Wireless Network Makes Airport Operations More Connected and Compliant

Customer Case Study

The National Airport of Romania assures network availability while improving efficiency and introducing collaborative applications

EXECUTIVE SUMMARY

Customer Name: National Airport of Romania

Industry: Transport

Location: Romania

Number of Employees: 1300

Challenge

- Improve customer experiences across the airport
- Raise staff mobility and productivity

Solution

- Cisco Borderless Network providing wired and wireless foundation for delivering Cisco Collaboration applications

Results

- Better network performance with tenfold increase in data transfer speeds
- Greater access to systems and applications with 99 percent availability
- Easier to satisfy compliance and accelerate expansion plans

Challenge

An incident at Romania's busiest international airport seriously delayed flights, leaving hundreds of passengers stranded. Operational systems from booking to check-in were unavailable, and the airport authority was left facing claims and penalties. The effects were dramatic; the cause of the chaos was failure of the airport's network.

Darla Vasile, CIO for National Airport of Romania, recalls: "This was not an isolated occurrence. Network downtime was becoming more frequent and our previous vendor was increasingly unable to provide the right level of support. For reliable customer service we needed a network with built-in redundancy and 99 percent availability."

The National Airport of Romania manages the Henri Coanda International Airport, the country's busiest international hub. The airport directly employs 1300 people but up to 5000 people work at the terminal, which is used by over 100 service companies and airlines. Currently over 18,000 passengers a day pass through the airport. These numbers are continually rising as ambitious development plans take effect.

"We wanted to provide existing terminal devices with optimum access to information resources for both passengers and staff," says Vasile. "We also needed to prepare for future developments such as interconnecting all airport assets including vehicles, baggage handling systems, and planes."

Solution

The National Airport of Romania chose a Cisco® Borderless Network solution from local partner Crescendo. "We decided to go with Cisco and Crescendo because they were aligned closest to our vision. And they offered the right expertise and best management tools for voice, video, data, and wireless," says Vasile.

"Staff productivity improved from the first moment the Cisco platform went live. The availability of services has dramatically increased and the network now operates at the desired 99 percent availability."

Darla Vasile
CIO
National Airport of Romania

The initial project focused on optimizing the core infrastructure. This was built using a validated Cisco design featuring Cisco Nexus® 7000 and Catalyst® 6500 Series Switches. Enabled by the switches, Virtual Device Context allows network traffic to be partitioned and delivered as a virtual LAN (VLAN) service within a multi-tenanted environment.

"VLAN capabilities were a key differentiator and something we had to have," says Vasile. Every company within the airport now has a separate Layer 3 VLAN. Security is achieved with Cisco ASA 5500 Series Next Generation Firewalls and Cisco IronPort® web and email security appliances. Everything is centrally managed using the CiscoWorks LAN Management Solution for simplified administration, configuration, and monitoring.

Increasing mobility was the next target. Geographically vast and dispersed airport operations were connected using a Cisco wireless network comprising Cisco Aironet® 1140 Series Access Points and Cisco 5500 Series Wireless Controllers. The wireless network consists of 20 access points and two controllers, and is accessed by staff using smartphones and tablets. However, that landscape will double in the next phase when it is opened up to airport partners and the public.

Building on this resilient foundation, the airport's made it easier for people to access systems and work collaboratively. With Cisco Jabber™ and Unified Presence users can see the real time status of colleagues and their preferred means of contact—telephone, mobile, instant messenger, video, and so on. They can initiate a call using Cisco Unified IP Phones with video capabilities or softphones with click-to-dial features. That means no more leaving messages and waiting for people to call back.

These Cisco solutions have been virtualized on Cisco Unified Computing System™(UCS®) [Please confirm model numbers] Blade Servers for added resilience and ease of management. "Cisco designed the overall architecture, which was incorporated into our master IT plan," says Vasile. "Crescendo brought lots of value in terms of integrating the Cisco networking and unified communications technologies. Its data center experience played an important role also in the deployment of our Cisco Nexus and Cisco Unified Computing Systems."

Results

The airport has accelerated application performance and achieved a tenfold increase in data transfer speeds compared to the previous network. Crucially, information and communications are more widely available and easier to access. "Staff productivity improved from the first moment the Cisco platform went live," says Vasile. "The availability of services has dramatically increased and the network now operates at the desired 99 percent availability."

Management is also much easier. "Previously we had to return to the office to solve a case. Now, we just use an iPhone or tablet to manage things remotely. Being able to troubleshoot faster means more problems are solved earlier," Vasile adds.

Regulatory compliance is simpler to satisfy because the airport has greater visibility and control of its IT environment. For example, it is much simpler to conduct network security assessments and benchmark against the standards demanded by the European Union and aviation industry regulators.

Finally, airport operations are more efficient and productive. "Using Jabber, particularly on mobile devices, increases our speed of communication and user satisfaction," concludes Vasile. "With Cisco Unified IP Phones we get better voice quality and can add video and other services like active directory."

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Next Steps

The National Airport of Romania has already taken great steps to transform its IT environment, yet it still has ambitious plans for the future. Wireless will be made available to the public and partners as part of a model where the airport provides the underlying infrastructure and charges operators for deploying their own systems.

The Cisco Identity Services Engine for context-aware security and Cisco Prime™ Infrastructure for unified access management are also part of the airport's architectural plan, which aims to offer connectivity to any kind of device for staff, customers, and partners. The network could also be used to assure physical security and video surveillance.

"Thanks to Cisco and Crescendo we're able to deliver effective flows of passenger and goods in a safe environment," concludes Vasile. "They have provided their experience and helped us deliver services beyond the expectations of our customers."

For More Information

To learn more about the Cisco architectures and solutions described in this case study, please go to:

www.cisco.com/go/borderless
www.cisco.com/go/collaboration
www.cisco.com/do/datacenter

Product List

Routing and switching

- Cisco Nexus 7000 Series Switches
- Cisco Catalyst 6500 Series Switches

Wireless

- Cisco Aironet 1140 Series Access Points
- Cisco 5500 Series Wireless Controllers

Security

- Cisco ASA 5500 Series Next Generation Firewalls
- Cisco IronPort Web and Email Security Appliances

Management

- CiscoWorks LAN Management Solution

Unified communications

- Cisco Jabber
- Cisco Unified Presence
- Cisco Unified IP Phones

Data Center

- Cisco Unified Computing System

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