Fast Data: servire i canali in tempo reale via API.

Il caso di un player strategico del mercato assicurativo italiano
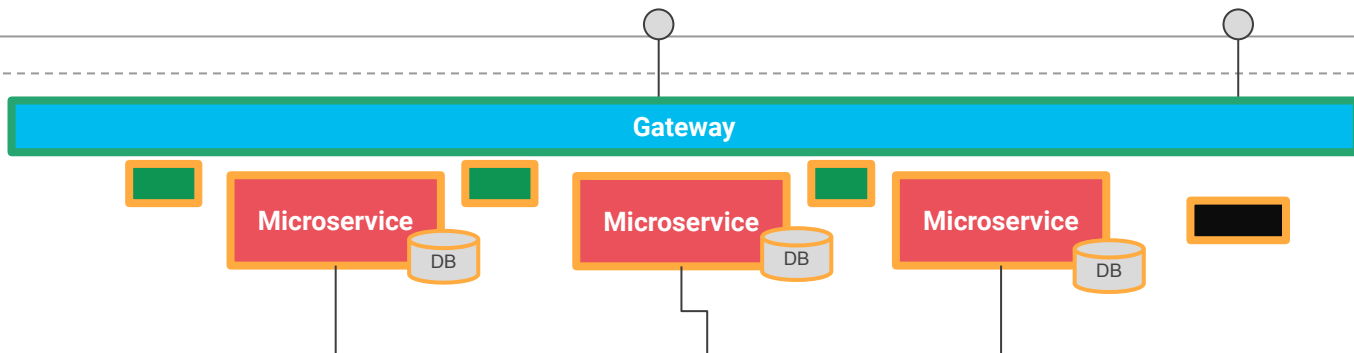
GIULIO ROGGERO, MIA-PLATFORM CTO

Intesys · Liferay · mia Platform

Il problema

E se avessimo bisogno di dati da sistemi legacy?

/api/*

/static/*

Gateway

Microservice DB

Microservice DB

Microservice DB

Come comunico con loro?

Legacy Systems

E se avessimo bisogno di dati da sistemi legacy?

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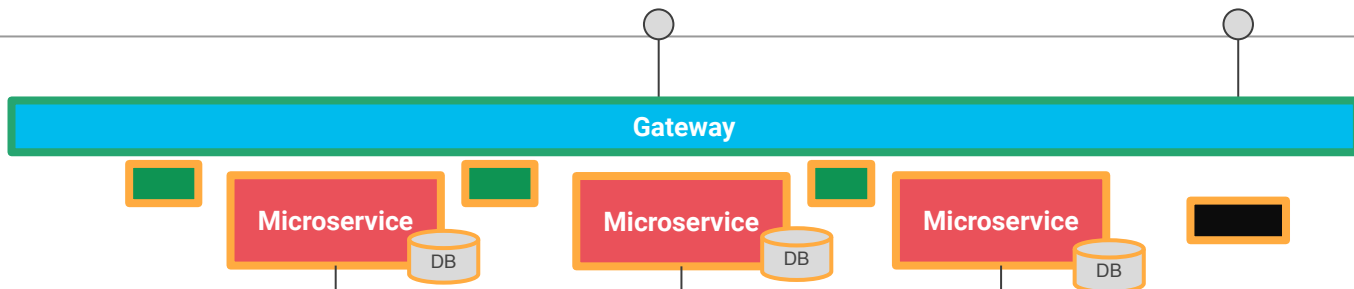
Punto-punto? Appesantisco!

Legacy Systems

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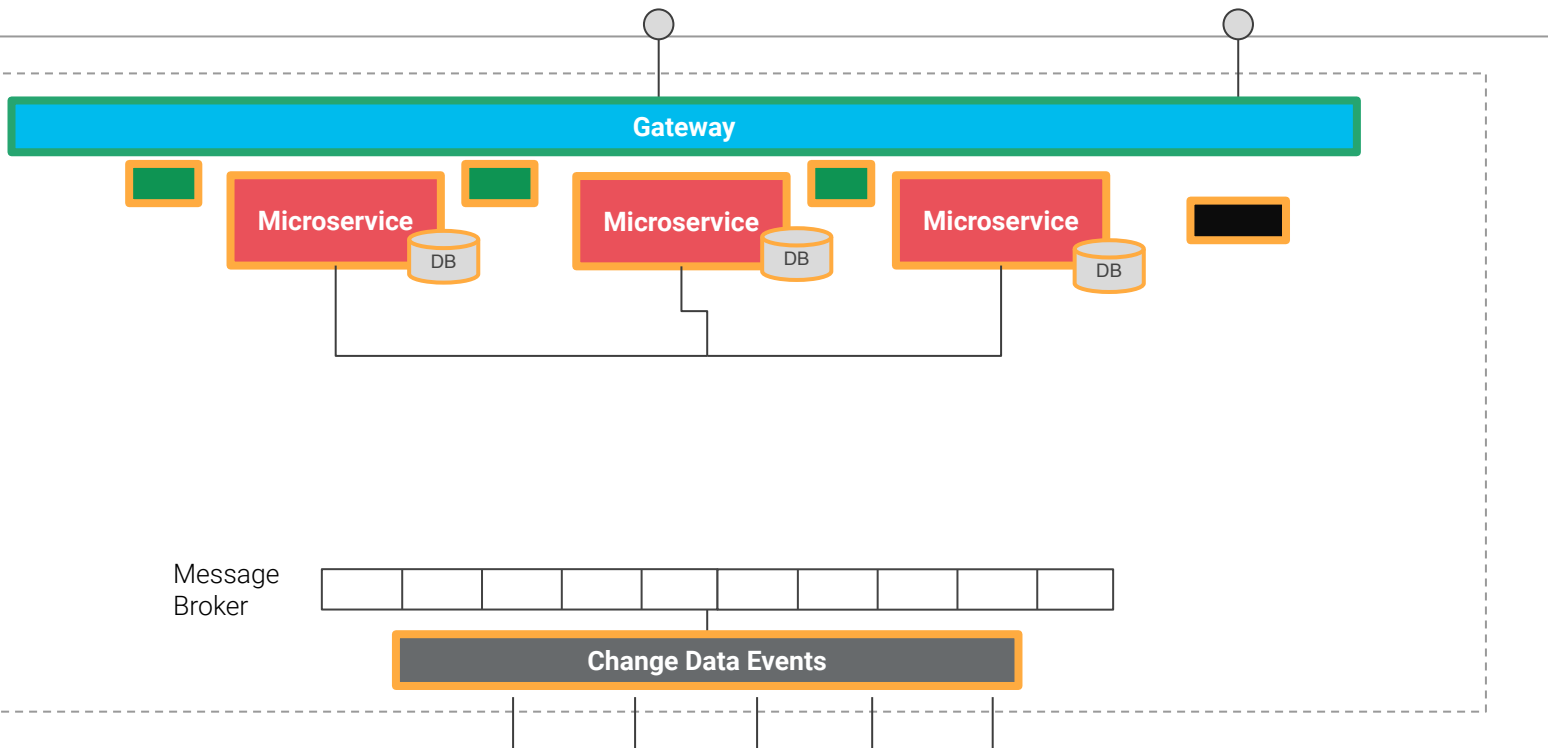
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Change Data Events

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E se avessimo bisogno di dati da sistemi legacy?

