Aplicaciones Modernas

12 factores a tomar en cuenta

¿Quién?

- JUG co-leader en GuateJUG
- Desarrollador Java certificado con +8 años de experiencia.
- Ganador del Duke Choice Award en 2016 con GuateJUG
- Parte del comité organizador del JConf Guatemala
- Conferencista desde 2012 en eventos nacionales e internacionales.
- Consultor en MangoChango S.A.

GUATE-JUG

Duke's Choice Award
2016 Winner
Java

ORACLE
Certified
Associate

Contenido

- **Los monolitos son cosas del pasado?**
- **Los microservicios son el futuro?**
- **Migración de monolitos a microservicios**
- **12 Factor apps**
- **Demo**

Los Monolitos son del pasado?

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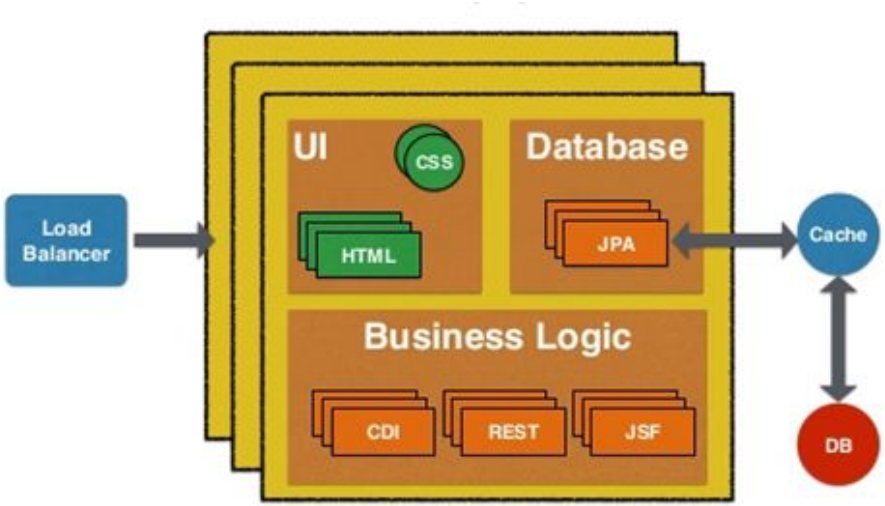
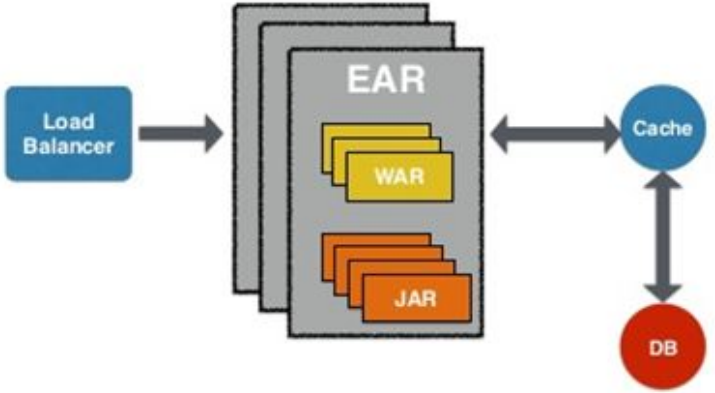
Los monolitos son del pasado?





Fáciles de construir, escalar y mantener.

images: @arungupta #devoxx

Los microservicios son el futuro?

