Introduction

Brussels Airport Company
We love numbers

MOBILITY

80 airlines

26%

317 companies

435,397,300 liters of waste water purified

25,700,000 passengers

2,792 Mwh generated by 12,980 solar panels

645 flight movements /day

38,074 app downloads

40,000 indirect jobs
Our focus

Excellent operations  Passenger experience  Sustainable development  ABD  Digitization
Airport Business District
Intermodal hub
Our purpose

We connect people, business & communities in the heart of Europe, creating prosperity & well being
Future Integration Platform
Integration targets & goals

**Align on industry standards**
- AIDX
- SWIM

**Enable scalability**
- Passengers
- AOP

**Standardize connectivity**

**Enable fast change**

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Integration architecture

Legacy App

Legacy App

API Service

API Service

Legacy Storage

Data Exchange Model - Target

API Gateway

Legacy App

Legacy App

API Service

API Service

Legacy Storage

Data Platform

Inner API
Outer API
Data extraction
Legacy
Is this only about API’s? No ...

• Different requirements need specific integration solutions

• Many patterns do exist

• There is no one-fits all technology

• An endpoint typically has limited options to change or standardize (who adapts? ... ), constraints are
  o Availability technical skills
  o Technology in use
  o Maturity
  o Budget
  o Product leverage (bought packages)
  o ...

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Platform components

- Enterprise service bus
- API Gateway
- Message Broker
- JAVA Services implementing API’s
  - Mainly on top of CDB
  - For info: baggage developed its own API services
  - Will move to service chain, mainly Airport ICT
- Monitoring
Growth Path

- Public community
- Aviation partners
- Brussels Airport
- ICT
- API team
Different non-technical requirements means different technology

Integration Platform

Consumer

Gateways

Scalability
No Confidentiality

Passenger flight cache

Swissport

High Available
Integrity
Garanteed delivery
Confidentiality

Orchestration
Business rules

API Service

Operational flight

Passenger flight

Service Team Applications

Business Processing Logic

CDB

Back end Data Storage

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Data Platform – Conceptual View

From Data to Business Value
Data Platform – Technology View
Not like this....

Like this!

by Henrik Kniberg
The API Program
**API platform – key focus**

At kick-off

- Secure by design
- Design for failure
- Reliability
- Monitoring
  - Usage
  - Traceability
  - Availability
  - Performance

- Functional priority on business partners
API Developer portal explained

API consumer

- Public
- Partners

API provider

- Developer portal
- API gateway

- Create account
- Read documentation
- Get keys
- Authenticate
- Request
- Response
API platform – key focus

Now ...

- Improve the user/developer experience
- Prepare for public usage
  - Legal aspects
  - Protection & security
  - Scalability (mainly in back-ends)
- Monetization & commercialization
Thank you for your attention

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