



AN IOT SOLUTION AT AN INTERNATIONAL AIRLINE HUB

An airline hub is a complex interlinking of flows. Each flow is of capital importance; it both determines and depends on the smooth operation of all the other flows. The slightest delay, the slightest switching error can generate major malfunctions in the system and thus lead to operating losses. To anticipate and prevent such complications, Groupe ADP provides, through its telecom subsidiary Hub One, bespoke traceability and measurement services. And this is where Codit came in: to integrate data from luggage containers into the cloud so that airlines present at Paris-Charles de Gaulle Airport could receive structured information in almost real-time.

Hub One is without a doubt one of the biggest players within the telecom industry (fixed, radio and mobile) and an integrator of mobile and tracking solutions. With more than 500 employees and almost 4500 customers, Hub One delivers end-to-end services, from its experience in the airport sector to innovative services and specific solutions for specific business needs.

Everything available, anywhere, anytime

Via the airport platforms of the Paris region, Hub One manages numerous traceability and measuring devices for its customers. For example, Hub One offers airlines traceability services for containers in the form of tractors towing trailers full of passenger baggage which move continuously through the airport, from the loading bays to the baggage carousels. Simply by passing through strategic points in the airport these trailers provide essential information to the person managing the carriage of baggage.

“This system had been in place for a number of years, but upgrading was difficult,” explains Taib Bouhouche, operator’s Project Director at Hub One (division Mobility). “It led us to the decision to start again from scratch, in order to give the airline a better service and to allow us to ‘industrialize’ the solution and thus transpose/propose it to other airports and other sectors.”

Feasibility study with BizTalk

The new specifications drawn up by Hub One required the solution to be “multi-service, multi-customer and multi-technology”. In other words, a sort of platform for collecting measurements and data from geolocation systems or the Internet of Things (IoT). In order to validate the concept, Hub One turned to Microsoft for its BizTalk solution, which was their first choice of integration solution. “Microsoft referred us to their certified partner Codit,” recalls Taïb Bouhouche, “and that’s how we met.”

Codit deployed its expertise in integration solutions and IoT to carry out the feasibility study in six months, allowing for the validation of the concept and the value of the platform. It also demonstrated opportunities to create a brand new service offering, encompassing these new IoT-based innovations.

“Expertise, team, flexibility, cost: four words that summarize why we chose Codit.”

A multi-customer, multi-service and multi-technology solution

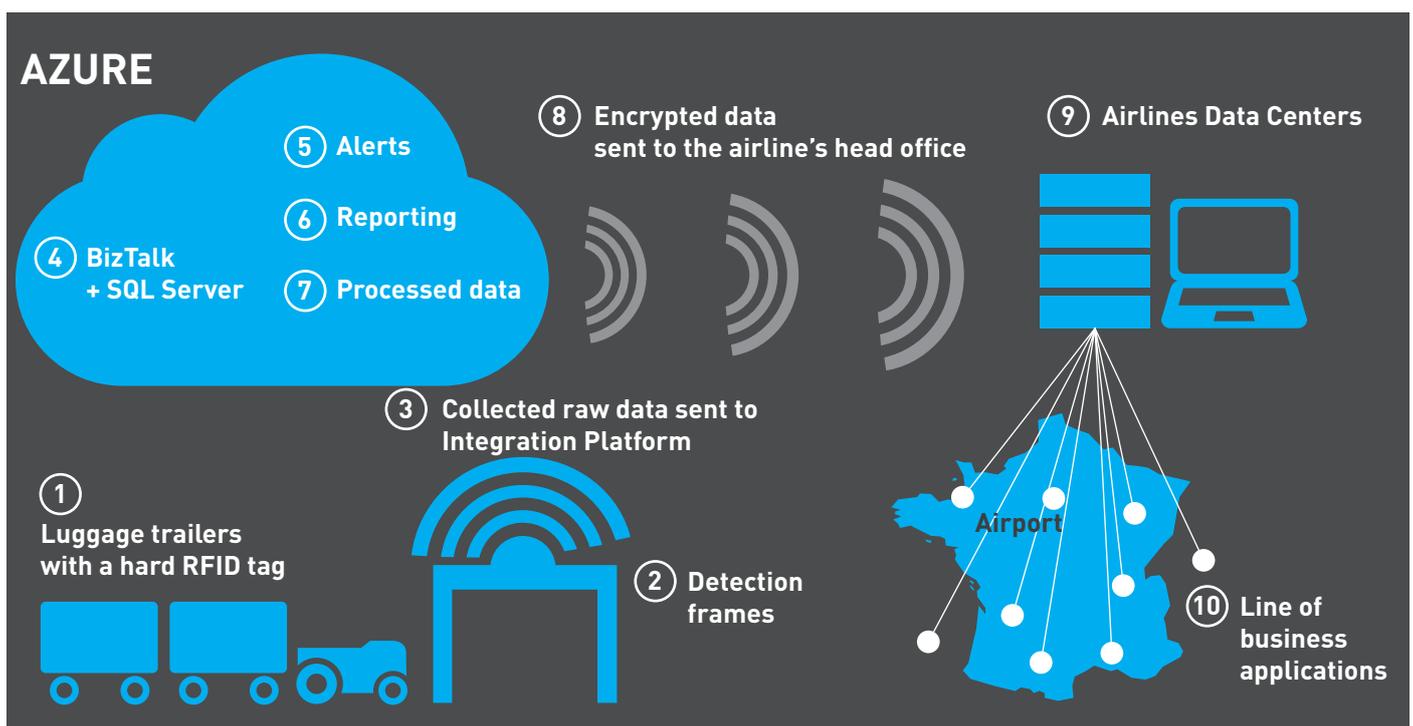
Hub One called for tenders. Codit, having already completed the feasibility study, was consulted along with two other companies. “We chose Codit for four reasons,” explains the Project Director, Taïb Bouhouche. “First, certified Microsoft partner Codit perfectly managed the Proof of Concept phase. Next they have a great team, and we had an excellent relationship with them. Also, we highly appreciate that Codit is a compact organization and thus flexible. Lastly, their bid was competitive compared to the others.”