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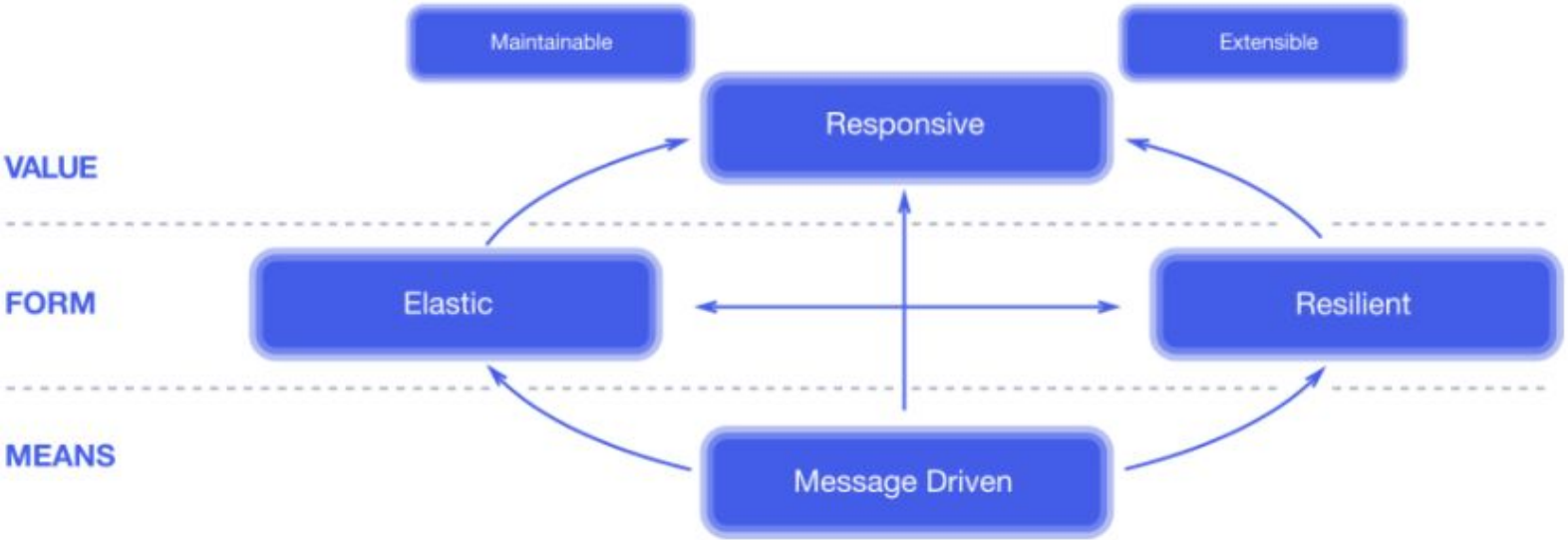
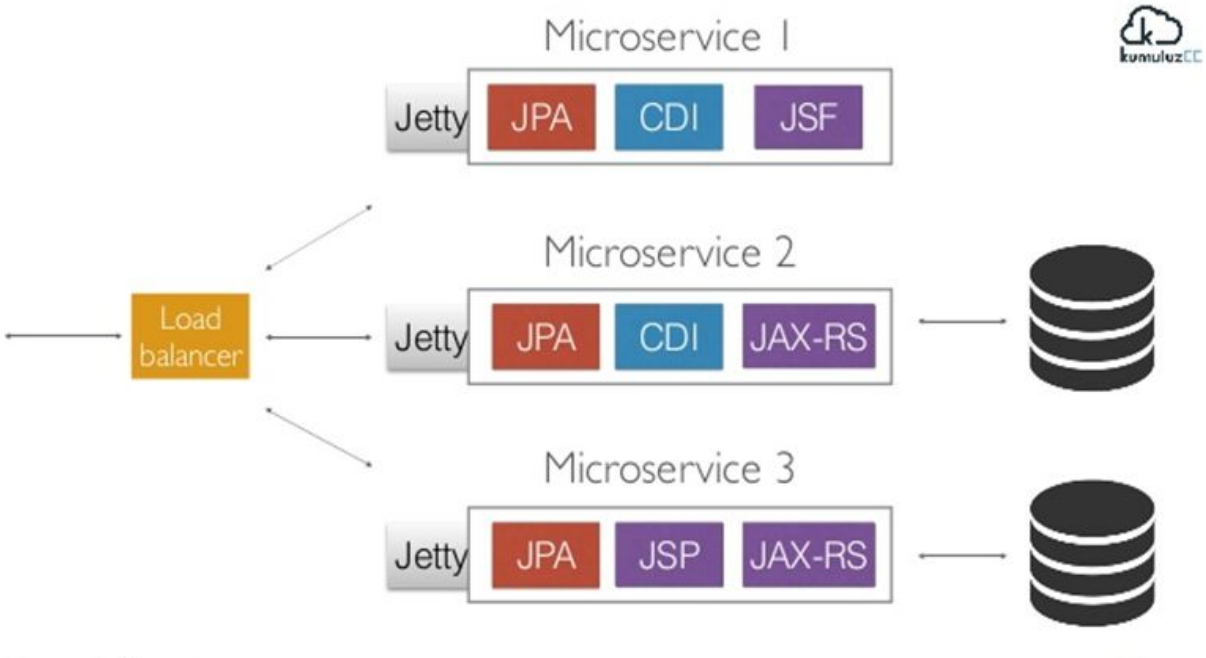
Porque microservicios?