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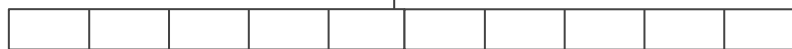**Microservice**

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Data Stream Aggregator

Message
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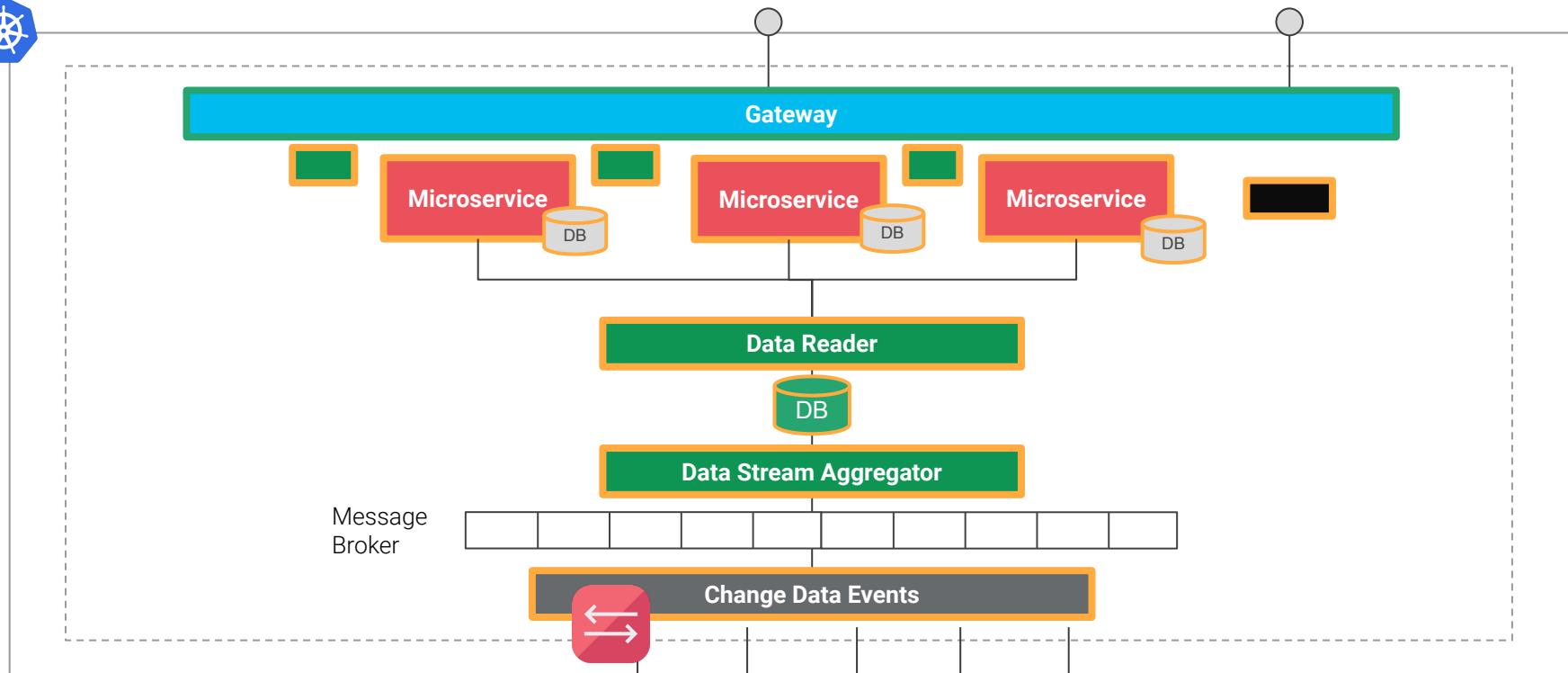**Gateway**

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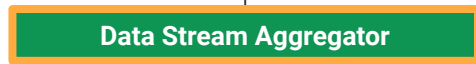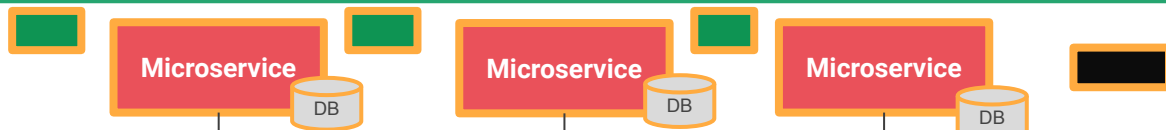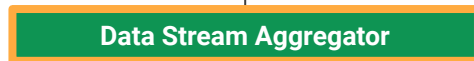**Gateway**

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E la scrittura?

