

Transforming Public Safety and Security



Lviv International Airport builds on Euro 2012 success, raising operational efficiency and safety standards

EXECUTIVE SUMMARY
<p>Lviv International Airport</p> <ul style="list-style-type: none"> • Transportation • Ukraine • 800 Employees
<p>BUSINESS CHALLENGE</p> <ul style="list-style-type: none"> • Help ensure safety and comfort of visiting fans during high profile events • Provide country with major hub for international business and tourist travel
<p>NETWORK SOLUTION</p> <ul style="list-style-type: none"> • Cisco Video Surveillance Manager for building customized video surveillance scenarios • Cisco Surveillance IP Cameras for flexible, effective security monitoring • Cisco Physical Access Manager (integrated with VSM) for door access control
<p>BUSINESS RESULTS</p> <ul style="list-style-type: none"> • Successfully handled record passenger numbers safely and securely • Processed up to six times normal number of flights on schedule • Enhanced video surveillance and control capabilities

Business Challenge

When a nation wins the right to host a global sports event, that opportunity invariably creates new requirements to bring stadium and transport facilities up to the standards demanded by governing bodies. While a global audience will be fixed on the television images beamed from the arenas where the live drama of sport unfolds, the experience of fans traveling to and from the host country is no less critical.

For Ukraine, co-host with Poland of the Euro 2012 Football Championship, this challenge centered on the city of Lviv. A first of its kind for both countries, the event was seen as a golden opportunity to raise international awareness and promote the two nations to the world.

Along with the construction of a brand new stadium just outside Lviv, the city's airport required a radical expansion and transformation. A public-private partnership was formed, not just to help ensure the airport could handle the expected influx of fans safely and comfortably, but with the aim of making the Ukraine more attractive for tourism and foreign investment.

A critical part of this vision was to take the best that technology had to offer to create a state-of-the-art transport hub. Cisco was chosen as the airport's technology partner based on its experience in providing public safety and security solutions that are easy to integrate and simple to manage.

Network Solution

The approach taken by Lviv Airport is based on Cisco Connected Airport, an architectural roadmap for improving protection of infrastructure, employees, and citizens. This improvement is achieved by using the network as a platform to mitigate safety and security risks through increased visibility, real time collaboration, and rapid response capabilities. The Connected Airport concept also provides a way of unifying and optimizing other separated operations, such as building and tarmac management, ground handling, retail services, and business communications.

"Cisco provided a complete solution," says Roman Gontarev, general manager for Lviv International Airport. "It offered several advantages in terms of scalability, reliability, high image quality, simplicity of installation and maintenance, and the broader integration capabilities with the access control and alarm systems."

At the solution's core is the Cisco Video Surveillance Manager (VSM), which helps enable the airport's operational teams to build customized video surveillance scenarios according to their exact needs and to monitor live and archived video streams from a centralized control room by means of video walls, from the desktop or other display configurations.

"In 2012, the airport served about 600,000 passengers safely, a 94 percent year-on-year increase and a record high. Our Cisco Security solution helped us to provide high quality customer service, from passenger check-in to full-cycle handling facilities."

— Roman Gontarev, General Manager, Lviv International Airport

Using the system, Lviv can configure, manage, display, and control images captured by Cisco Video Surveillance IP Cameras and third party video endpoints. "There are lots of flexible video recording options such as motion-based, scheduled, or event-based, with detailed activity reports and system audits," says Aleksey Bezrukin, lead engineer for access control and video surveillance systems for Lviv International Airport. "It also provides other advantages like being able to continuously monitor and archive a video stream at the same time."

The airport's video surveillance network consists of 68 outdoor and 276 indoor cameras. The high resolution provided by the cameras allows operators to zoom in and recognize faces and license plates. In addition, the cameras offer a greater degree of viewing area with 360-degree pan-tilt rotation.

Integrating VSM with Cisco Access Control has helped Lviv to further leverage its security investment. "The task of monitoring 190 doors and five barriers is significantly easier," says Sergei Vyshemirsky, head of aviation security for Lviv International Airport. "Images from employee ID swipe cards are relayed over the network to the control room where they are quickly validated against stored images. In the event of a mismatch, we can use a Cisco camera to instantly zoom in and further validate the person requesting entry."

PRODUCT LIST

Cisco Video Surveillance

- Cisco Video Surveillance Manager
- Cisco Video Surveillance IP Cameras

Cisco Physical Access Control

- Cisco Physical Access Manager

Cisco Unified Wireless Network

- Cisco Aironet® 3500 Series Access Points
- Cisco 5500 Series Wireless Controllers
- Cisco Prime™ Infrastructure Management

A Cisco Unified Wireless Network, using Cisco Aironet 3500 Series Wireless Access Points with CleanAir technology, with Cisco 5500 Series Wireless Controllers and Cisco Prime Infrastructure Management, offers free Wi-Fi access for passengers. It also provides a wireless virtual private network so that employees can collaborate securely and download information including video. The WLAN also supports portable wireless scanners to speed up luggage processing.

Business Results

Lviv International Airport was completed on schedule in April 2012, well in time for the opening games of Euro 2012. The impressive, ultramodern facility is capable of handling up to 1220 passengers every hour, equating to a throughput of 10.7 million people a year. At the opening ceremony, Ukraine's President, Viktor Yanukovich, gave a clear statement of the airport's long-term strategic importance, declaring that it was "another proof of renewal of the city and the country as a whole."

A holistic security approach puts Lviv Airport firmly in control to better deal with the multiple complexities of airport management—optimizing safety, cost savings, and efficiency across an area in excess of 47,000 square meters. "The integration of Cisco Video Surveillance Manager and Cisco Physical Access Managers acts as an effective alert system," says Bezrukin. "Any attempt at unauthorized entry generates a pop-up window on the desktop of the operator who can then challenge the person."

Euro 2012 tested these capabilities. Lviv unobtrusively monitored temporary staff and volunteers who were recruited especially to help out with increased airport traffic. Up to six times the normal number of flights were processed and turned around on time. Arriving daily in the thousands, fans were moved swiftly through passport control, baggage reclaim, and transported to their destination. Similarly, as the games progressed and championship teams were eliminated, the airport processed a steady flow of fans returning home.

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— Alexander Stepanchuk, Head of IT Department, Altis Holdings

Video from all airport facilities including terminals, towers, flight service stations, and offices, can be aggregated using Cisco VSM, allowing greater event correlation and further optimizing security personnel resources. Command center managers can also monitor all airport security and operations, such as aircraft maintenance, baggage handling, and passenger screening.

Managing a record number of airplanes simultaneously was a great achievement. "In 2012, the airport served about 600,000 passengers safely, a 94 percent year-on-year increase and a record high. Our Cisco Physical Security solution helped us to provide high quality customer service, from passenger check-in to full-cycle handling facilities," says Gontarev.

For More Information

To learn more about Cisco Physical Security solutions, go to www.cisco.com/go/physec.



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