

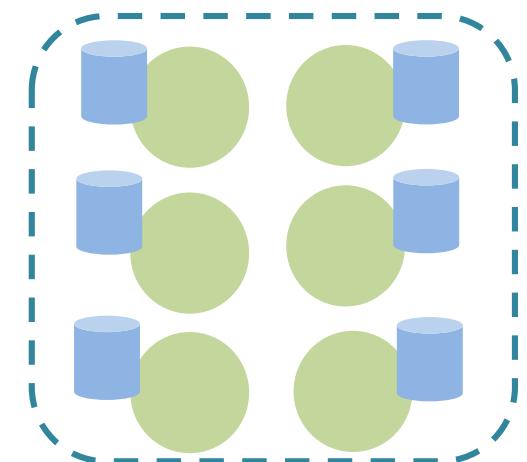
# MICROSERVICES PRINCIPLES

# Microservices principles

INSA

- Split an application into a set of small services
- Each microservice has one **responsibility**

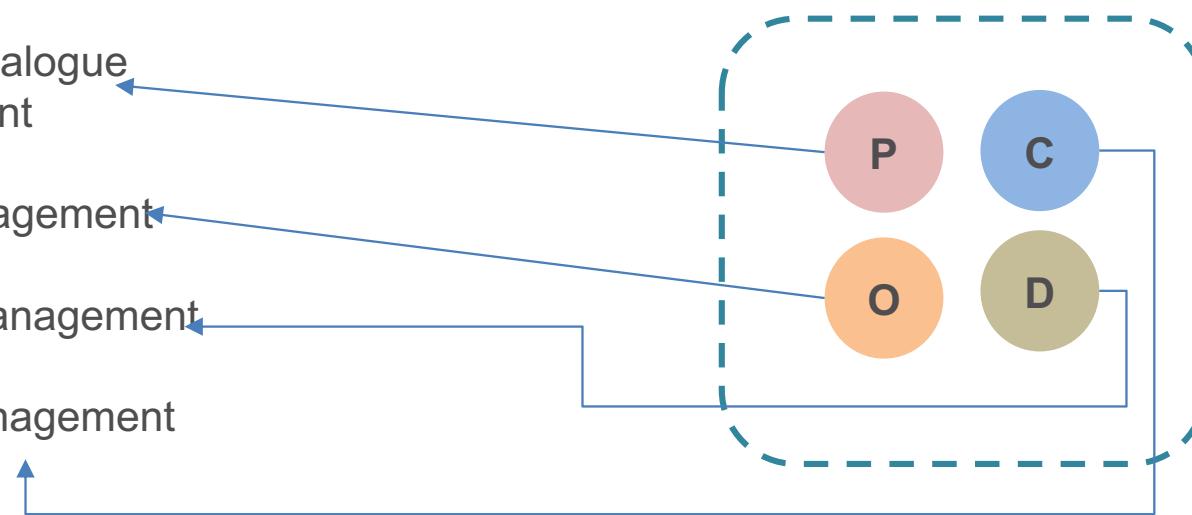
Microservices based application



### Business capabilities:

- Product catalogue management
- Order management
- Delivery management
- Clients management

### Online store

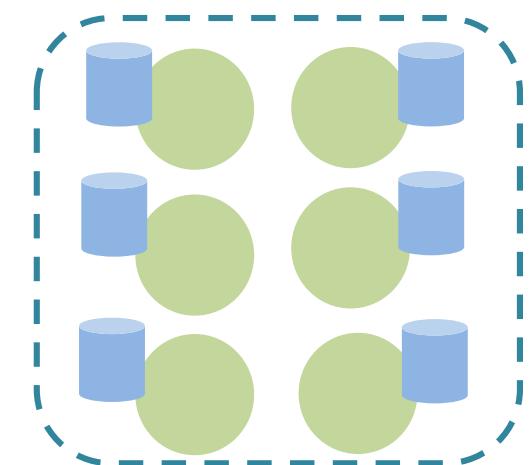


# Microservices principle

INSA

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- Each microservice has one **responsibility**
- Based on the **business layer**