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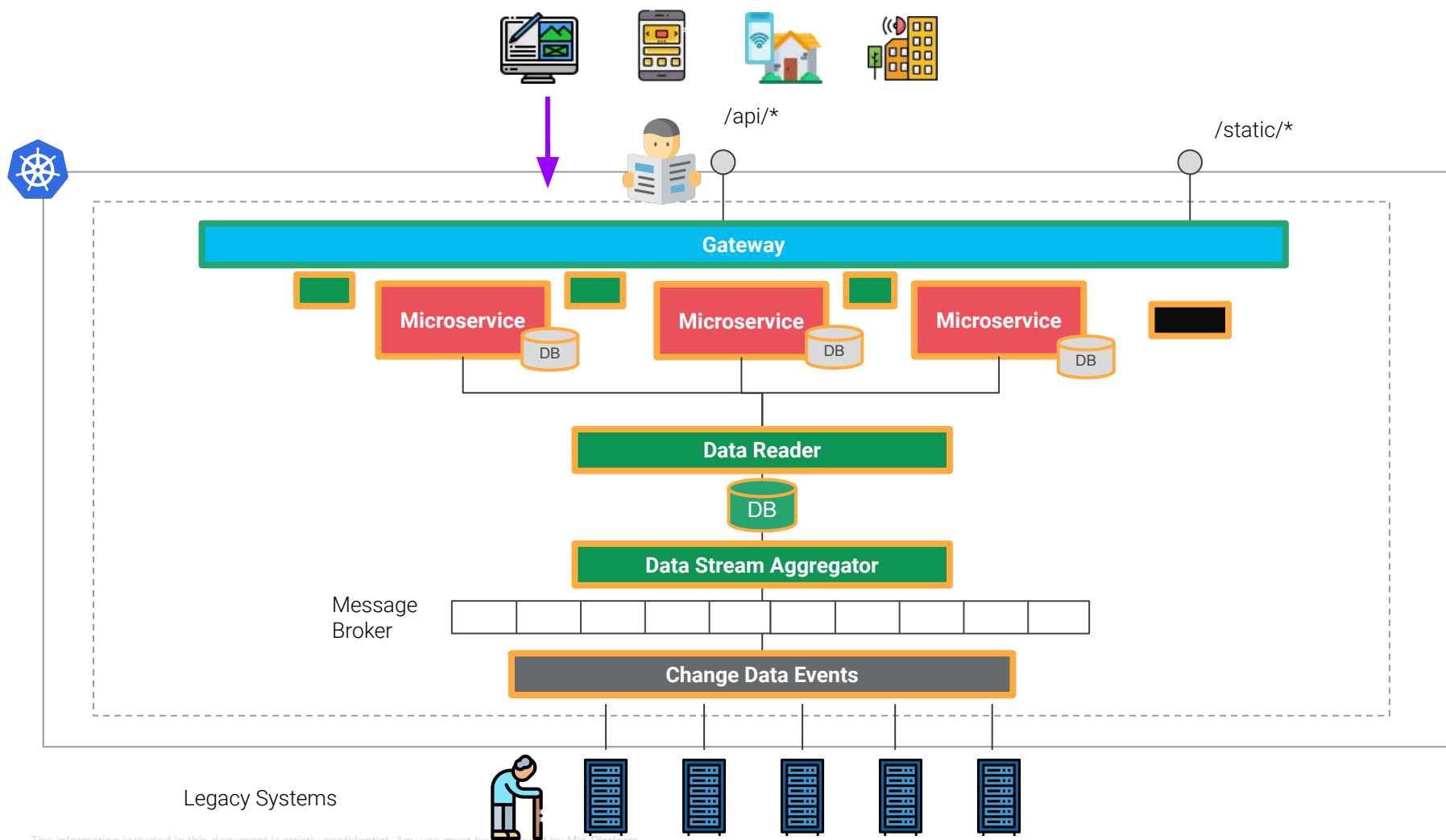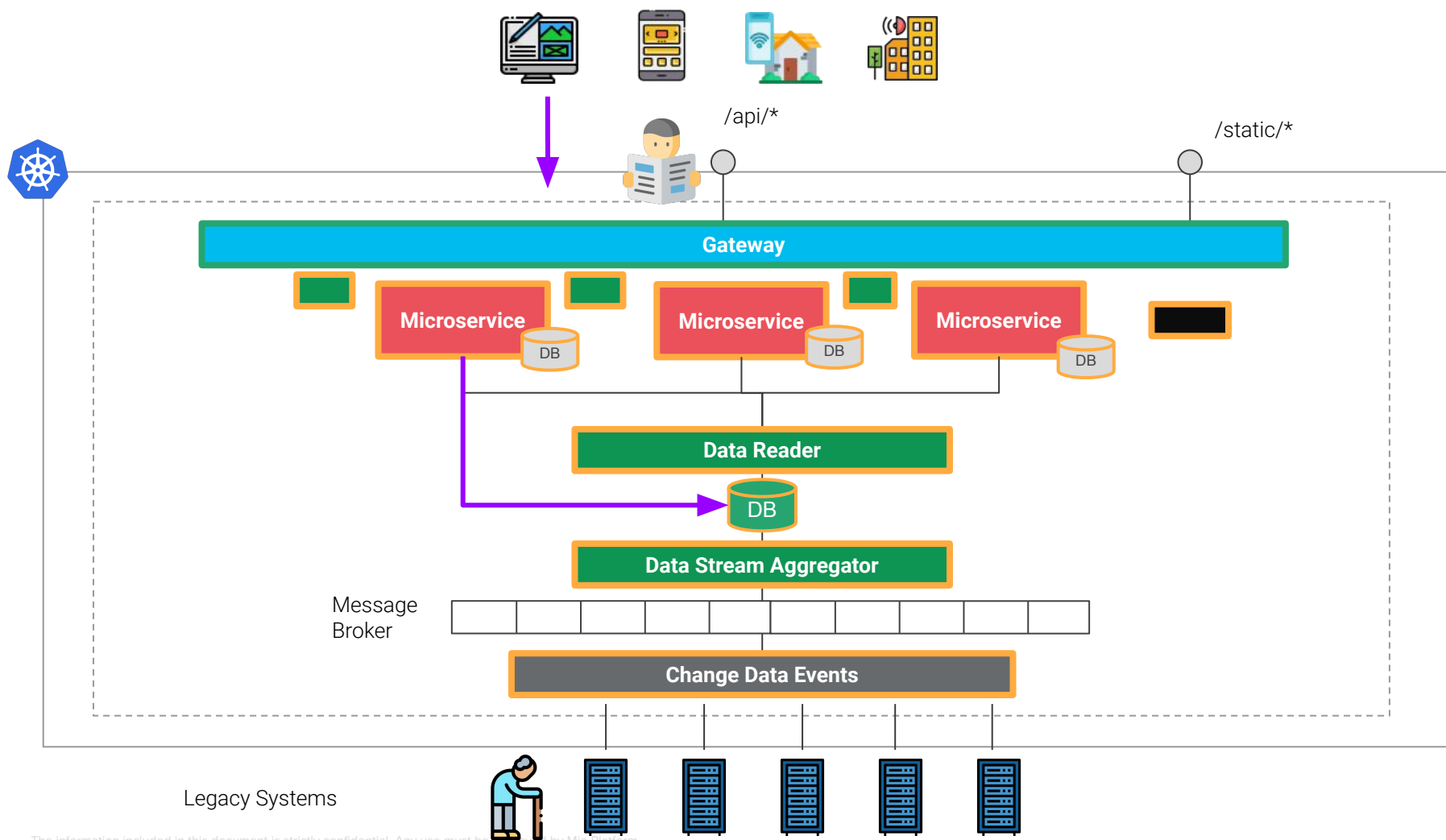
I sistemi legacy rimarrebbero disallineati e la logica transazionale è prima da tirar fuori tutta

