Magazine Subscription   About Us   Site Map

Search

network centric Security

Visit the **new** Ne

Home | Magazine | News | Products | Industry Directory | Community | Resource Center | Classifieds | Services / Advertising

HOT TOPICS

Access Control
Airport Security
Analytics *new*
Business Continuity
Casino Security *new*
CCTV
Dealers and Integrators
Emerging Technologies
Facility Security
Fire / Life Safety
Government
Homeland Security
Identity Management / Biometrics
IP Video
IT Security
Monitoring
Network-Centric Security
RFID
School Security
Transportation Security
Video Surveillance
Wireless Networks

RESOURCE CENTER

Products
Industry Directory
Vendor Catalogs
Classifieds
Events
Newsletter Subscribe

MAGAZINE

Subscribe
Current Edition
Archived Editions

ABOUT US

Contact Us
Media Kit

Home   Articles

Extended Outlook

By Lee Caswell   Apr 01, 2009

City grows its video surveillance as a valuable police tool

The Long Beach, Calif., police department turned to high-tech "eyes in the sky" to monitor and protect public access areas. Video surveillance cameras have been installed in various downtown locations that are popular commerce and entertainment destinations, drawing thousands of visitors each day.

In 2006, the Long Beach Redevelopment Agency allocated funds to create the infrastructure for the video system. The Wi4Net division of CelPlan Technologies of Reston, Va., was chosen to implement and maintain the system. Since then, Wi4Net has been installing the video surveillance system in phases, starting with Pine Avenue, a historic downtown entertainment, dining and shopping district.

Phase II takes the system to the sports arena, convention center, world trade center, and various other facilities and high-traffic areas. Phase III ventures into further reaches of the city.

New Sarix IX Series Mega Pixel Cameras

PELCO by Schneider Electric

Adding Virtual Patrols

Phase I of the project involved installing nine video nodes and 17 cameras in the Pine Avenue entertainment district. The video is stored on a highly scalable storage area network from Pivot3.

"Having the video surveillance system is like having additional patrol officers on the street," said Lt. Steve Ditmars with the Long Beach Police Department. "From our monitoring hub, we can see what is happening in a public area and direct officers to a hot spot if needed. The system has been embraced by patrol officers in the area and has been used in several cases."

Delivering scalable storage capacity at a reasonable cost for a municipal video surveillance system with large input requirements was a major part of the project. "Evidence is irreplaceable," said David Carreon, IVN's vice president of sales. "Preserving it and making it available when needed is critical to the clients we serve."

Grow-as-You-Go Storage

The Pivot3 high-definition solution is a vital link in the evidence chain of custody. The solution's open-system approach allowed it to integrate seamlessly into the Wi4Net FlexiVideo solution that includes components from multiple providers.

Phase II of the project entails adding six more nodes and 12 more cameras, and Phase III includes adding another 15 nodes and 30 cameras. The ultimate goal is achieving citywide security coverage, and the video from all those cameras will need to be effectively managed and stored.

Poll

What did you find the most beneficial at ISC West?

○ Educational programs and seminars
○ Networking opportunities
○ Viewing the latest products
○ Other

Vote
View Results
Archives

Webinars

Rapid Action Pandemic Planning for the Private Sector

"In the early stages of implementation, when we only had a handful of cameras, we could get by with directattached storage servers," said Jasper Bruinzeel, vice president of marketing and sales with CelPlan Technologies. "However, this gave us limited storage capacity and no growth path. The storage area network gives us the capacity we need to accommodate the current and future growth of the surveillance network. We estimate we'll need 6 terabytes of storage space in the near future, but we expect to grow far beyond this. The Pivot3 system will let us grow capacity as we need it, whenever we need it."

The high-definition storage system, built on Pivot3 RAIGE™(RAID Across Independent Gigabit Ethernet) technology has a unique way of handling vast amounts of video data streams. The RAIGE operating system drives a series of inexpensive networked nodes, called databanks, which are virtually clustered. This creates a high-performance storage cluster where the video data is distributed, protected and accessed in parallel across multiple databanks connected via common gigabit Ethernet. This unique configuration breaks the limit of physical RAID devices by using a totally virtualized environment.

The virtual architecture allows performance and capacity scaling along with flexible and dynamically changeable data protection levels and volume definitions. There are no hardware limits; by adding databanks, the capacity can grow to hundreds of terabytes, allowing enterprise scaling with affordable industrystandard drives. Each databank adds processing power, cache and network ports contributing to an overall increase in performance and bandwidth.

Contrary to most storage systems, whose performance degrades as capacity is added, the performance of a solution improves with the addition of each new databank.

For the city of Long Beach, the system can start small and grow incrementally as more surveillance capacity is added. The city doesn't have to pay for excess storage capacity that sits idle long before it is needed. Instead, the network administrator can simply plug in another inexpensive self-configuring databank at any time. The architecture supports dissimilar databank nodes, preserving the city's investment in existing technology while making the introduction of newer technology painless.

Another important feature of the RAIGE architecture is the inherent redundancy at every level. Because the video images are distributed and replicated across multiple databanks, no data is ever lost if a databank fails. The system dynamically rebuilds itself, providing peace of mind for the police department, as it can be assured that the stored video images will always be available, if and when needed.

Cost-Conscious without Compromise

"We like the manufacturer's approach to storage," Bruinzeel said. "We get superior performance and growth potential from a storage area network at an affordable price. Even though we're cost-conscious with the city's money, we are not compromising a thing to get a great back-end storage solution for all our video."

"We have built one of the nation's first and largest wireless camera system infrastructures, using the 4.9 GHz spectrum for all of the cameras," Ditmars said. "Although our camera and wireless system were designed with expansion in mind, we realized only later the large scaling required from a storage perspective. We now have a storage system that can meet our current and future needs at a lower cost. The system was implemented quickly, and because of its 'pay-as-you-grow' model, it costs us only a fraction of traditional SAN solutions."

As the city of Long Beach enters the final stages of its decades-long revitalization, the city's visitors and residents can feel safe as the video "eyes in the sky" add a strong police presence to the newly remade and vastly popular public areas of the historic Southern California city.

This article originally appeared in the April 2009 issue of Security Products.

About the Author

Lee Caswell is the co-founder and chief marketing officer of Pivot3.

Printable Format   E-Mail this page

Related Articles

Avigilon Joins ONVIF 05/11/2009
Municipal Utility Powers Up Infrastructure Security With IP Video Upgrade 05/01/2009
Secure Investments 05/01/2009
Texas School District Uses Network Cameras To Enhance Security 05/01/2009
Bosch Will Provide Turnkey Security Installation to Hamburg-Moorburg Plant 04/30/2009

Going Critical

Deployed Integrated Intelligent Video Solutions: What's In It For Me?

View all webinars

Links

Security Cameras
The Internet's #1 distribution source for all security camera products.