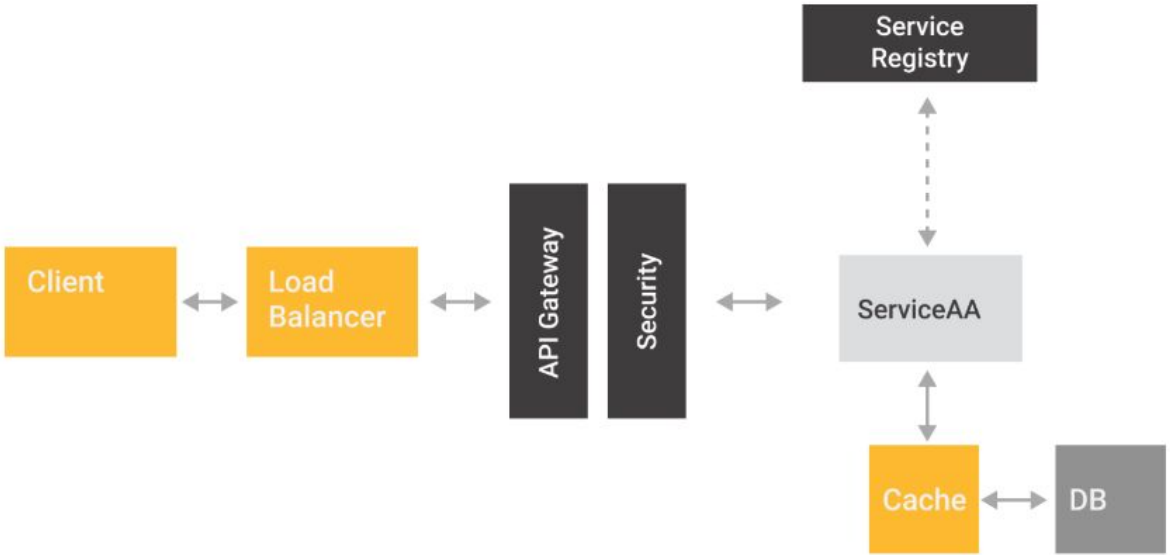
images: @arungupta #devoxx

Arquitectura de microservicios



images: @arungupta #devoxx

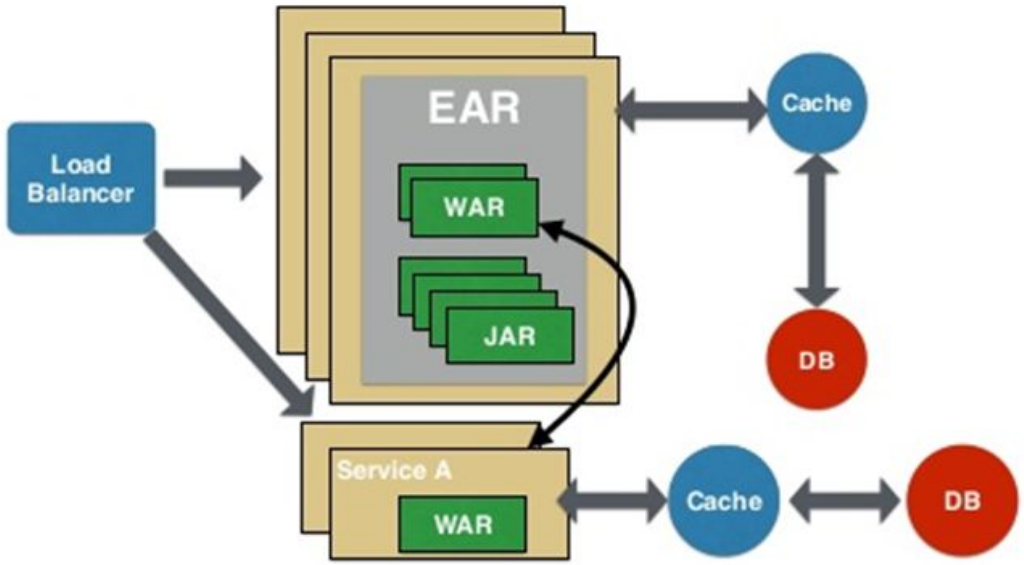
