

Case Study

Dubai Airports

Dubai Airports owns one of the largest Omnicast™ systems in the world with almost 8000 cameras



Dubai Airport authority trusts Genetec Omnicast IP Video Surveillance for uninterrupted system reliability and growth at two major international airports.

Business challenge

Dubai Airports is the designated government authority in the United Arab Emirates which owns and manages the operation and development of both of Dubai's airports – Dubai International (DXB) and Al Maktoum International (DWC). While Dubai International has been the main airline hub since 1960, welcoming over 68 million passengers per year and serves 260 destinations, upon completion, Al Maktoum International (which opened its doors to passengers in 2013) will become the largest airport in the world with an ultimate capacity of more than 160 million passengers annually.

When it comes to security and protecting the millions of passengers who frequent the airports every year, Dubai Airports require the very best security technology on the market. A decade ago, the organization sought to upgrade an existing closed-architecture analog system, understanding before many other airports the value in an open-architecture IP-based video surveillance system.

Dubai Airports wanted to implement a more robust, user-friendly and scalable network-based platform that would be capable of handling over 1000 cameras, and accommodate its ambitious expansion plans. The new video surveillance system also had to be successfully implemented at other international airports. After much deliberation, Dubai Airports chose Genetec Omnicast IP video surveillance for its proven ability to scale up to thousands of cameras, while maintaining high system availability.

High camera count is matched by high system availability

Today, Dubai Airports has over 6,500 cameras on the Omnicast system at Dubai International and another 1,200 cameras at Al Maktoum International, which were gradually upgraded in three phases.

The flexibility of the open architecture video surveillance system allowed Dubai Airports to preserve existing analog investments by simply adding IP encoders, while also installing newer IP camera models throughout the expansion. The most significant benefit of using Omnicast has been its ability to maintain the highest level of system availability.

Summary

Client name: Dubai Airports

Organization size: 3182 employees

Products: Omnicast

Industry: Transportation

Location: Dubai, United Arab Emirates

Since each terminal and concourse has its own security team actively monitoring the cameras around the clock, the support for multicast streaming has been crucial to Dubai Airports. Multicasting helps to minimize network traffic and optimize bandwidth in installations where multiple users are accessing the same live video source. With a multicast transmission, operators actually connect to a multicast IP address of the video stream which is shared amongst all users. This adds another level of reliability to the system by ensuring the network is stable and optimized within this massive installation.

Cutting-edge features in Omnicast lead to efficient response

Since each subsystem has been installed independently, Dubai Airports has leveraged the Federation™ feature from Genetec to easily access any camera throughout the airports as if they were all part of a single system. From any workstation or control room, airport authorities with appropriate privileges can get a global view of their security operations, and handle live incidents with all video evidence at their fingertips.

With just under 8000 cameras to manage, and more expansion plans on the horizon, Dubai Airports is leveraging the interactive map-based interface called Plan Manager. Operators can quickly find cameras, change a camera's field of view, or respond to alarms directly from a map of a specific terminal or concourse. This feature has significantly minimized the time and effort required by operators to find cameras, since they no longer have to memorize camera numbers or to search through long tree lists.

The open architecture of Omnicast has also enabled Dubai Airports to integrate with existing third-party access control systems. Access control events such as a door being forced open, access denied to a cardholder or a door remaining opened for too long, automatically prompt video of nearby cameras to display on screen. With this integration, operators have a comprehensive view of their surroundings, enabling a more efficient response and tighter control over restricted airport areas.

Continued growth assured with Genetec

The intuitiveness and complete reliability of the 8,000-camera Omnicast system has assured Dubai Airports that its continued system expansion will never be limited.

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Infrastructure at a Glance

Omnicast IP video surveillance system is managing a mix of analog and IP cameras from different manufacturers. Omnicast is also integrated with third-party access control systems and Barco video walls in multiple control rooms.