Data Reader

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Message Broker

Change Data Events

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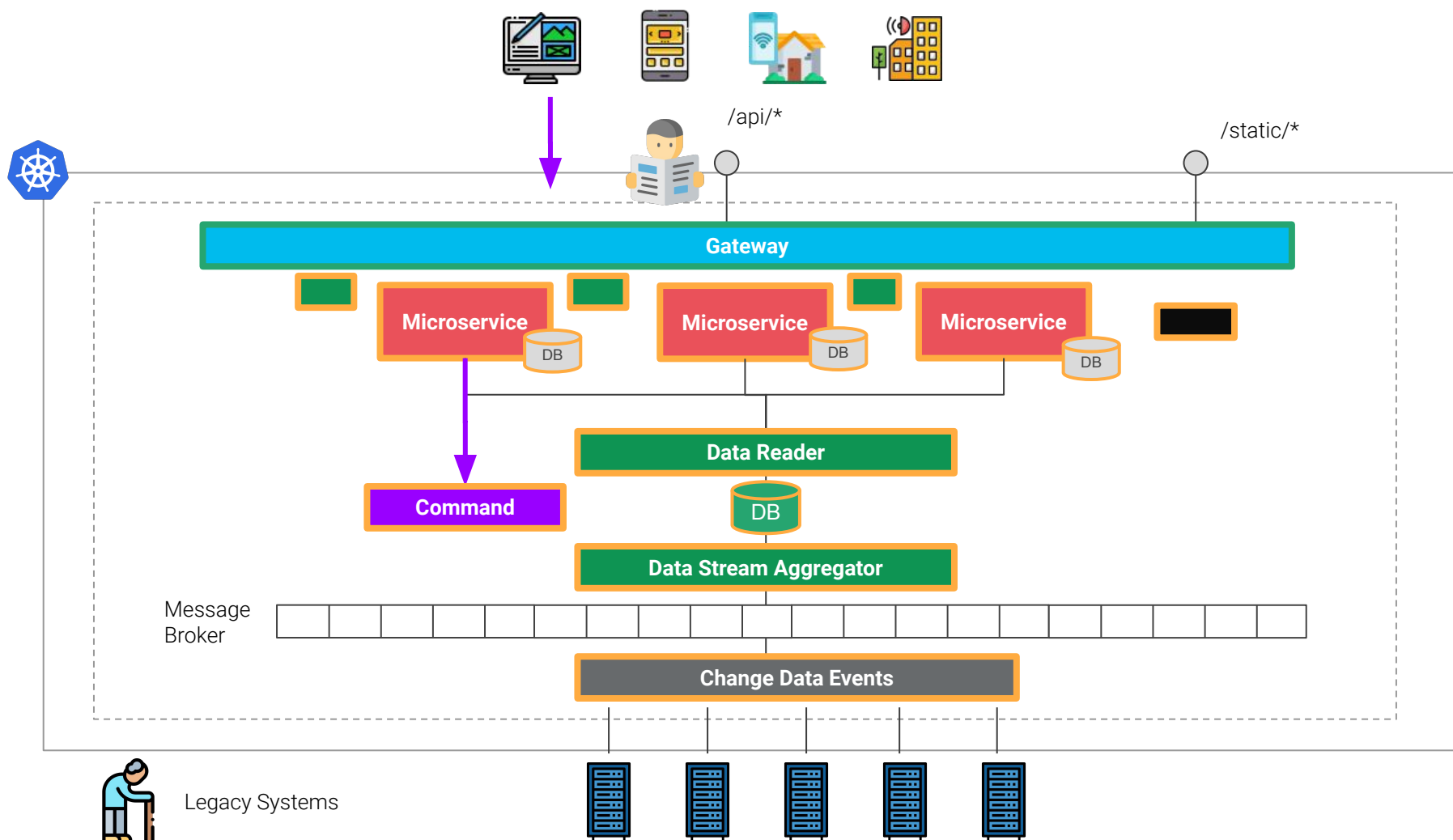DB

Microservice
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Data Stream Aggregator

