

Wi-Fi Innovation Powers Next-Generation Airport Services

Customer Case Study



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Frankfurt Airport transforms workplace efficiency and lays foundation for further improved passenger experience at its new headquarters

EXECUTIVE SUMMARY

Customer Name: Fraport AG

Industry: Transport

Location: Germany

Number of Employees: 20,700

Challenge

- Equip new headquarters with flexible and collaborative working environment
- Provide robust wireless platform for future growth and commercial innovation

Solution

- Cisco Unified Wireless solution
- Cisco Mobility Services Engine for delivery of location-based services

Results

- Wireless-only implementation enabled initial cost saving of €800,000
- Productivity and collaboration enhanced for 650 employees
- Innovative Wi-Fi services forecast to deliver up to 40 percent revenue uplift

Challenge

Frankfurt Airport is the busiest airport in Germany. Owned by Fraport AG, an international venture with partnership interests in 13 other airports worldwide, Frankfurt earns the majority share of annual group revenues, which exceed €2.5 billion. In 2012, this modern, popular hub handled more than 57 million passengers and close to half-a-million flights.

Fraport provides systems and services for airlines and concessionaires, which include seven hotels, 230 shops, and 90 food and drink outlets. It also works closely with partners to create new commercial opportunities. When the company decided to build a new corporate headquarters, it turned to its long-term technology partner, Cisco.

The Fraport core IP network, routing and switching, firewalls, and videoconferencing and WebEx collaboration solutions are all based on Cisco technology. In addition, the airport had already seen the operational benefits of a Cisco® wireless local area network (WLAN) across its ramp and terminal areas, so Cisco was a valid choice for the new project.

“We wanted the new headquarters building to welcome employees, customers, and guests with wireless services that were simple to use and easy to manage,” says Rudolf Marquet, vice president ICT infrastructure for Fraport AG.

Situated between two terminals, close to the airport’s operational center, the building’s open design features two eight-story blocks linked by walkways. With 23,000m² of space and underground parking, it was intended to reflect the company’s commitment to sustainability.



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Rudolf Marquet
Vice President ICT Infrastructure
Fraport AG



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Rudolf Marquet
Vice President ICT Infrastructure
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It was important that the new facilities offered flexible workspaces with open areas, meeting rooms for team collaboration, smaller spaces for individual working, and well-equipped rental units. This environment would allow employees to work wherever they wanted, from spontaneous meetings to quiet corners affording privacy and concentration. The end goal was to raise productivity, enhance job satisfaction, and provide all users with a great experience.

Solution

Fraport considered two possible approaches: an integrated wired and wireless network; or wireless-only. “After careful consideration and benchmarking, we took the wireless-only route, such was our confidence and trust in Cisco,” says Marquet. “And, of course, this provided a very attractive business case.” The initial aim was to save money on copper cabling, at the time of installation and whenever the company might need to move staff around. Workstation costs would also be reduced by replacing phones with software clients loaded onto laptops.

Cisco held several workshops to keep the Fraport senior team informed during the planning and development phase, paying particular attention to bandwidth requirements for the airport’s voice and data needs, coupled with secure access to collaboration tools and corporate applications.

Based on a Cisco Unified Wireless architectural design, the new mobility solution comprises 240 Cisco Aironet® 3602 Wireless Access Points, Cisco 5500 Series Wireless Controllers and Cisco ASA 5500 Series Adaptive Security Appliances and Cisco Prime as centralized Management. The Cisco Aironet 3600 Series includes ClientLink 2.0 to boost performance and range for clients.

The new mobility solution provides an always-on connection for up to 800 users via notebooks and smartphones and delivers all office communications including file sharing, email, Internet access, and IP telephony using headsets and hands-free calling.

Results

When the new airport-based HQ opened its doors, 650 employees changed the way they worked. “With Cisco’s help, we have developed an up-to-date workplace environment,” says Marquet. “People can reach colleagues at all times, with access to information anywhere. And it’s very easy to switch between solo and team work, thanks to fast, flexible communications.”

The cable-free environment is expected to generate more than €500,000 in savings over the next 10 years compared to a hybrid wired/wireless approach.

Now the airport is looking to use its wireless platform to deliver new revenue-generating retail and passenger services. It has a bold target to increase average revenue per customer (ARPU). The wireless solution is one part that helps to support those opportunities in line with the Cisco Open Network Environment (ONE), a validated framework for automated provisioning and rapid deployment of new context-aware services and applications.

Fraport has already developed its own customized wireless application, FRA-App, and has started testing the Cisco Mobility Services Engine (MSE) to launch location-based and context-aware customer services across the airport. Using an opt-in application downloaded onto passenger mobile devices, the solution will be deployed as a navigation tool and linked to location-based alerts, for example for special offers at participating outlets when users are nearby.

“Open, flexible, and communicative are the three words that characterize the new standard for airports,” says Marquet. “Now, we want to build on that success with innovative new services. Cisco is our choice of partner, now and for the future.” This success was underlined in 2013 when business travelers voted Frankfurt Airport the best European airport for efficiency and service in the Business Destinations magazine.



For More Information

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

www.cisco.com/go/wireless

www.cisco.com/go/mse

www.cisco.com/go/prime

www.cisco.com/go/asa

Product List

Wireless

- Cisco Aironet 3600 Series Wireless Access Points
- Cisco 5500 Series Wireless Controllers

Security

- Cisco ASA 5500 Series Adaptive Security Appliance

Management

- Cisco Mobility Services Engine
- Cisco Prime



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