Designed as a multi-customer, multi-service and multi-technology platform,

the first line of business applications was implemented. Specifically, the device had to be able to track thousands of pieces of luggage at strategic points throughout the airport. Tracking is done automatically, error-free, and without constraint so as to supply the end client with data that is accurate and almost instantaneous.

To do this, each container is given a hard RFID tag that is resistant to material deterioration. This UHF tag can be read from a distance of up to 10 m by detection frames under which the baggage trailers pass. “We wanted to know if we could read the tag when it was stationary and also

when it was moving,” explains Taïb Bouhouche. “Therefore we designed frames and detectors that could collect accurate information from sources moving at speeds of up to 30 km/h.” The collected data is then sent to the integration platform, set up by Codit, where it is filtered, checked for duplicates, contextualized, enriched, structured, stored... Next, the data is sent to the airline’s head office which is several hundred kilometers away. The time between data capture and data delivery is less than 10 seconds, ensuring an almost real-time communication of information to managers and other line of business applications.



3 A fully managed cloud-based integration

In this project, BizTalk was being connected to Azure, Microsoft's cloud platform. Previously Hub One used its own servers. "Migrating to the cloud was preferred if we were to enjoy greater simplicity and to ensure the highest performance even when demand would peak," underlines Taïb Bouhouche. Codit, through its unit Managed Services, provides hosting on Azure as well as maintenance (supervising the solution and updating BizTalk, the OS, the BDD, the middleware...) with a high level of availability. "It was a logical choice for us to outsource the management of the platform, because it is not our core business. If we didn't outsource, it would have been expensive in terms of time, recruitment, training and organization. Codit's Managed Services suited us perfectly."

Barely five months were needed to get from launch to go live. For Taïb Bouhouche, the Project Director at Hub One "the go live was the most critical phase of the project. We could not allow ourselves the slightest malfunction, because the service is being used continuously by the airline." As a precaution, the old and new systems ran in parallel during the progressive migration of the detection frames so that, in the case of issues, backtracking would have been possible. "The airline was fully aware of what we were doing. Yet we didn't encounter the slightest problem during the migration managed by Codit."

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Successful partnership

"Our partnership with Codit was a real success. They are experts in integration and IoT technologies, and extremely customer-oriented: they are on top of things, build good relationships and prove to be very responsive and flexible. Codit fulfilled every aspect of its contract, also towards our customers, in terms of deadlines, cost and expertise!"

Benefits

Improving the service

Simpler and more comprehensive reporting, with the possibility to follow up upon a large number of indicators including service quality, availability... The advantages of the Codit platform have contributed to the airline's renewed confidence in Hub One.

Cost optimization

"This new platform has allowed us to optimize costs," says the delighted Taïb Bouhouche. "And we've been able to pass on those savings to our customer."

Operating security

After implementation of the integration solution, Codit continues to manage and monitor it. With the assurance of a high level of availability and guaranteed updates

by Codit, an iPaaS expert, Hub One can concentrate on its core business.

Scalability

The cloud platform ensures scalability at the right price. "This solution allows us to move forward with our IoT projects and to develop new, innovative services for our existing customers," highlights the Project Director, Taïb Bouhouche.

Flexibility

"The day we're asked to set up tracking for individual baggage, and not just the containers, our system will be ready," points out Taïb Bouhouche. "In fact, flexibility is the principal advantage of this solution because we intend to apply it to other sectors, beyond the airport industry."