Message Broker

Change Data Events

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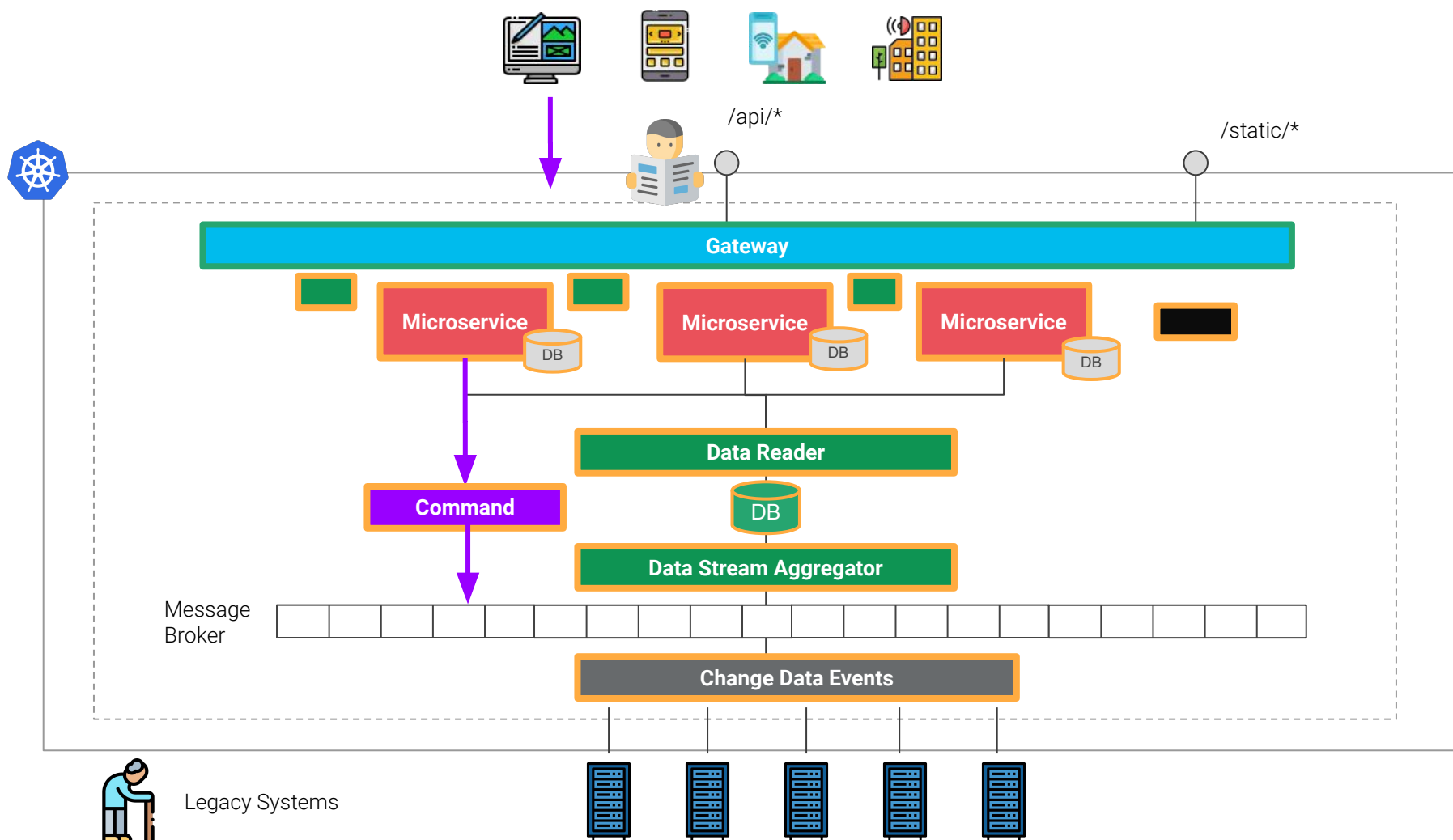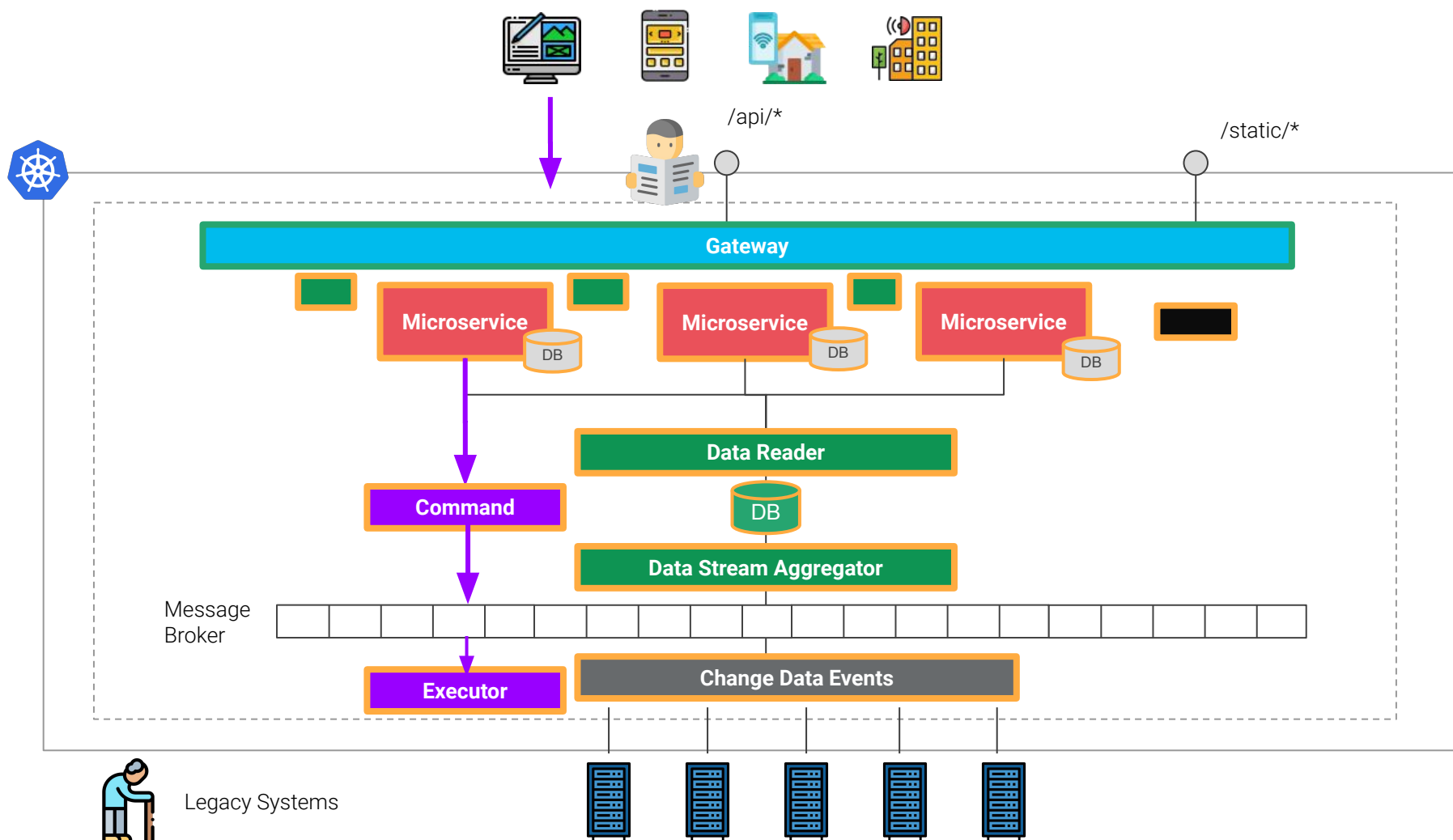
Message Broker
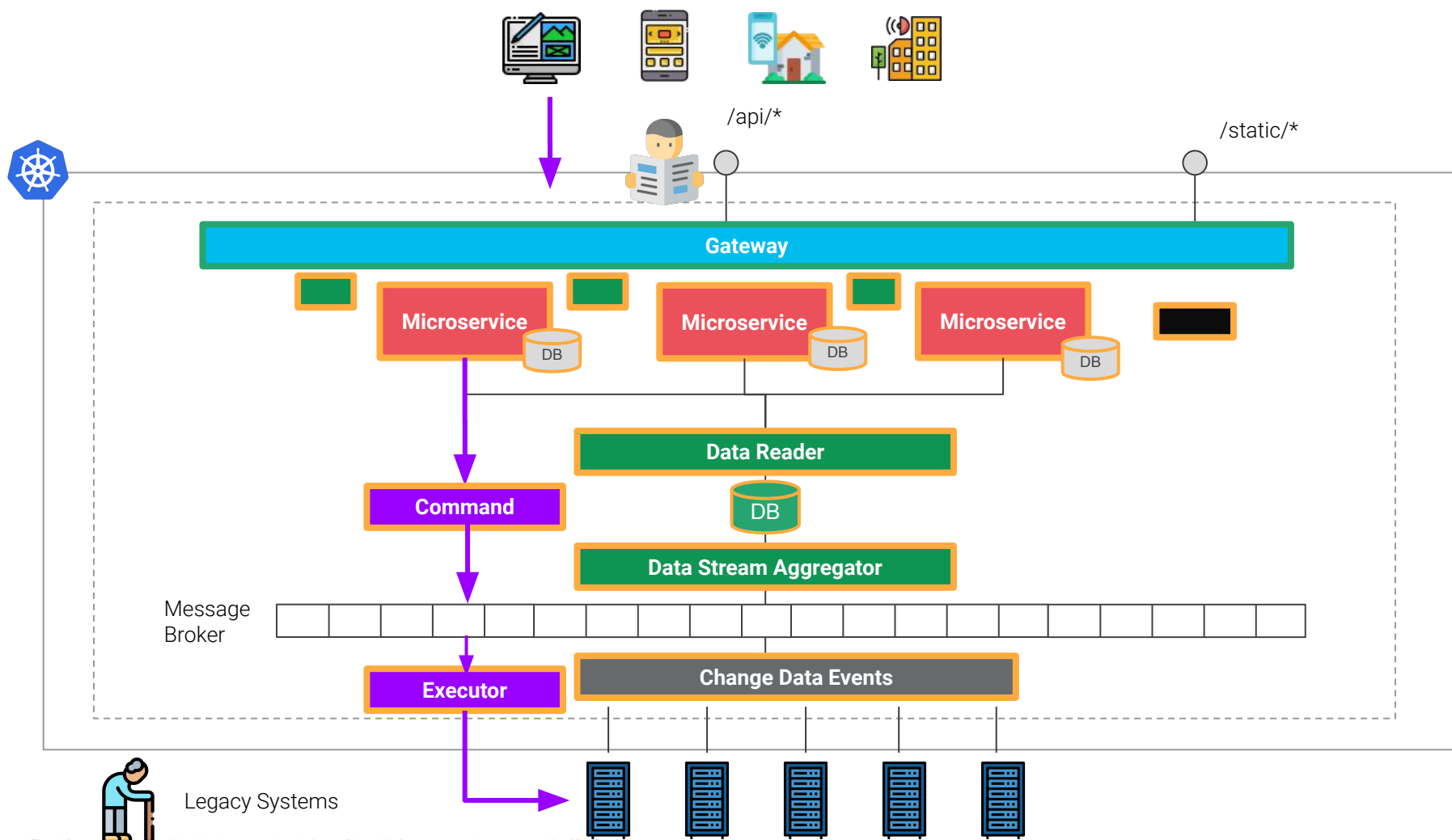
Executor
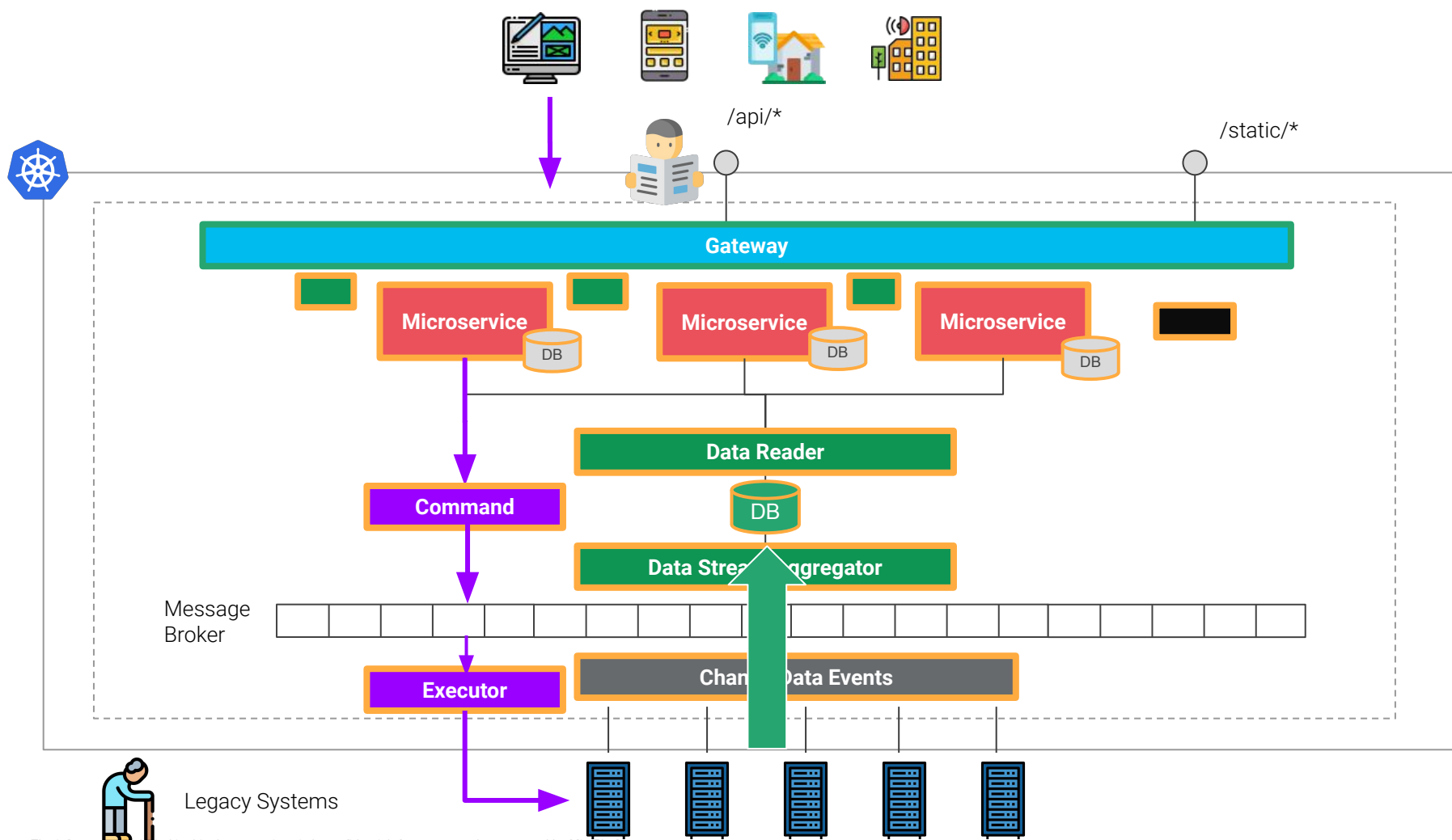
Change Data Events