Arquitectura de microservicios



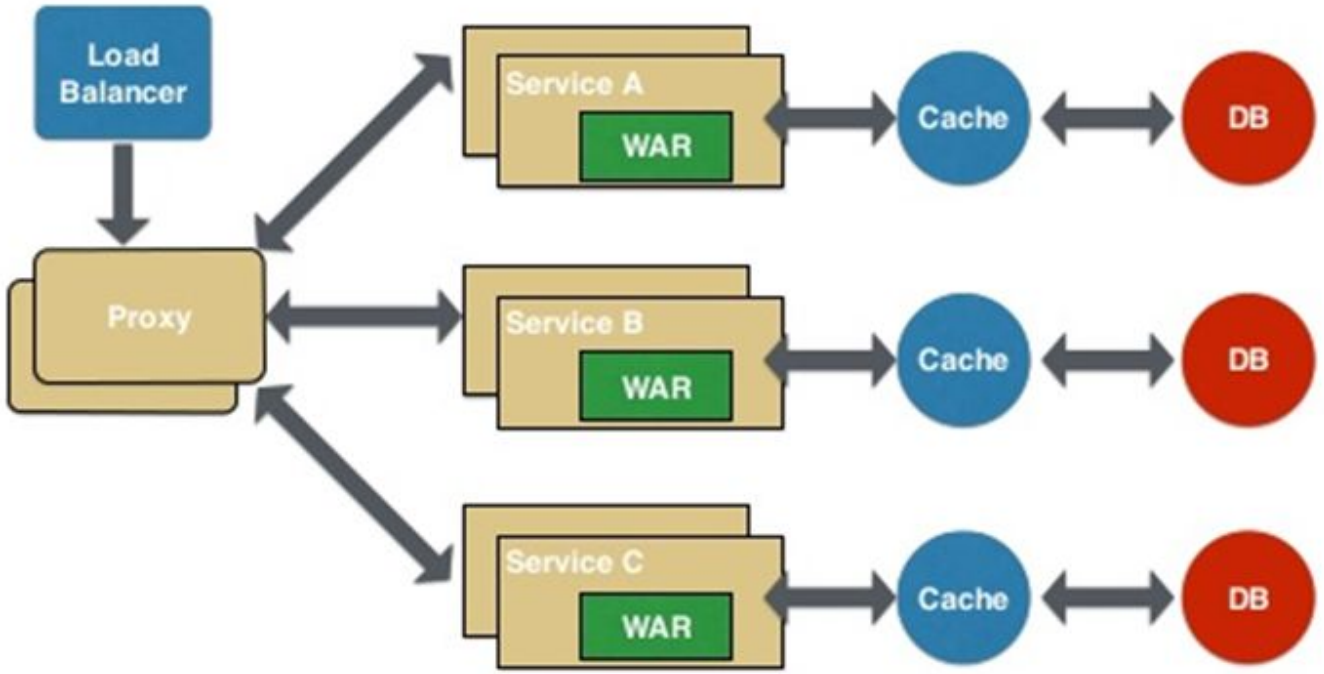
Is by far more complex than a monolith, and needs a team to manage it

