

CASE STUDY

GRANULARITY OF ARUBA SOLUTION ALLOWS STREAMLINED NETWORK ACCESS FOR 24.8 MILLION



Brussels Airport welcomes more than 24 million passengers a year and ensures convenient travel to meet family, to take a short break or to do business.

The strong network with more than 230 direct connections between Brussels Airport and other cities in the world strengthens the role of Brussels as the capital and centre of Europe.

“We have an ambitious Strategic Vision 2040 plan to accommodate the expected growth in air traffic in the next 25 years, and become the airport of choice of our customers,” says Luc Logghe, head of ICT/Operations, Brussels Airport. “And to do that, we must offer an outstanding passenger experience.”



CREATING AN END-TO-END EXPERIENCE

Sketching a vision of the Brussels Airport for the future, Logghe says the aim is to provide an end-to-end experience: “Imagine, when leaving home, you would receive up-to-date information about transport and parking options and choices to handle your luggage. We thus guide you to and through the airport, whisk you through security, and have a table for you at your favourite airport restaurant. You are informed about the status of your flight, and for example an express delivery of a chocolate box waits for you at your departing gate. From an ICT perspective, we need to provide the digital tools and innovation to make that possible.”

Digital signposting directs passengers through the terminals; shops and restaurants ping offers to passengers as they pass by or when they arrive at the airport.

Central to this, Logghe continues, is an always-on, very reliable, always connected IT infrastructure: “And it has to be secure. A

REQUIREMENTS

- Create the best passenger experience
- Drive increased efficiencies and operational excellence
- High-performance Wi-Fi connectivity throughout the airport
- Establish a network platform capable of supporting IoT and driving service improvements

SOLUTION

- 400 High-density 802.11ac Aruba indoor and outdoor APs
- 2 Aruba Mobility controllers
- Aruba ClearPass Policy Manager
- Aruba AirWave Network Management
- HPE Intelligent Management Center (IMC)
- 68 DC Core, Distribution & ToR Switches
- 600 Campus Access Switches

BENEFITS

- Improve passenger experience with easy network access to premium free Wi-Fi throughout the terminals
- Provide a secure and available corporate wireless data network, able to support innovative digital services and solutions

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LUC LOGGHE, HEAD OF ICT/OPERATIONS
BRUSSELS AIRPORT

zero per cent, risk-free digital connected infrastructure doesn't exist, but we need to be as strong as possible. We have two networks: one for internal operations, one for our 200+ partners. Both need to be protected.”

Taking control of the wireless network

In 2015, Logghe began work on a revamp of the airport's data centre network: “Up until that moment my focus had been on the wired environment, but it became increasingly obvious that we need to revisit wireless. Operationally, staff were working off mobile devices. I could see where IoT was going. From a passenger perspective, wireless had been built by an external partner, and frankly, passengers weren't satisfied. So, we decided to take control of our wireless.”

At this stage there was no Hewlett Packard Enterprise or Aruba Wi-Fi deployed around the airport. Logghe says it was clear

that Brussels Airport would review the incumbent solutions, and was keen to examine a range of alternative solution providers. From a wired point of view, he considered HPE and its closest competitor as on a par, but the HPE acquisition of Aruba proved a game-changer:

“For me, Aruba is best-in-class in mobility, particularly in terms of innovation and management capabilities.”



The promise of innovation

The airport’s network solution comprises 2 Aruba 7240 Mobility Controllers, 300 high-density indoor Aruba AP-315 and 100 high-density outdoor Aruba AP-270 Access Points. The wired network is composed of several segments, built around HPE-7906 DC Core Switches, HPE-5930 DC Distribution Switches and HPE-5700 TOR Switches. The Access Layer includes 600 HPE-5130 Switches. In addition, Aruba ClearPass Policy Manager enables secure network access control, while Aruba AirWave Network Management offers granular visibility into wireless and Campus networks together with HPE Intelligent Management Center (IMC) for managing the data centre.

“Bottom line, we considered the competing wireless option more basic. Aruba’s solutions were really on the bleeding edge. They promised more innovation,” says Logghe.

A PLATFORM FOR NEW SERVICE DELIVERY

It is expected that, on average, over 40,000 people will be connecting to the new wireless network and authenticated by Aruba ClearPass Policy Manager each day. Installation of the new wireless network began in early 2017 and completed spring 2017. Logghe expects the setup of the authentication of guests to be fully complete by the first quarter of 2018. “We are aware that we’re at the beginning of a long journey. Every passenger should enjoy fast, easy-to-access Wi-Fi by January 2018. And

by next summer I’d expect to see some new services coming through. We’re already beginning to collect a lot of helpful digital data to help enhance the passenger experiences.”

Once complete, Brussels Airport will have the wireless network it needs, inhouse and under its control, backed by a solid and reliable wired backbone. It will provide the platform on which to build and manage a whole range of new, IoT-based operational improvements.

“We’re already running well, operationally,” says Logghe, “but we recognise the possibilities of IoT. We want to increase efficiency, integrate more processes and be better able to support innovation.

We have a new business unit started, called Digital, which is also exploring IoT, with a view to examining, testing and implementing new services. It’s important we’re able to move quickly on this.”

Granular management, clear control

Central to this innovation platform will be the ability to integrate partners and manage the appropriate network accesses.

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Anticipating the EU’s imminent General Data Protection Regulation (GDPR), Luc Logghe says Brussels Airport must be ready: “GDPR is not something to mess with. An airport is a very visible business. Passengers understand their rights and expect us to manage their personal information correctly. Respecting their privacy is a part of the passenger experience.

Ultimately, we want as much contact as possible with our passengers. The more we can build a profile of an individual’s preferences, the better we’ll be at crafting the ideal airport experience.”



BUILDING 1000, CITYGATE, MAHON, CORK, IRELAND
TEL: +353 21 423 3000 | CONTACT.ARUBA.EMEA@HPE.COM