Legacy Systems

Digital Integration Hub
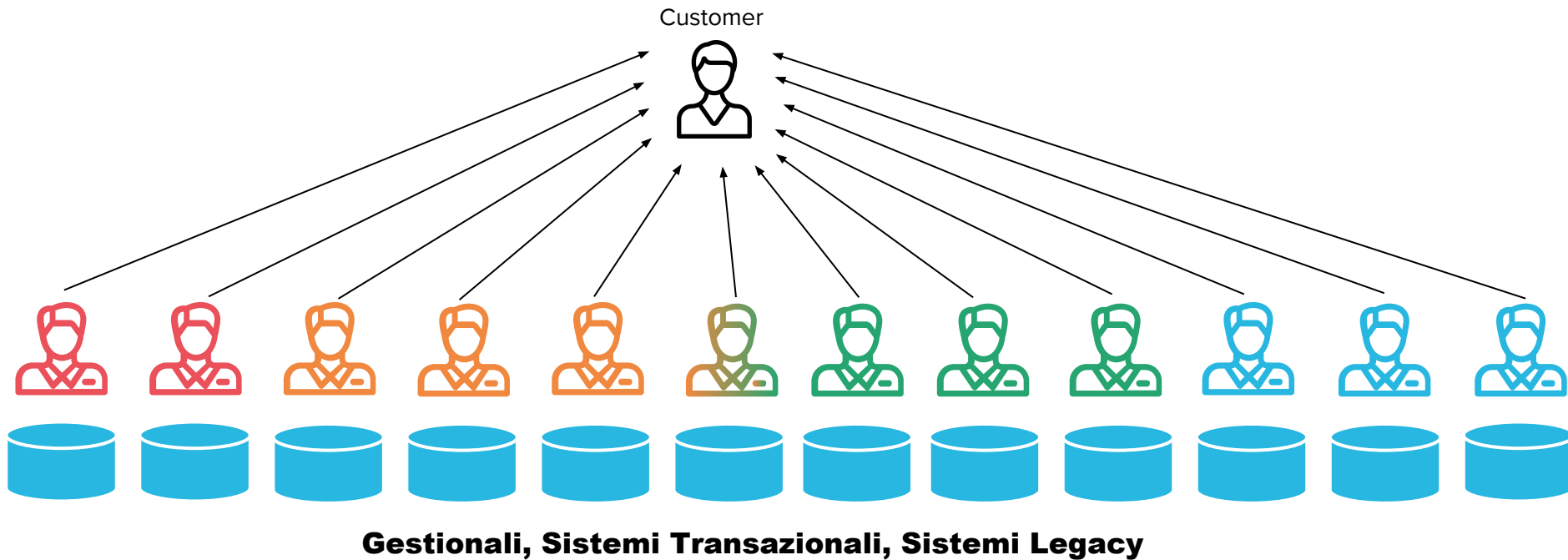
Gartner's target architecture: the Digital Integration Hub