images: @tuxtor

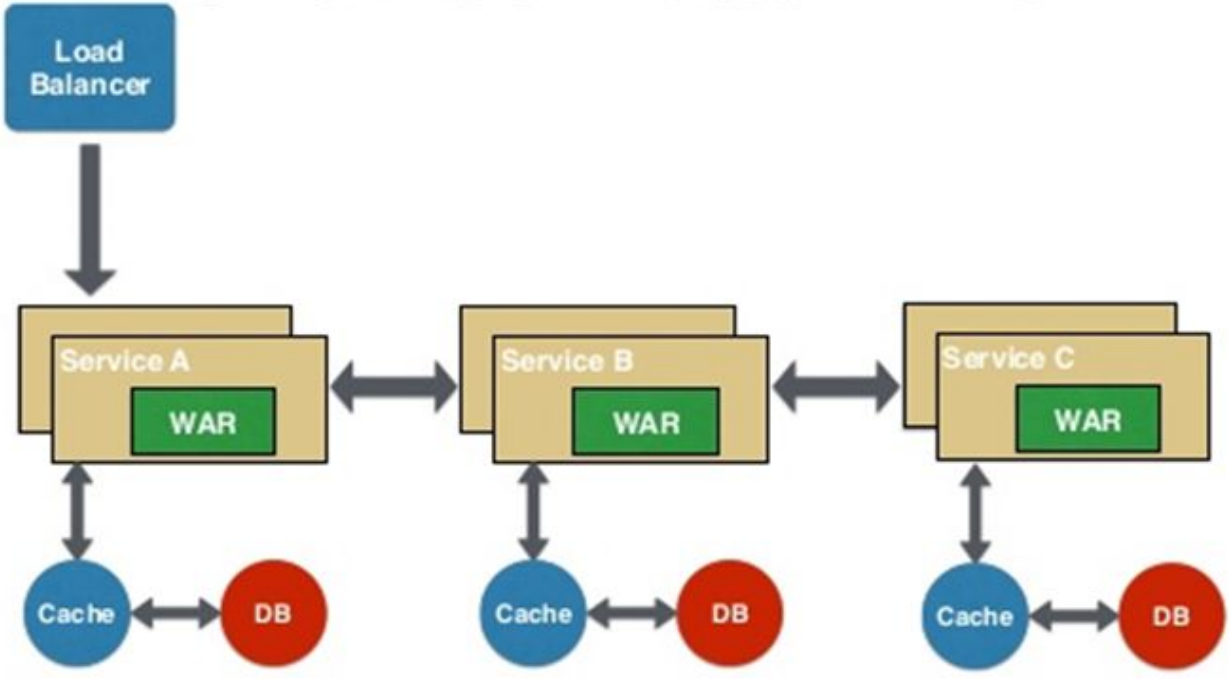
De monolitos a microservicios



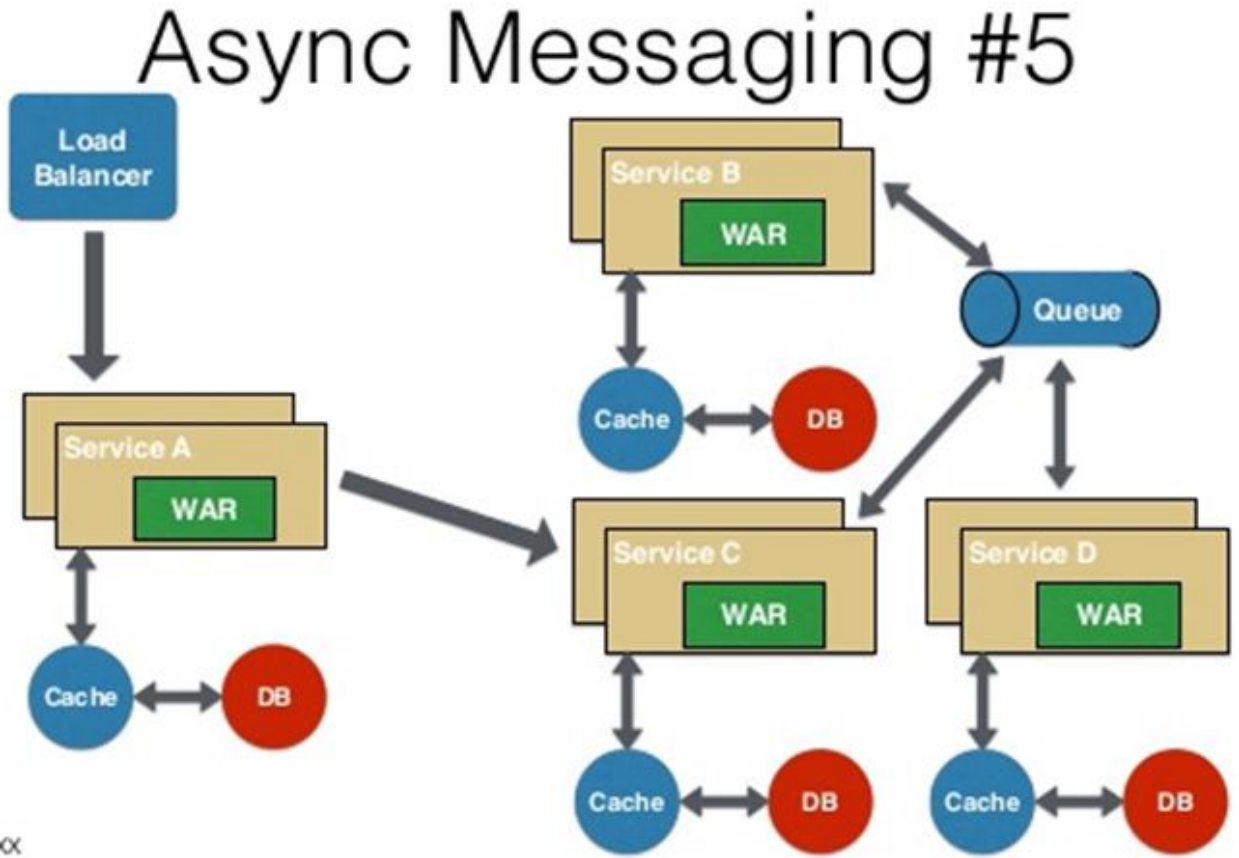
De monolitos a microservicios