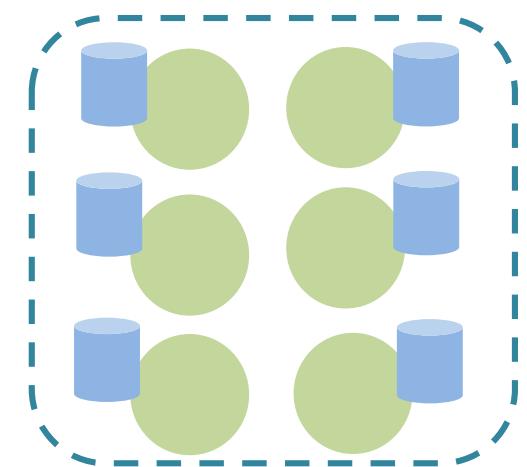
Microservices based application



# Microservices principle

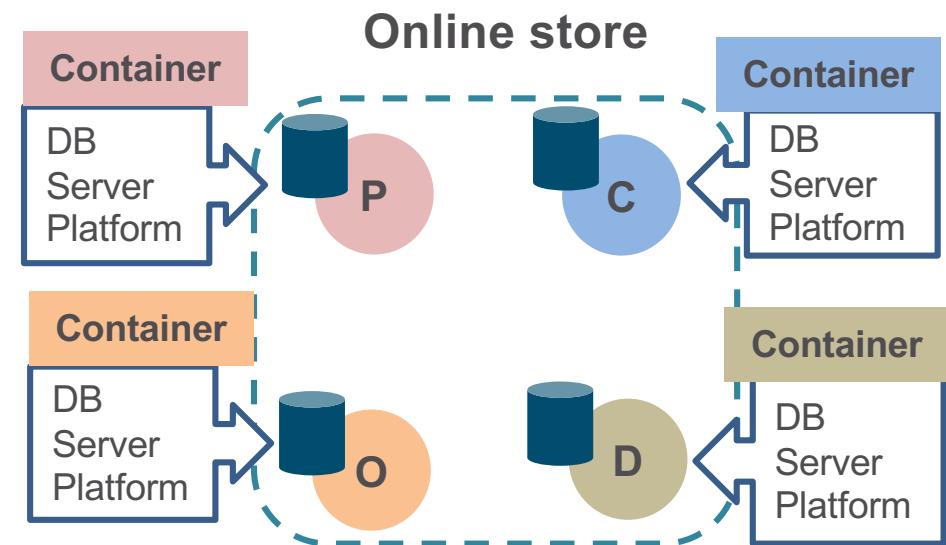
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- Each microservice has one **responsibility**
- Based on the **business layer**
- A microservice can have its **own execution environment** (container)
- A microservice can have its database (**decentralized database**)

Microservices based application



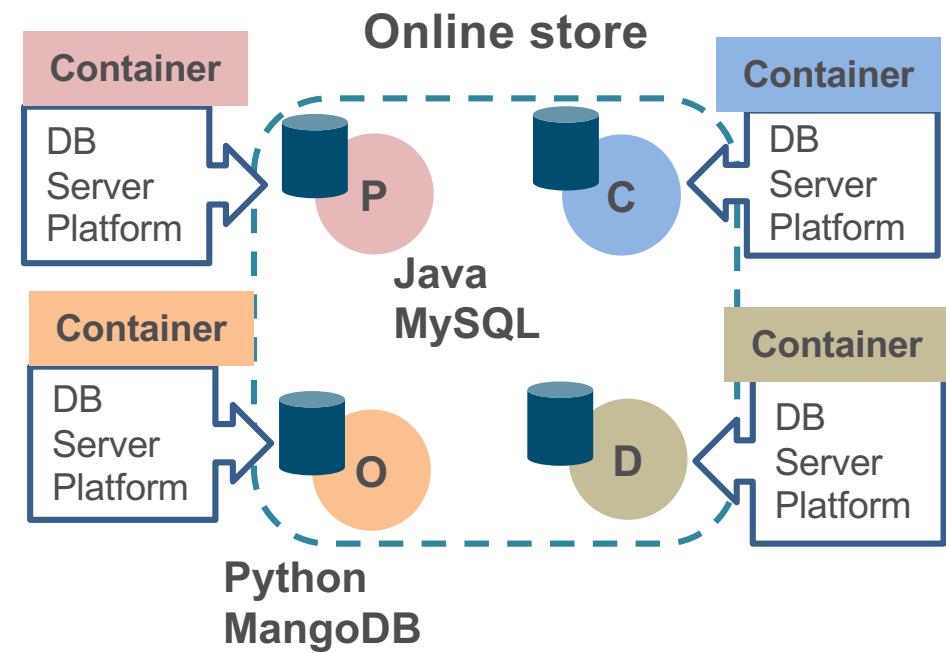
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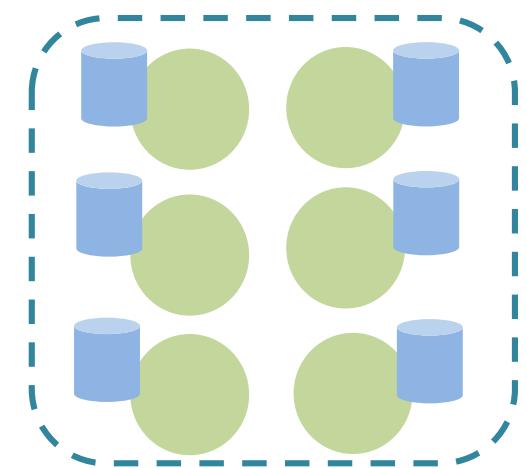
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# Microservices principle