*"DIH-enabled API platforms will emerge as **key architectural foundations**, and deployments will become more comprehensive."*

Use Case

Starting Point

Customer

Gestionali, Sistemi Transazionali, Sistemi Legacy
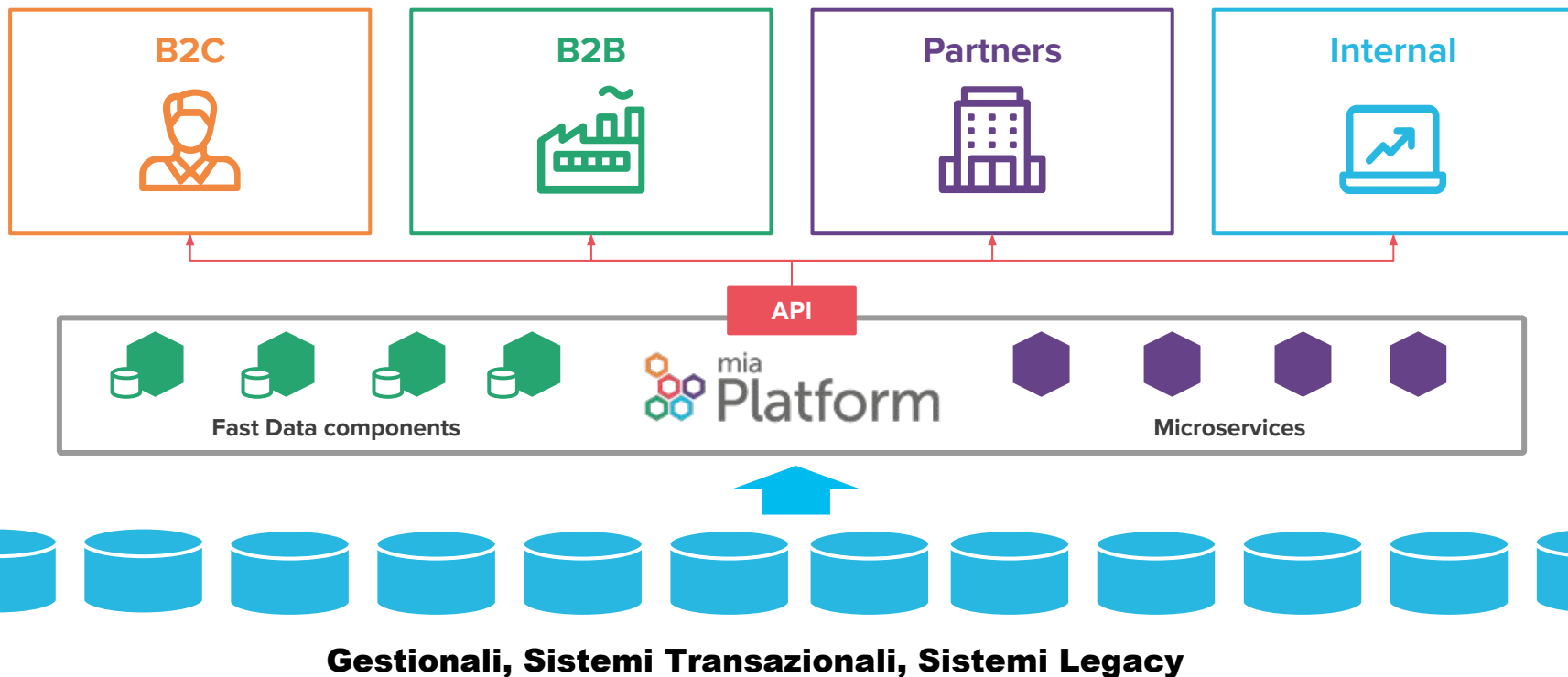
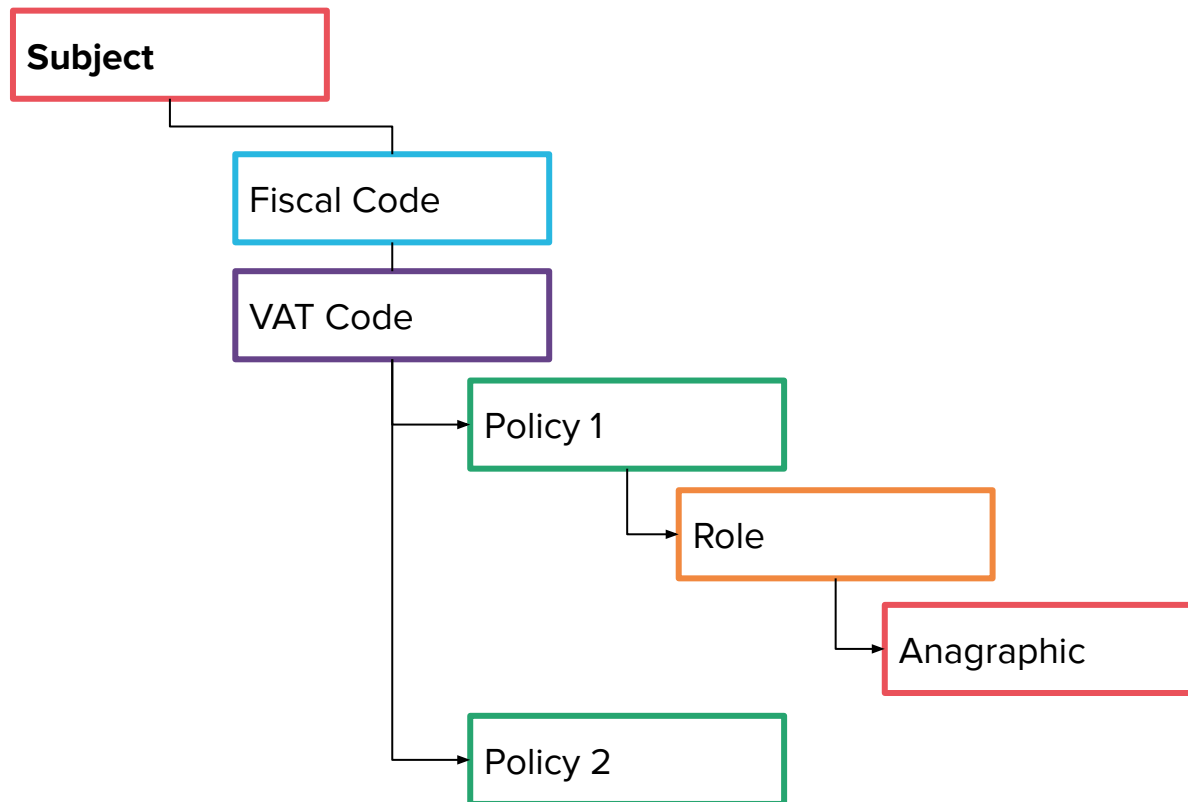# The Vision, an Omnichannel platform

The same data, aggregated according to different business needs, can serve different channels

