



Port Security - West Coast

Wireless networking technologies and scalable IP-based video systems have converged to now provide the ability to develop comprehensive video security monitoring systems that can cover extremely large, expansive facilities such as seaports, oil refineries, and military bases. Pasha Stevedoring and Terminals (PST) of Wilmington, CA required a video surveillance system to cover its operations at the Ports of Los Angeles and Long Beach. PTS, a professional cargo-handling company that provides expert vessel loading and unloading services for the global maritime transportation industry, chose a wireless IP-based video surveillance system from IVC.

Currently, twenty-two cameras are installed at the Port of LA. The cameras are connected to a network infrastructure that includes copper Ethernet cable, fiber optic cable, and fixed wireless radios from Motorola. The 5.7Ghz, 14 Mbps Motorola Canopy radios are configured in a point-to-multi-point architecture. Seven cameras attached to wireless subscriber units are connected to the facility's network via two wireless access points. In one situation, two cameras are connected to a single subscriber unit via a small switch. In a few cases, fiber media converters are employed to connect cameras directly to the site's fiber backbone. The wired cameras are fixed view and are used to monitor the interior of some of the buildings on the premises.

The access points use external 12 dBi Omni directional antennas to cover distances that range from 300 meters to 1 km. The units are configured to operate on different

frequency channels and are connected to the facility's NOC with CAT5e UTP cable.

Video from the cameras is managed by IVC's Relay Server software. The Relay Server software serves live video to local and remote clients. It also is responsible for managing the storage of video for the system and serving stored video to these same clients. PST views video through the IVC Relay Server web interface and through the IVC View Station client software. The browser interface provides the possibility of viewing video locally and remotely. The View Station allows users to customize any number of displays. PST has configured a 22-window main view with single mouse click access to full screen views of any camera.

Some of the key features that led PST to use IVC in this application include:

- Instant selection of multiple preset views, including zoom level, from browser page or View Station
- Bandwidth management features of Relay Server software to efficiently use limited wireless bandwidth
- Use of panoramic views in browser page and View Station for single click navigation of PTZ cameras
- Scalability and flexibility; no restrictions on camera types or connectivity – no proprietary equipment needed to manage cameras

