

MOBOTIX

CASE STUDY



Panorama Towers: A Luxury Condominium Complex

The Panorama Towers is a premiere luxury condominium complex in Las Vegas, Nevada. The award-winning, high-rise complex houses 652 units in two towers on 8.5 acres. The complex features world-class, luxury amenities that include a resort-style heated pool and hot tub, two 2,500-square-foot fitness centers, concierge service, valet parking, spa facilities, a yoga and pilates studio, two large-screen movie theaters, two indoor racquetball courts and two conference rooms. Approximately 409 full-time residents call the luxury condominium complex home and up to 652 residents are vacationers and second-home owners.

After facing the worst real estate market in Nevada's history due to the economic downturn, Panorama Towers rebounded with one of the highest appreciation rates in the region. Prices nearly doubled over second half of 2011. Completing the largest developer defect suit in Nevada history, Panorama has enjoyed a near full occupancy rate for the last two years and counting.

The Image Quality Challenge

Since its development in 2006, Panorama Towers relied on an analog camera system to capture video and enhance safety. The video was predominately used to investigate incidents and homeowner violations. However, the image quality fell drastically short, according to Christian Petrou, CEO, Rvnue, the Panorama Tower's security systems integration firm.

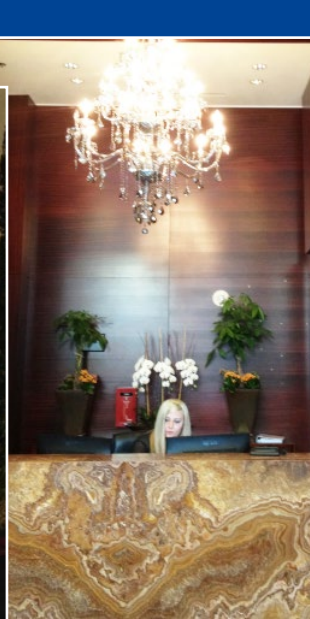
"With the previous camera system, users couldn't tell the difference between anything close on the color spectrum. The captured images made it nearly impossible to determine whether a person was male or female," Petrou said. "Security personnel lacked the image clarity necessary to enforce a fine or close any cases."

At one point, an individual scratched an elevator mirror and, even though the camera was ideally positioned to capture the event, the image quality was too poor to identify the person responsible. The management team invested several hours into the investigation and in the end, absorbed the cost of the replacement.

Occasionally, residents commented about the efficiency of the tower's personnel and there was no video or audio available to determine what had actually occurred.

Security-Vision-Systems





T24

“The decentralized approach is brilliant”

“We wanted high-resolution video and reliable audio to provide us with the details of these exchanges,” said River Polson, Security Post Commander, Panorama Towers. “If one of our employees breaks protocol, we need to be aware so we can address the issue and retrain. Therefore, the video system we sought could be used as an operational tool as well as security tool.”

The Ideal Solution

Systems integrator Rvnu designed and installed an end-to-end IP surveillance solution from MOBOTIX. The system includes 137 MOBOTIX cameras as well as Dell R720 rack servers for 80TB of storage. The integrator recently completed the first phase of the MOBOTIX installation, which included 78 cameras. A MOBOTIX DualNight M12 camera, an IP camera with two high-resolution lenses for day/night function, secures the rear gate and tracks incoming and existing vehicles. DualDome D14 cameras, which include two lenses to provide a 180-degree panoramic view that reduces camera counts, monitor the towers’ perimeter, lobbies, receiving docks, the pools and the valet area. No matter which model, all MOBOTIX cameras with 3.1 megapixels record 30 times more detail than traditional CCTV cameras.

Rvnu found additional cost and camera count reduction in the deployment of more than a dozen MOBOTIX S14 cameras, which are capable of securing two adjacent rooms. The S14D FlexMount features two hemispheric sensor modules, each with a 180-degree horizontal viewing angle, connected to the

camera module via a 6-foot-long cable. With the camera wiring and housing concealed in a wall and a lens on either side, the S14D provides a comprehensive, 180-degree view of a room.