Structure of a Single Customer View

Subject

Fiscal Code

VAT Code

Policy 1

Role

Anagraphic

Policy 2

The structure is Customer Centric

Starting from VAT code / Fiscal code you can obtain all the customer's policies with the relative anagraphics
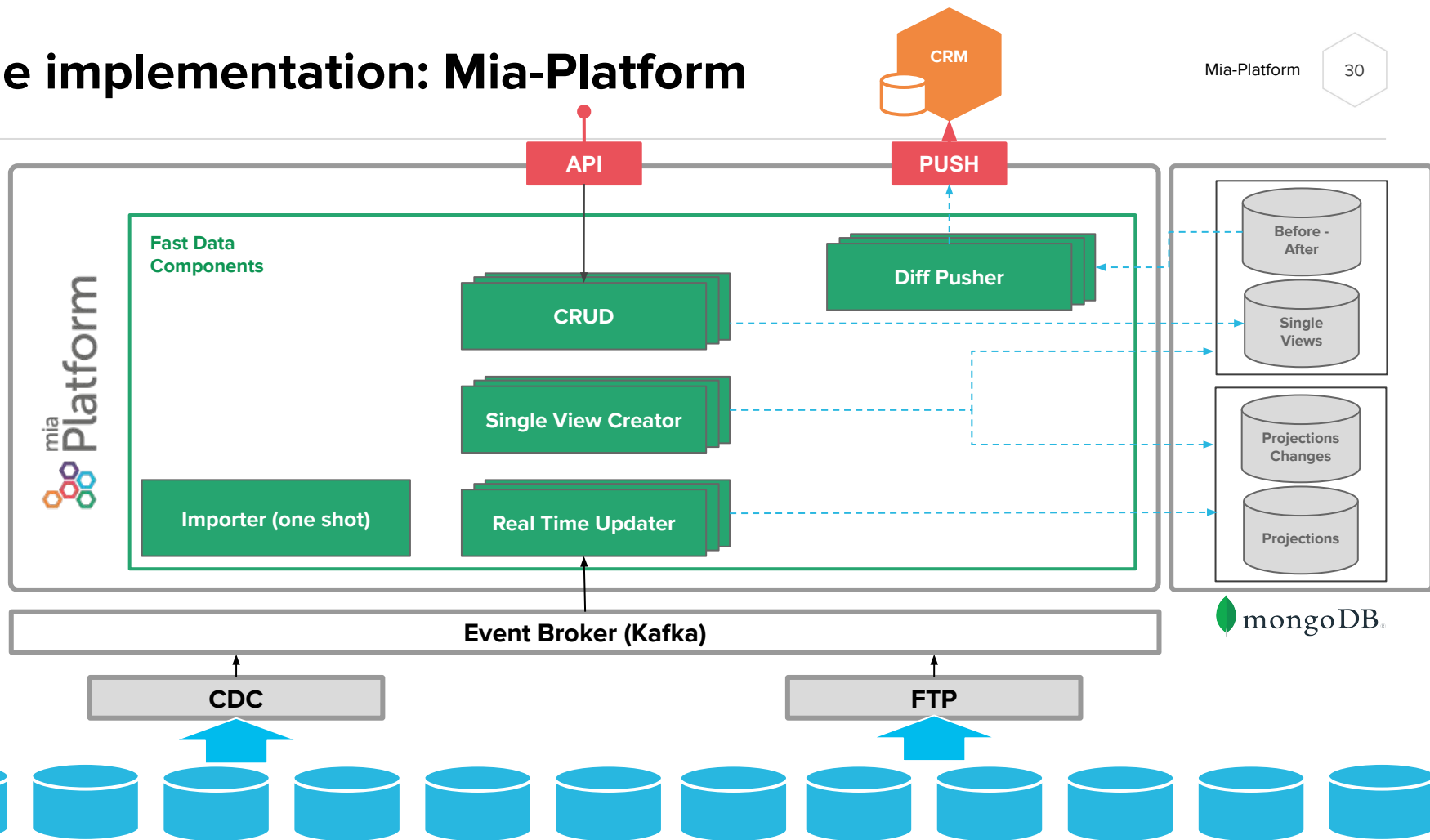
Example of a Single View

```
  _id: ObjectId("5d7beea09f571102ae508629")
> dataVersion: Object
∨ subject: Object
      fiscalCode: "████████████"
      vatCode: null
      idSubject: "HFIP750593998"
      isLegalEntity: false
    > ana: Object
    > contacts: Array
∨ insurances: Array
    ∨ 0: Object
        id: "0448_379284_null"
        portfolioOrigin: "EXAMPLE"
        number: "379284"
        masterNumber: null
        currentExpirationDate: 2021-05-03T00:00:00.000+00:00
        originalExpirationDate: 2021-05-03T00:00:00.000+00:00
        proposalNumber: "379284"
        currentEffectDate: 2015-09-29T00:00:00.000+00:00
      > roles: Array
      > company: Object
    ∨ 1: Object
        id: "0448_385968_null"
        portfolioOrigin: "BI"
        number: "385968"
        technicalBranchCode: "I-I"
        currentExpirationDate: null
        originalExpirationDate: null
        proposalNumber: "385968"
        currentEffectDate: 2017-04-17T22:00:00.000+00:00
      > roles: Array
      > company: Object
        masterNumber: null
  updatedAt: 2020-06-11T02:55:44.048+00:00
  __STATE__: "PUBLIC"
```

The implementation: Mia-Platform

CRM

API

PUSH

Fast Data Components

Diff Pusher

CRUD

Single View Creator

Importer (one shot)

Real Time Updater

Before - After

Single Views

Projections Changes

Projections

Event Broker (Kafka)

CDC

FTP

mongoDB

Numbers

12

Systems of Record managed

4M+

Clients aggregate to the Single Views

<15 sec

From the legacy application to the channel

<50 ms

Client's investigation time

The information included in this document is strictly confidential. Any use must be approved by Mia-Platform.

Giulio Roggero

⭐ **Information & Communications Technology**

| Scrum & Agile | Agile Transformation | Software Craftsmanship |

| Modern Software Development | Open Source Software | Software Architecture | microservices |

| API Design | FastData | Data Lake | Streaming | GKE | TDD & BDD | DDD |

| Agile Coaching | Cloud Native | Kubernetes | Mia-Platform |

📍 Milan, Lombardy, Italy

Giulio Roggero

Founder & CTO Mia-Platform

Il mio focus principale è semplificare la vita a sviluppatori e IT operations con Mia-Platform, uno dei primi Digital Integration Hub out-of-the-box al mondo. Ad oggi aiuto più di 70 persone dei team di Mia (software engineers, product owners, IT operations, UX designers) a creare un prodotto che semplifica lo sviluppo su Kubernetes.

🐦 @giulioroggero   in linkedin.com/in/giulioroggero/   🌐 instagram.com/giuliorog… (Instagram)   ✏️ blog.mia-platform.eu/it (blog)

🏢 mia-platform.eu (company)   🌐 github.com/giuliorog… (GitHub)

https://sessionize.com/giulio-roggero/

Grazie

Giulio Roggero

MIA-PLATFORM CTO

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