Punta Cana International Airport Raises Surveillance to New Heights with Networked Solution

Customer Profile

Punta Cana International Airport is situated in the eastern part of the Dominican Republic. With passenger numbers now totaling 4.5 million each year it is firmly established as the busiest international hub for this popular Caribbean tourist destination.

Background

Thanks to the sustained growth of the airport, and new terminal construction in recent years, there was a realisation by management that action needed to be taken to upgrade the legacy surveillance infrastructure that was no longer fit-for-purpose. A major additional challenge at Punta Cana was to ensure that any works would not unduly disrupt critical airport operations. The proposed answer was to move to an advanced networked solution comprising IP cameras plus NUUO NVR servers and a powerful CMS, all linked together in one seamless LAN. A new fiber backbone was also to be adopted to provide effective and reliable transmission of the video footage.

The ambitious project represents a significant uplift in capability compared to the airport's previous CCTV system. This had been built around multiple standalone DVRs with limited functionality. Given the scale of Punta Cana's operations, the DVRs' continuous recording had become an outdated and inefficient way, to store video compared to that which could be offered by new elements, like the feature-rich NUUO Mainconsole NVR servers, with record-on-event options. Another capability of the latest NUUO NVR servers that satisfied a specific security requirement of the airport was password protection on the Mainconsole software to prevent unauthorised access to footage.

Solution

Looking into more details at the intelligent surveillance solution, designed by system integrator Soico, a total of 204 Axis IP cameras were specified for the airport. Once in place these were connected, via a dedicated LAN, to 5 NUUO Mainconsole NVRs, and ultimately, to a NUUO CMS Client situated in the airport's control room. The industry-leading smart guard function in the NUUO NVRs means that alarms can now be automatically reported in seconds to the CMS so action can be taken.

Regarding the performance requirements for the project it was stipulated that video recording should be in CIF resolution at 15 FPS using the H.264 codec. In addition, footage was to be held for 15 days. This necessitated a HDD storage capacity of 30TB using RAID 5.

Sitting at the heart of Punta Cana's video surveillance operations, the NUUO CMS provides control room operators with the ability to make informed decisions as incidents develop. Essentially, should movement be detected in a restricted area the NUUO CMS can spotlight the camera in question via an on-screen map and allow operators to open an associated viewing box to see the scene for themselves. Another useful capability is an alert if an object is left unattended - an important consideration for today's airport security staff. Focusing on the control room video wall, the flexible CMS enables selectable camera angles to be displayed whilst leaving some matrix channels free, so relevant video can pop-up automatically in the event of an incident.

Benefits

Undoubtedly, the NUUO solution has transformed the security situation at the airport for the better. Before, the project items were stolen on a daily basis; but few of the culprits were caught on camera, so there was little to deter their disruptive activities. Now, thanks to effective video surveillance, the criminals have to think twice. Underlining the positive impact on the ground, on the very first day of installation, the CMS played a pivotal role in the identification and capture of a thief following the report of a robbery thanks to the user-friendly playback capability.

Customer feedback received since the solution went 'live' has been extremely encouraging. Regarding the NUUO NVR and CMS, airport security staff commented: "The system has great performance compared to our previous experience with standalone DVRs. This is the first time we have had software which is easy to use and has so many different tools."
Success Stories

Soico SRL is a prestigious and fast growing electronic security company in Dominican Republic. Since 2006, it has made major integration projects, such as access control, CCTV and fire alarms. They also provide the service to manage all the systems in central stations for projects like shopping centers, service centers, residential projects and airports, etc. In the SOHO market, Soico handles great deals on installation, monitoring alarm systems and video surveillance through the IP camera technology. In a highly competing market, Soico keeps the promise to provide the highest security through experienced project designs and offering quality devices, like Axis and NUUO. For more information, please contact Soico: +1-809-565-1823.

Device & Software List

- Cameras: 204 Axis IP cameras
- Recording Servers: 5 NUUO Mainconsole PC-based NVRs
- Client Software: NUUO CMS (Client + Matrix) in Control Center
  - a) 5 CMS (Client + Matrix) PC Servers
  - b) 9 monitors for CMS Client
  - c) 10 monitors for CMS Matrix
- Storage: Internal storage of 6 TB per recording server, RAID 5
- Switch: 5 recorders are remotely accessed and centralized by Control Center via Fiber, using a PoE Switch

Project Architecture

NUUO Partner – Soico SRL

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Project Photos