Customer Profile:

THE UNIVERSITY of TEXAS
HEALTH SCIENCE CENTER
AT HOUSTON

The University of Texas Health Science Center at Houston was founded in 1972. Located in the Texas Medical Center, the institution brings together the Dental Branch, the Graduate School of Biomedical Sciences, the Medical School, the School of Public Health, the School of Nursing, the School of Health Information Sciences, the UT Harris County Psychiatric Center, and the Brown Foundation Institute of Molecular Medicine for the Prevention of Human Diseases. The student population totals 3,865 students, with 1,389 faculty and 3,648 staff.

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Kevin Granhold
Director of Datacenter
Operations and Support Services,
University of Texas Health
Science Center at Houston

DES-3828P- Managed 24-Port 10/100 Stackable L3 PoE Switch, 4 Gigabit Ports, 2 Combo SFP

- Monitor Your Home or Office over Internet from Your Web Browser

- PoE Support Gives You More Flexibility for Camera Installation

- Starts Recording and Sends E-mail Alerts Upon Motion Detection

University of Texas Health Science Center at Houston Secures New Data Center with End-to-End D-Link® PoE Network Camera Solution

The Challenge

The University of Texas Health Science Center at Houston built a brand new, 7,500 square foot data center back in 2007. Part of their facility design included the need for security cameras. "We wanted to see who's coming and going in this high-value facility," said Kevin Granhold, Director of Datacenter Operations and Support Services at the University of Texas Health Science Center at Houston. "We also needed to monitor entrances to remotely let people in if necessary."

A security and surveillance solution would allow the organization to record activities within the data center, review incidents, monitor who is performing what tasks throughout the day, and keep track of the general coming and going of employees.

"We were looking for an enterprise solution to help us manage a few dozen cameras and assess any situation that might occur within the data center," said Granhold. "We also needed to consider design issues with respect to wiring and camera placement."

The Health Science Center evaluated the analog surveillance system used by the University of Texas police department and took a look at the associated costs. They also looked at technology issues like optical and digital zoom, and camera capabilities in particular lighting situations. "It was pretty obvious the direction we needed to go," said Granhold.

Network cameras would be much less expensive than analog, from both an equipment and wiring perspective. The university decided that they would need wired Ethernet cameras, because they didn't want to add power receptacles to accommodate wireless cameras. They would be able to power wired Ethernet cameras with Power over Ethernet (PoE) technology.

"We made a strategic decision to use PoE rather than putting receptacles at each camera," said Granhold. "From a cost perspective, it was definitely advantageous to go with PoE cameras using IP rather than your typical analog and cable cameras."

The Solution

After exploring several IP camera vendors, the university decided to invite a D-Link field engineer to their campus to go over options and look at their building designs. The engineer made some recommendations to accommodate their coverage needs and helped the university decide on the proper cameras for specific applications.

The university eventually purchased 30 D-Link Network PoE cameras - 40% with digital zoom DCS-5300 and 60% with optical zoom DCS-6620. "We used the better cameras DCS-6620 in the places where we needed better pictures," explained Granhold. They tied the IP surveillance network together with a 24-port PoE switch, the D-Link DES-3828P, and D-Link DWL-P50 PoE adapters. This separate network links to their production network via one uplink. By keeping the video network separate, it has a higher level of security, and their IT staff can treat it as a distinct entity outside of the production network.

Granhold's team performed the installation, placing brackets on the walls to hang the cameras and mounting them. Ethernet wiring was already part of the building design, so it was easy to connect everything back to the DES-3828P switch.

The system is set up to record 90 days of intermittent activity. The cameras record only when there is activity in the rooms. If there's no activity, no data is stored to disk. The camera network includes eight simple 1U servers, each with a 500G hard drive. The storage is not fully utilized. Staff can monitor the cameras via eight 23-inch screens in the operations area of the data center. Each screen shows four cameras.

The system is mostly used for security and surveillance purposes, as opposed to monitoring employee productivity. Within weeks of the

D-Link's IP surveillance solution helped secure a new 7,500 square foot data center at The University of Texas Health Science Center at Houston

DWL-P50 - Power over Ethernet (PoE) Adapter

• Deliver Power up to 328 Feet (100m) Away

• 802.3af Compliant Power over Ethernet

• Plug & Play Installation

DCS-5300 - 10/100 Fast Ethernet Internet Camera

• View a Live Camera Feed from Your Compatible 3G Mobile Phone or PDA

• Expand Your Survey Area with Motorized Pan/Tilt and 4x Digital Zoom

• Advanced Video Motion Detection with E-mail Alerts

DCS-6620 - 10/100 Internet Camera, Pan/Tilt/Zoom, 10x Optical Zoom, Dual Codec, 0.05Lux

• Motorized Pan/Tilt/Zoom

• User-Selectable Compression Codec - MJPEG and MPEG-4

• 2-Way Audio Support

• Extreme Low Light Sensitivity

• Smooth Video Recording of Up to 30 FPS

installation, the university was able to analyze a theft incident with the recordings. "We had some equipment stolen from the data center," explained Granhold. "We went back and looked to see who took it. One vendor took another vendor's tools. It was easy to figure it out with the digital evidence."

It's now easy to sort things out when events occur in the data center and no one takes responsibility. "We just look at the video files and sort it out," said Granhold. The University of Texas police department has even asked to view their recordings to examine incidents that have taken place on the property.

"I think it's a really good tool," said Granhold. "Some people find it a little intrusive, but we have a really big investment in our data and equipment, so it's necessary. Most people don't even think about it any more."

The system, in place for the past two years as of this writing, has been "relatively glitch free" according to Granhold. "It worked out great for us," he said. "I'd recommend spending more money on the better cameras - the DCS-6620's. And make sure you have done your due diligence with coverage design. You don't want to have dead spots where a certain area is not visible to the cameras. Also, make sure that all your cameras and your policies are set up the same. If you do have a problem and you go back to look, you don't want one camera set up on a 30 day retention and the others on 90 days. You want all those settings exactly the same."