The S14Ds are deployed throughout the interior of the condominium complex. With just one camera module in the cases noted below, Panorama Towers is monitoring:

- The concierge service area and the package room on the opposite side of the wall to track packages in case one is ever misplaced or stolen
- The entire employee break room and adjacent hallway
- The main gate, where residents are asked to provide identification. The two lenses provide a high-resolution view as well as audio
- The guard station as well as the driveway pulling up to the area
- Receiving docks and the inside hallways leading to the docks

Petrou said his team also installed MOBOTIX Q24 cameras in high-risk areas. The Q24 uses MOBOTIX’s hemispheric technology to provide a 360-degree, high-resolution view of a room.

“With the S14s hemispheric view, we can replace almost a dozen traditional cameras,” Petrou said. “One S14 can replace up to eight of traditional cameras and the Q24 provides a view that traditionally takes three to six cameras to obtain.”



D12



The cost efficiencies of MOBOTIX's decentralized approach to surveillance and the deployment of MxControlCenter, professional video management software available with the purchase of every MOBOTIX camera at no additional cost, also helped Panorama Towers stay considerably under budget. Each MOBOTIX camera is equipped with a high-speed computer, which reduces bandwidth because images are processed on the camera. This approach also preserves critical video data in the event of network outage, an important attribute for the condominium complex because the video data is used primarily for evidentiary purposes. Per security parameters, only authorized individuals have access to the IP video system.

"The decentralized approach is brilliant and makes each individual camera more robust," Polson said. "Each camera is recording video and we're ensured that, under all circumstances, those cameras are going to capture video."

On Time and Under Budget

Petrou estimates the entire technology project will cost \$1.4 million, a mere 28 percent of the proposed \$5-million budget. That drastic cost savings is due to the cost efficiencies of MOBOTIX's decentralized concept, free video management software and the drastic reduction in the number of required cameras.

Even before phase one was completed, the cameras resolved incidents. Immediately after Rvnue installed an M12 camera,

the camera captured a reckless driver on a perimeter road and caught a clear image of the license plate.

Polson's security staff monitors video in real-time to quickly address any resident complaints or security concerns. "If a resident calls security dispatch, we'll be able to view the video that corresponds with that event. Now, these situations are significantly easier to deal with."

"We got a far superior security system and it even pays for itself with reduced manpower costs. We are grateful to Christian and Rvnue for their knowledge and guidance in this project." said Board Director Michael Murphy.

"The reduction in camera count alone saved the complex approximately \$40,000, and approximately \$680,000 in additional cabling" Petrou said. "The security team no longer has walk around the perimeter or spending countless hours investigating an incident. They now have the image clarity they need to be more effective and, therefore, the system will pay for itself in reduced labor and power costs."



MOBOTIX – Made in Germany: Innovative Technology, Reduced Total Costs

The German company MOBOTIX AG is known as the leading pioneer in network camera technology since its founding in 1999, and its decentralized concept has made high-resolution video systems cost-efficient.

Increased Resolution Reduces Amount Of Cameras Needed

1536-line, high-resolution sensors give a better overview and allow users to monitor an entire room with just one camera.

Reduced Installation Costs At Any Distance

Standard Ethernet connection enables the use of common network components such as fiber, copper and wireless (wi-fi).

Intelligent Cameras Reduce The Number Of Recording Devices

The decentralized MOBOTIX concept makes it possible to store data from approximately ten times more cameras to a single storage device than is normally possible.

Event-Controlled Image Format Minimizes Storage Costs

Automatic image adjustment (frame rate, size) based on movement, sound or signal input reduces the bandwidth and storage requirements.

Low Power Costs, No Extra Heating

Anti-fogging without heating allows usage of standard PoE technology to power the system via Ethernet or two-wire cable, saving power cabling costs.

Backup Power Supply Costs Reduced By Over 80 Percent

Low power consumption, approximately four watts, enables year-round PoE (no heating required) with one centralized UPS from installation room using the network cabling.

Robust And Practically Maintenance-Free

Fiberglass-reinforced composite housing with built-in cable protection and no mechanical moving parts (no auto iris) guarantees longevity.

Software For Thousands Of Cameras And Storage Devices Included

The right premium user interface software for every application: MxEasy for compact video solutions, MxControlCenter for professional control centers.

Unlimited Scalability And High Return On Investment

While in use, more cameras and storage can be added at any time; image format, frame rate & recording parameters are camera specific.

Additional Functions And Other Extras Included

Audio support, lens, wall mount and weatherproof housing (-30 to +60 °C; -22°F to +140°F) are included; microphone & speaker available in almost all models.