SOA and Cloud uprising
A personal experience

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At Pivotal office, Paris, May 9


WE HAVE TO GO BACK.
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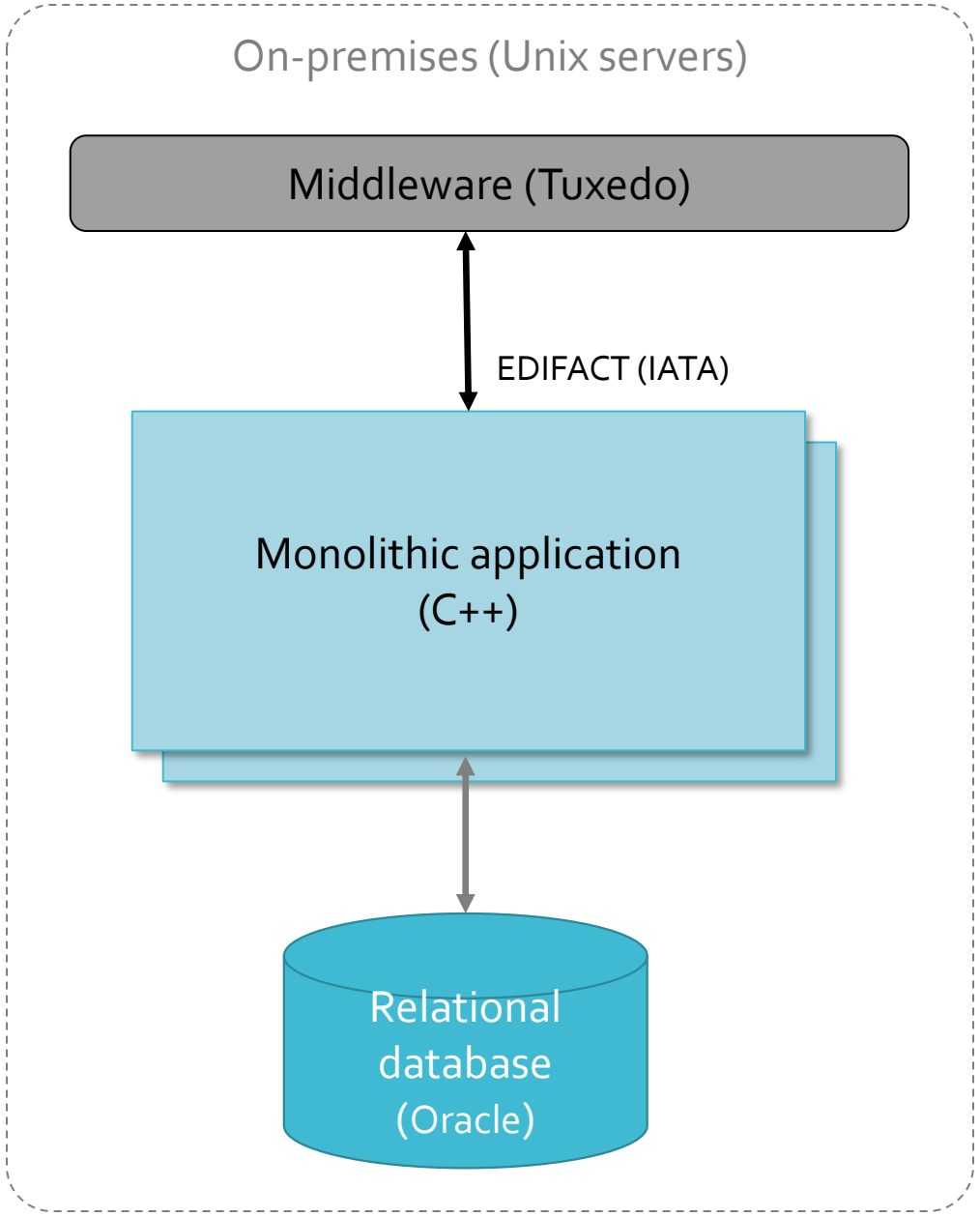
Backend server for airline systems

- E-ticketing
- Check-in
- Onboarding



2004-2006

1 release every 3 months

High availability

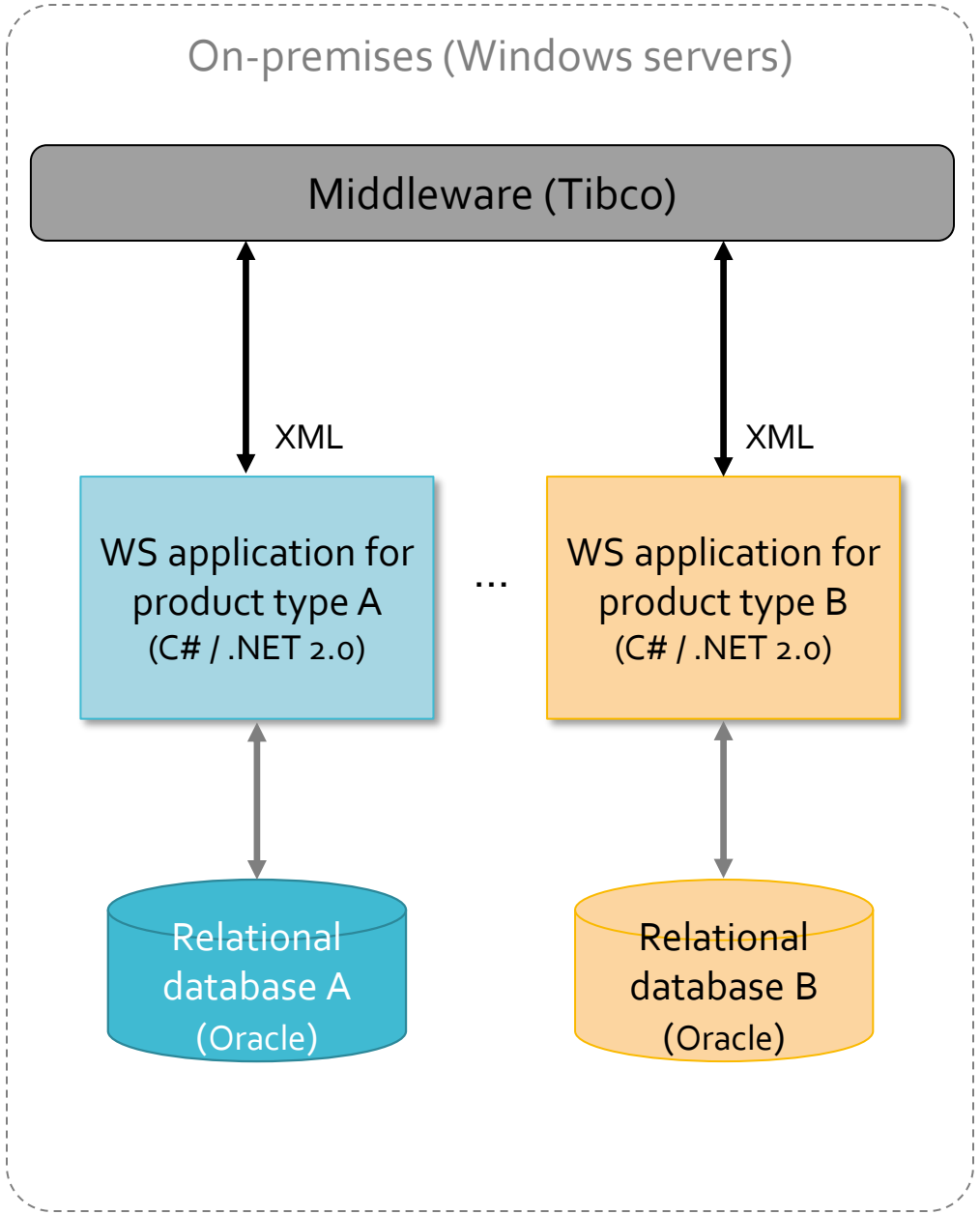
Black box testing: 100%

No framework

No automation

Straight Through Processing for a corporate and investment bank

- Derivative rate products
- FO -> MO & BO
- Enrichment
- Affirmation



2006-2008

1 release every month

Data quality

Partial unit testing

CI (CruiseControl.NET)

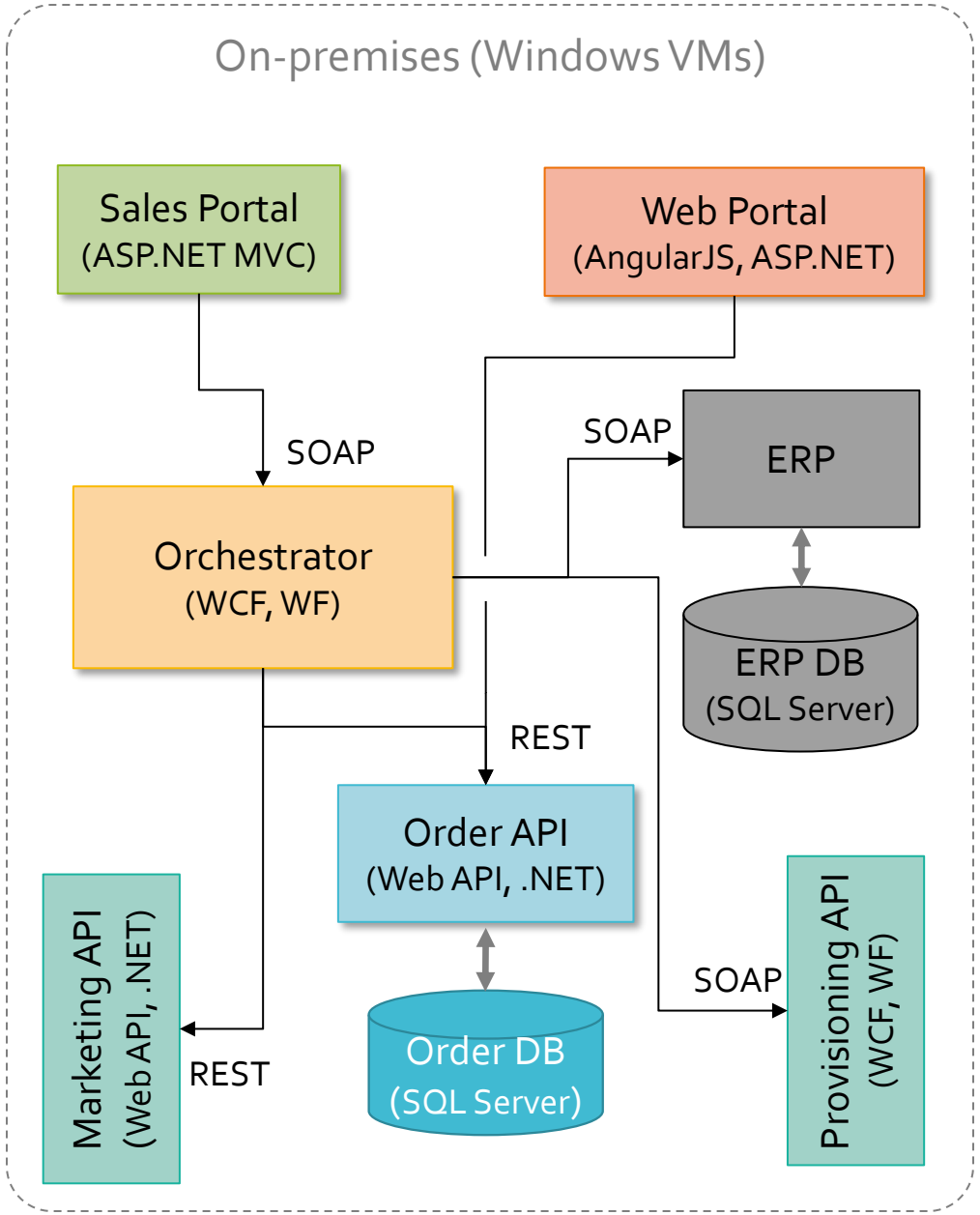
Internal framework

Dependency injection

Manual deployment

Information System for a Telecom services company

- Quoting
- Ordering
- Provisioning
- Emailing
- Invoicing



2013-2018

1 release every month

Performance issues

Technical debt

Agressive roadmap

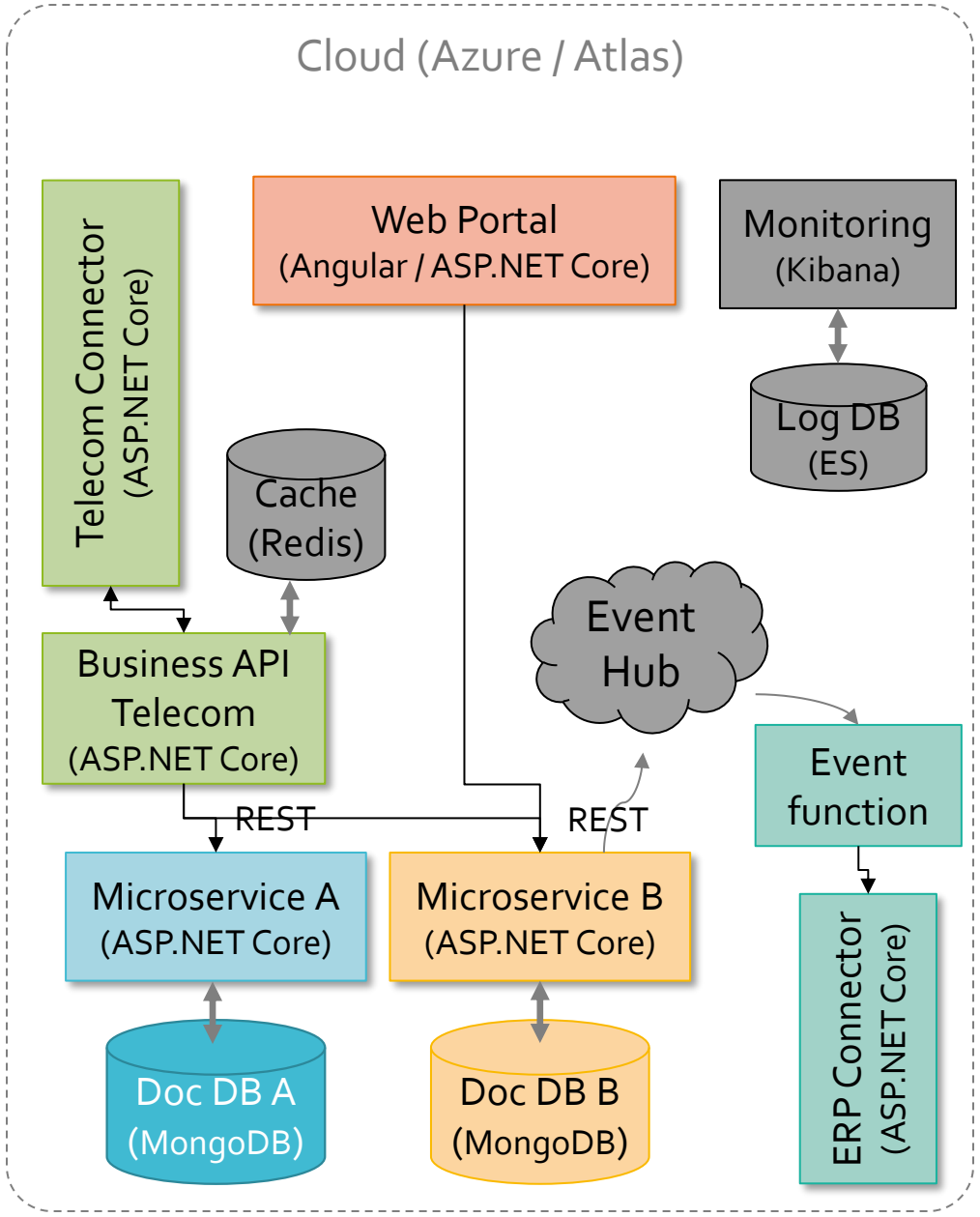
DevOps transformation

Automated testing tool

Partial pipelines (CI/CD)

Information System for a telecom intervention company

- Intervention
- Mobility
- Uberisation



2018-2019

1 release every sprint

Multiple teams

Complete pipelines (CI/CD)

Grades "A" on code quality

80% of code coverage

Performance (< 100ms)


WHERE DO WE GO
FROM HERE?
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Lesson learned #1

Human first

- Short delivery cycles / early feedbacks (**Agile**, MVP)
- Break the silos (**DevOps**)
- Focus on **Added Value**

It's all about people

Lesson learned #2

Seek engineering excellence

- **Open source** approach
- Software **craftsmanship** mindset
- Full **Cloud** (IaaS, PaaS, Saas)
- **NoSQL** data stores
- **Automation** (CI, tests, CD, IaC)
- Cross-platform & Containers target
- **State of the art** (microservices / SPA)

Going further

- ~~Project~~ => ~~Product~~ => Value Stream
- Cloud native applications
- Multi-Cloud platform
- Serverless


SERVERLESS
YOU SAID?
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Use case #1

Azure functions

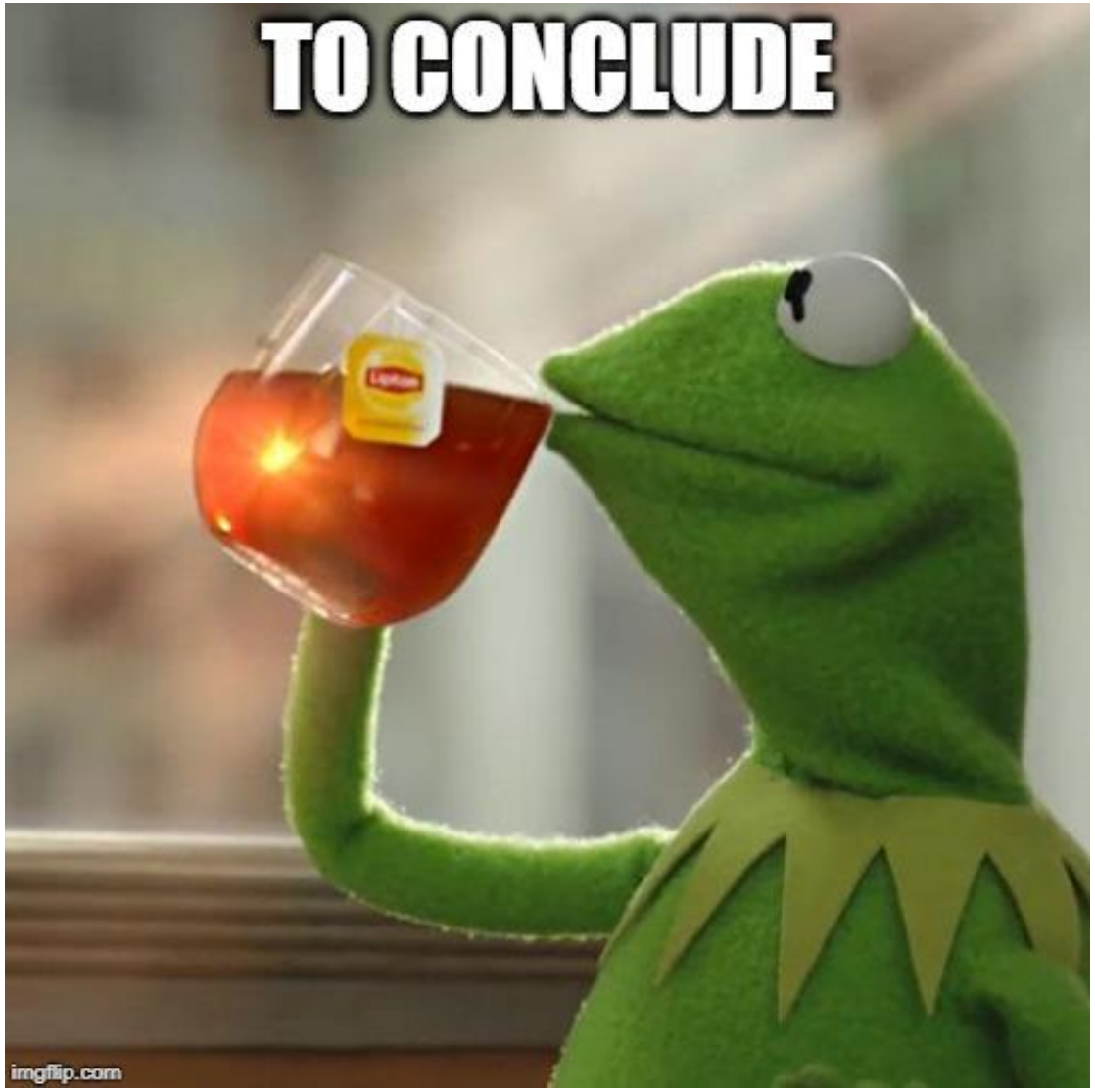
- Small C# code to process events
- Enabler for asynchronous actions inside an IS
- CI/CD with Azure DevOps
- Free tier

Use case #2

MongoDB Stitch

- Built-in API (« back-end ») with authentication & permissions
- Triggers on data events (data enrichment for instance)
- Small JavaScript functions
- Event streams from the client
- Focus on user experience (« front-end »)
- Free tier

Time for a demo?


TO CONCLUDE
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IT revolutions

(my short list)

- TDD / Dependency injection
- Agile
- DevOps
- Automation
- Microservices / SPA
- NoSQL
- Cloud / Serverless

Thank you!