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- A microservice can have its **own execution environment** (container)
- A microservice can have its database (**decentralized database**)
- A microservice exposes a **REST API**

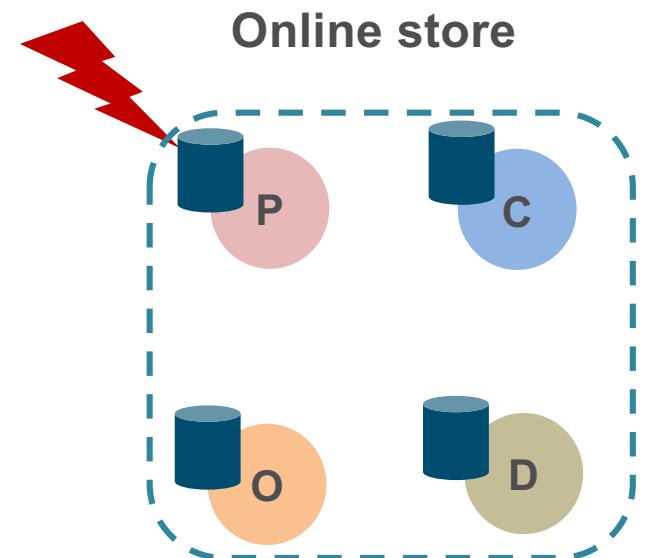
Microservices based application



# Microservices advantages

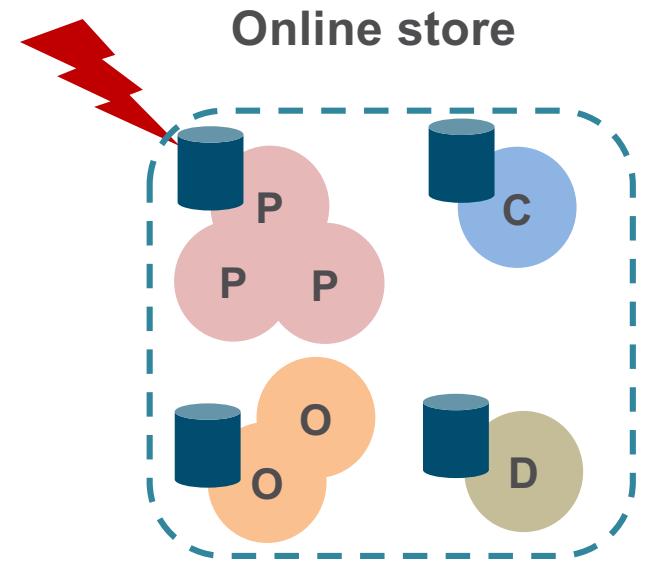
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- Autonomy
- Flexibility



# Microservices advantages

- Autonomy
- Flexibility
- Scalability
- Resiliency
- ...



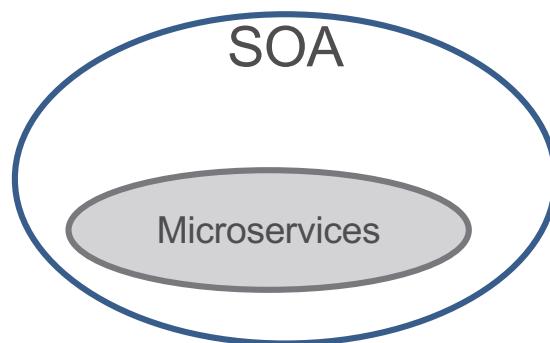
What is the difference between SOA and microservices?

# SOA vs microservices

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## SOA

- Service boundaries are not defined
- A service can have several responsibilities



## Microservices

- Guidelines on microservice boundaries
- A microservice has one responsibility
- The best of SOA

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