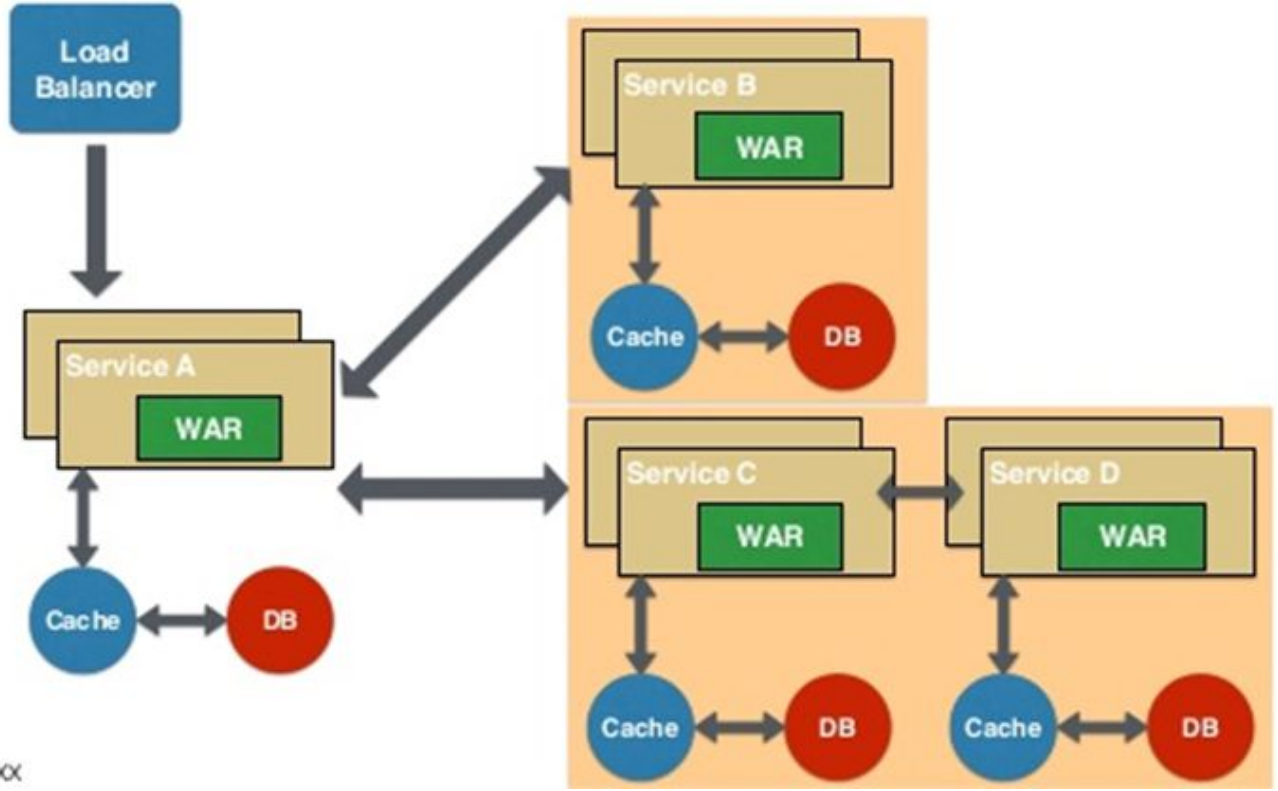


De monolitos a microservicios

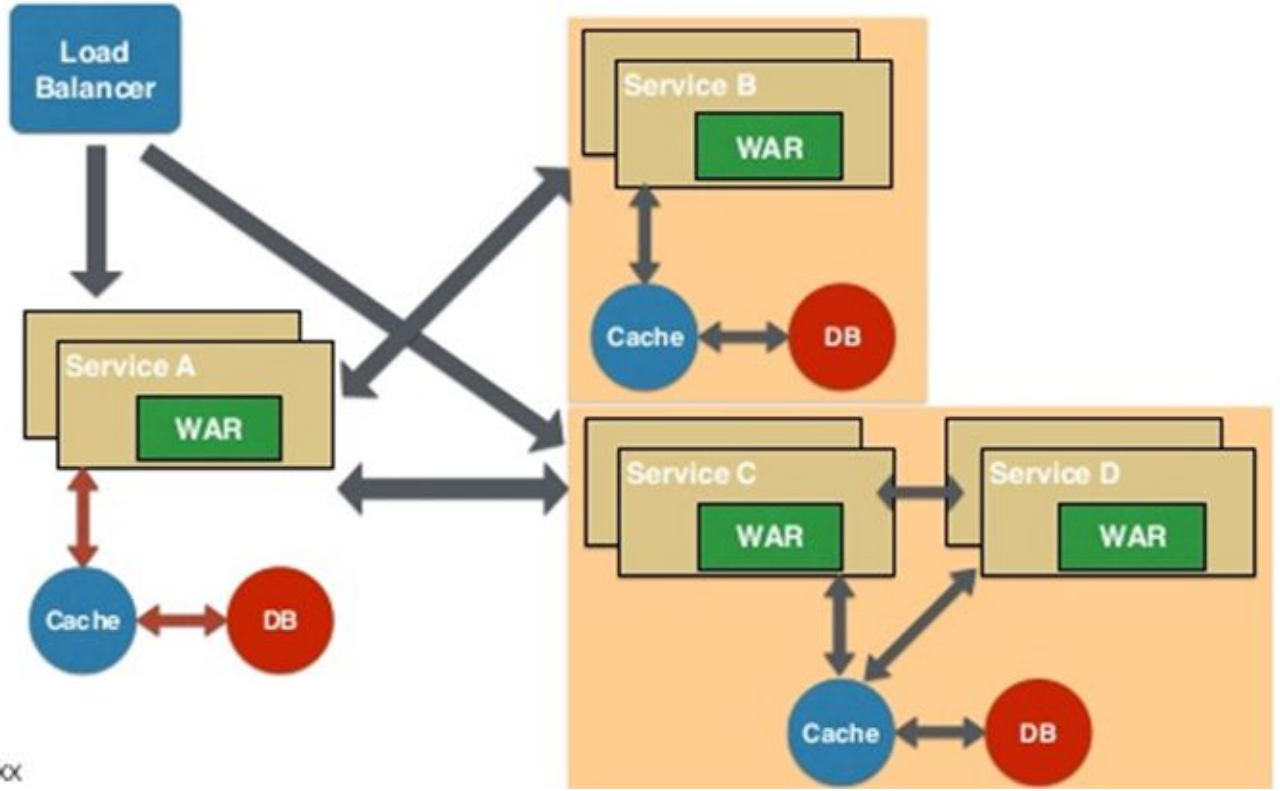


De monolitos a microservicios

