



Success Story



City of Riverside, California

Integrated Security Solution for a Growing Community

“The ability to monitor activities and events in real time gives us an operational edge that did not exist before we installed the new system. By choosing Insight Video Net’s CMS technology we will be able to expand our surveillance and response capabilities in ways that are not possible with other video systems”,

~Steve Reneker, Chief Information Officer, City of Riverside

Our Partners

Insight Video Net partnered with the following wireless and wired segments to transfer the captured video to servers across the city-owned fiber network:

Infnet Communications
www.infnet.net

Skypilot
www.skypilot.com

Today, federal, state and local governments are seeking better and more cost effective security solutions for their communities. Surveillance tools are increasingly being used to deter crime, identify lawbreakers and to improve the management of emergency responses and major events. The City of Riverside, California recently installed a state-of-the-art network of digital video surveillance cameras along its primary shopping and commuting corridors and at vulnerable infrastructure sites. The new surveillance capabilities have enabled the City to monitor activity on the street and, when an event occurs, to respond more rapidly and more effectively.

Customer Background

Riverside, California is one of the fastest growing metropolitan areas in the United States. It is a diverse city of approximately 300,000 people. Riverside has a unique blend of historic charm and modern city features. Riverside’s economy is diverse and healthy; rather than being dominated by a single industry, Riverside is home to a wide range of government, light industries, manufacturers, distributors, diverse retailers, offices and other professional services. Riverside has four excellent colleges and other educational institutions, including the University of California, Riverside. Riverside’s historic buildings and unique settings have frequently provided locations for the movie and television production industry.

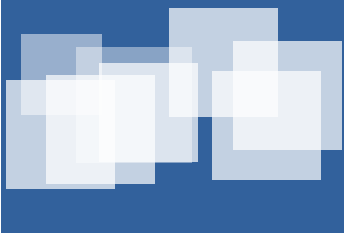
The City prides itself on providing the best available technology to the benefit of its residents, businesses and visitors. Riverside’s civic leaders are committed to maintaining the community’s quality of life and security despite the challenges of rapid growth. The design and installation of a leading edge digital video surveillance system from Insight VideoNet was an important addition to Riverside’s security infrastructure.

Business Need

Riverside has experienced the stresses that are common to any community that experiences rapid growth: increasing crime, higher demand for services and more traffic congestion. The increased traffic poses a particular problem for Riverside because many of the major streets cross railroad tracks that bisect the City. Trains that slow or stop at crossings can stop traffic across the City causing major disruptions. The cost of increasing the number of personnel to monitor train traffic was not affordable, so a decision was made to look to technology to help respond to the challenges. It was quickly determined that video and sensor monitoring could help meet Riverside’s requirements.

Riverside’s IT staff had little experience with digital video systems and so they required a system that would:

- Require minimal human intervention.
- Offer the capability for viewing live video streaming from any camera on the network.
- Provide reliable evidence in civil and criminal cases with appropriate proof of authenticity and audit trails.
- Automatically implement Riverside’s retention policies for video to reduce storage costs and limit the City’s exposure to liability.



Solution

Riverside engaged Insight VideoNet, to design and help deploy a new fixed digital video surveillance solution that would monitor and record activity at designated locations and facilities across the City. After reviewing Riverside's requirements, Insight Video Net provided a design for a sophisticated digital video solution customized to the City's unique requirements. The system uses 205 cameras to monitor and record activity across the City. Video is transported by both wireless and wired segments from Infinet Communications and Skypilot to transfer the captured video to application servers via the city-owned fiber network. The application servers enable the viewing of live video and process the video for archiving by adding the appropriate metadata and then compressing it. The video then goes to storage servers that securely retain the video and control access to it. The new surveillance system provides coverage to primary streets, parks, water and power infrastructure and other public areas.

The City's design team selected Insight's Central Management System™ (CMS) software as the core of the video management system. CMS software authenticates, stores and organizes the video, audio and metadata content captured by the fixed cameras. Once the video files have been stored on Riverside's Operations Center servers, personnel can connect to CMS using a web browser application to search and review stored video files. The Insight Video Net Central Management System is a security-rich solution that provides an open-architecture approach, supports industry standards and enables different levels of access rights. Any person accessing the system will be logged, and information about who uploaded, downloaded, viewed or copied files is recorded in the security database. Other features of the video surveillance system that will be used in Riverside include:

- Capture of video/audio data to a MPEG4 format.
- Compression format at up to 30 frames per second.
- Use of video analytics to trigger system alerts when trains slow or stop in the City.
- Triplex operation permitting personnel to simultaneously view live video, capture video and playback video files. This allows full control over the viewing of the video without halting the recording in any way.
- Configurable pre and post event video/audio data capture: pre-incident recording will capture up to the first two minutes prior to the alert.
- Encryption that prohibits video file viewing by unauthorized users. To prevent the video from being altered, the stored video goes through a rigorous digital signature process using RSA-based encryption. The encryption process links each frame to the preceding one through a complex algorithm, which prevents anyone from deleting a video sequence. Any change to an individual frame, down to a single pixel, is detected.
- Remote system management that allows authorized personnel to access the video system from any user location through TCP/IP for system monitoring and troubleshooting.
- Video file bookmark capability allows personnel to attach notes to the video files. These notes are later indexed with the storage and management system and are searchable.

Benefits of the Solution

The new digital video system has improved public safety and quality of life in Riverside by providing new tools to the City for the deterrence, investigation and prosecution of crime and other violations.

The violations are detected and recorded automatically using a video analytics product from Agent VI and prosecutions can be more effectively supported by digital evidence.

The new video system will also improve the management of emergencies and major events by allowing live viewing of situations. This enables managers to make better decisions more rapidly and to use City resources more effectively. Review of incidents is also easier because the new system provides instant access to the stored video.

"The ability to monitor activities and events in real time gives us an operational edge that did not exist before we installed the new system. By choosing Insight Video Net's CMS technology we will be able to expand our surveillance and response capabilities in ways that are not possible with other video systems", said Steve Reneker, Chief Information Officer.

By engaging Insight Video Net and their business partners, the City of Riverside acquired the hardware, software and services it needed to implement one of the most modern surveillance systems available. The City was impressed by the Insight VideoNet team's digital video knowledge and experience and their ability to respond quickly to any technical issue that arose. Riverside expects to continue to work with Insight Video Net as it expands its surveillance and monitoring network. 

Your dealer info: