# WSO2 ESB

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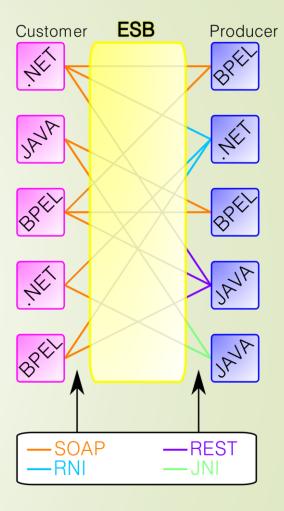
Florian Lotter

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### Introduction

- WSO2: Web Services oxygenated
- ESB: Enterprise Service Bus
  - Routes messages between services
  - Monitor and control message exchange between services
  - Resolve contention between service components
  - Control deployment and versioning of services



## Key Components API Manager

#### Dev' portal Traffic Manager Micro Gateway · Rate limiting, Throttling · Lightweight API runtime API Marketplace · Web-based portal Event-based · Compliments decentralisation · Backed by APIs · Distributed traffic policy · Developer-centric · Developer Self-service · Container-friendly evaluation 8 ` Publisher Key Manager Gateway Analytics · Back office application · Collect usage data · Authentication server · Centralised API runtime · Web-based portal API security · Policy enforcement Summarise information · Backed by APIs Mediation (light) · Visualisation of statistics Identity integration Design, LCM, Governance Extension point · Extension point Trigger alerts

## What is API management?

- API design
- API gateway
- API store
- API analytics

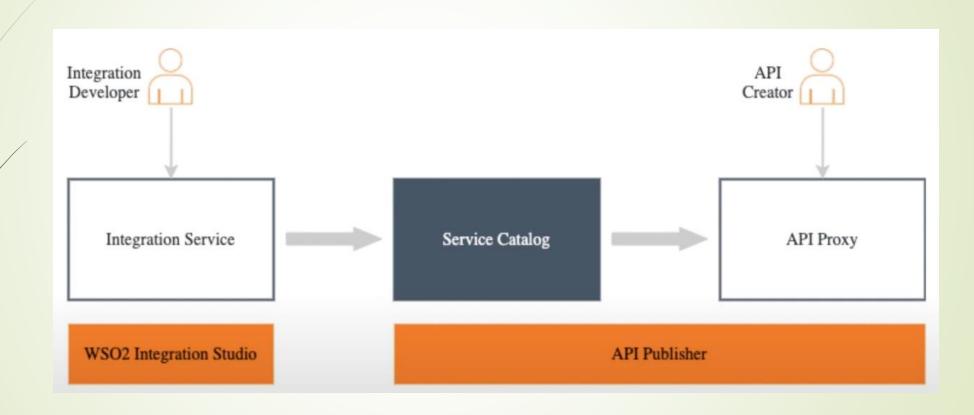
#### Benefits and drawbacks of ESB

- Scales from point-solutions to enterprise-wide deployment
- More configuration rather than integration coding
- No central rules-engine, no central broker
- Easy plug-in and plug-out and loosely coupling system

- Slower communication speed, especially for those already compatible services
- Single point of failure can bring down all communications in the Enterprise
- High configuration and maintenance complexity

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## Integration First Development



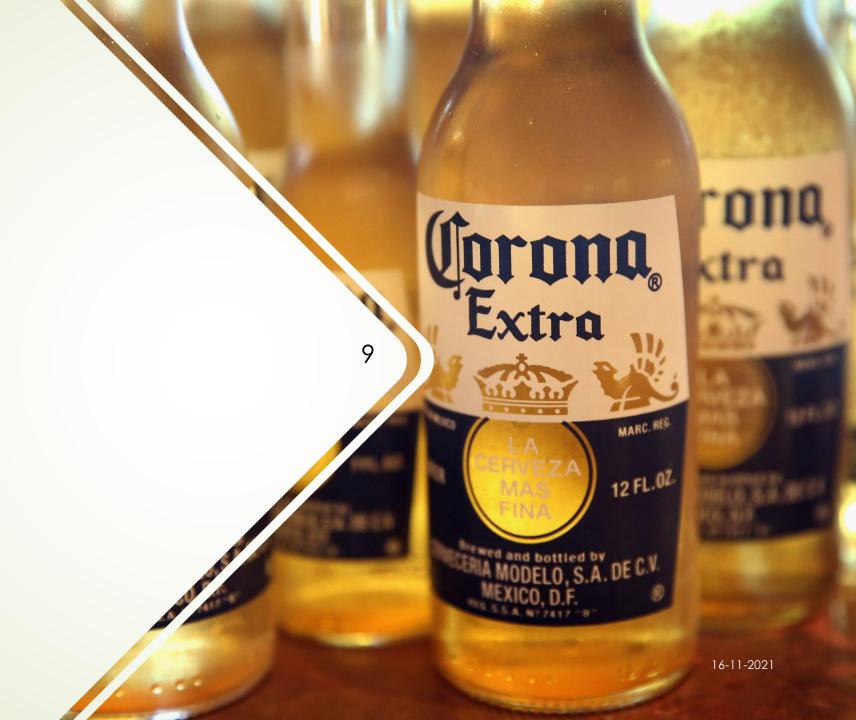
#### Service-oriented architecture

- Architectural style that supports service orientation
- Way of thinking and developing in terms of service.
- According to SOA, a service has four properties:
  - 1. It logically represents a repeatable business activity with a specified outcome.
  - 2. It is self-contained.
  - 3. It is a black box for its consumers.
  - 4. It may be composed of other services.

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### Break

- A few minutes break to:
  - Go to the bathroom
  - Grab a coffee or a corona



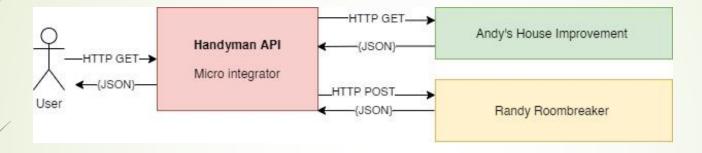
## Demo

API Management – Joris

#### Tasks

- Create your own Integration Solution
  - Use case: Hospital Microservice
    - Connect Users and Healthcare Providers trough a convenient service
  - Get started here:
    - https://ei.docs.wso2.com/en/latest/micro-integrator/develop/integration-development-kickstart/

#### Extra Task



- Create a Handyman Finder in your area Microservice
  - Follow the same steps you learned in the previous example use case
  - Additional Challenge: Unit test your Microservice

## Extra help if you get stuck on tasks

<u>https://ei.docs.wso2.com/en/latest/micro-integrator/develop/creating-unit-test-suite/</u>

Kahoot!

https://bit.ly/3nj5bNj



The end

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The end

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