K switches and plans to deploy more throughout its campuses.

Magnum 6K Switch in typical Code Blue tower installation
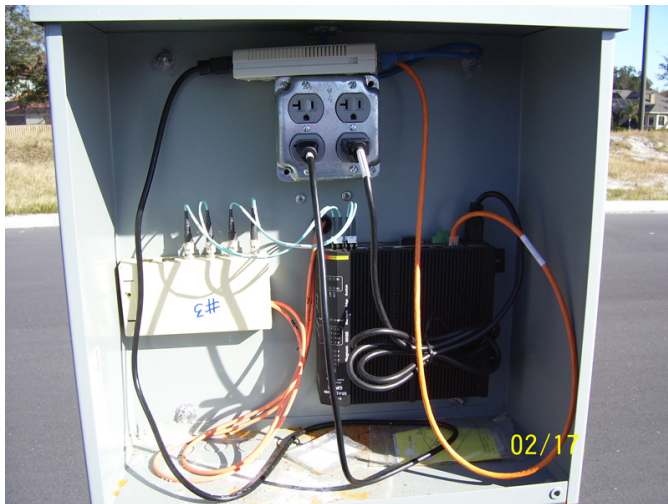
Magnum 6K Switch in typical lightpole installation

ABOUT MAGNUM PRODUCTS

Magnum 6K Managed Switches are highly configurable switches, providing modular slots for user selection of 100Mb, 10Mb, or Gigabit Ethernet fiber or copper ports. The Magnum 6K line is hardened for the harshest industrial environments. Many 6K Switches are convection cooled (such as the Magnum 6KQ used as part of the Seminole State College solution). Power input choices include AC, 24VDC, -48VDC, 125VDC, and dual DC input for redundancy.

MNS-6K Managed Network Software provides the latest technology for switch management, network management and security. Based on network standards, it is easily integrated into existing networks, and features standards-based redundancy functionality and Secure Web Management (SWM) GUI. MNS-6K-SECURE is available for those customers demanding *extra* security in their networks. It includes SNTP client and SNTP server that provides synchronized time services for networks. Both MNS-6K and MNS-6K-SECURE now feature industry standard RSTP-2004 to support larger rings and meshes.

To learn more about GarrettCom's range of hardened and innovative industrial networking products, visit **www.GarrettCom.com.**