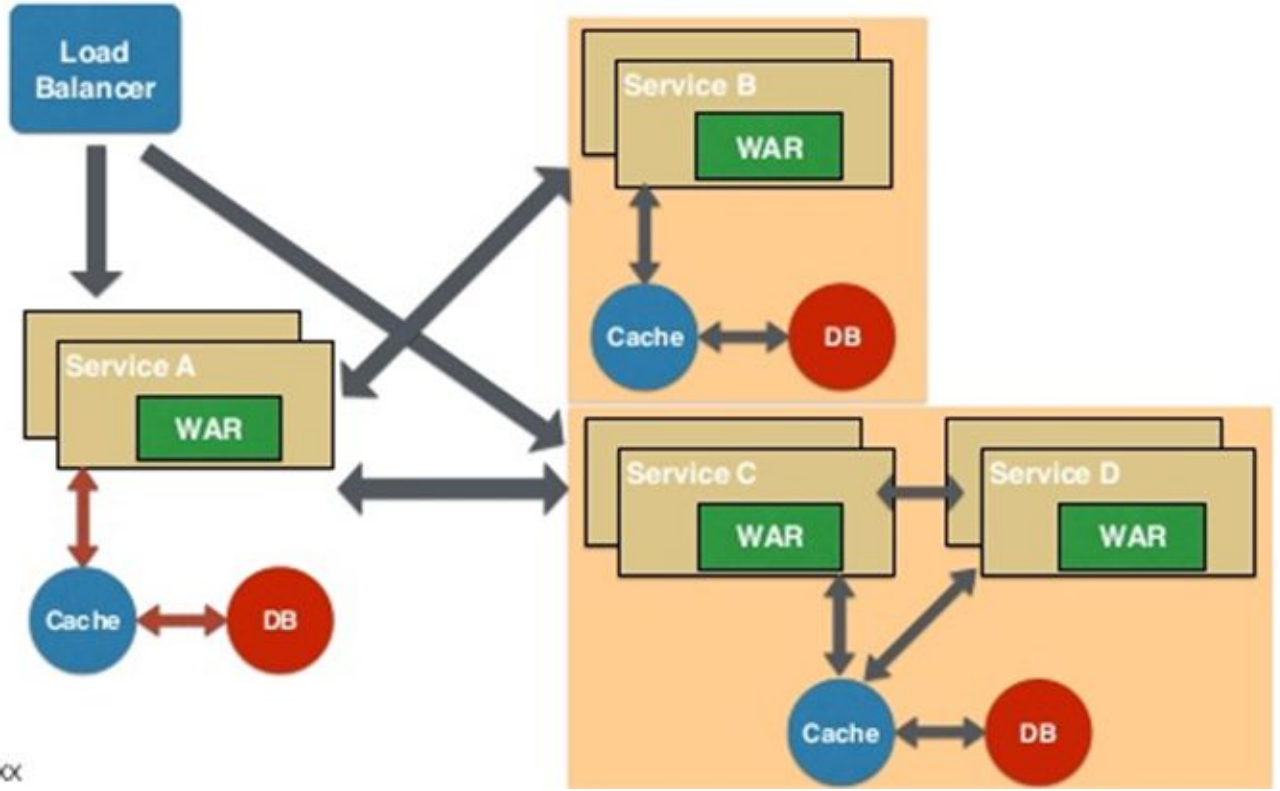



Load Balancer
Service A
WAR
Cache
DB
Service B
WAR
Cache
DB
Service C
WAR
Cache
DB
Service D
WAR
Cache
DB

De monolitos a microservicios



De monolitos a microservicios



12 factor app

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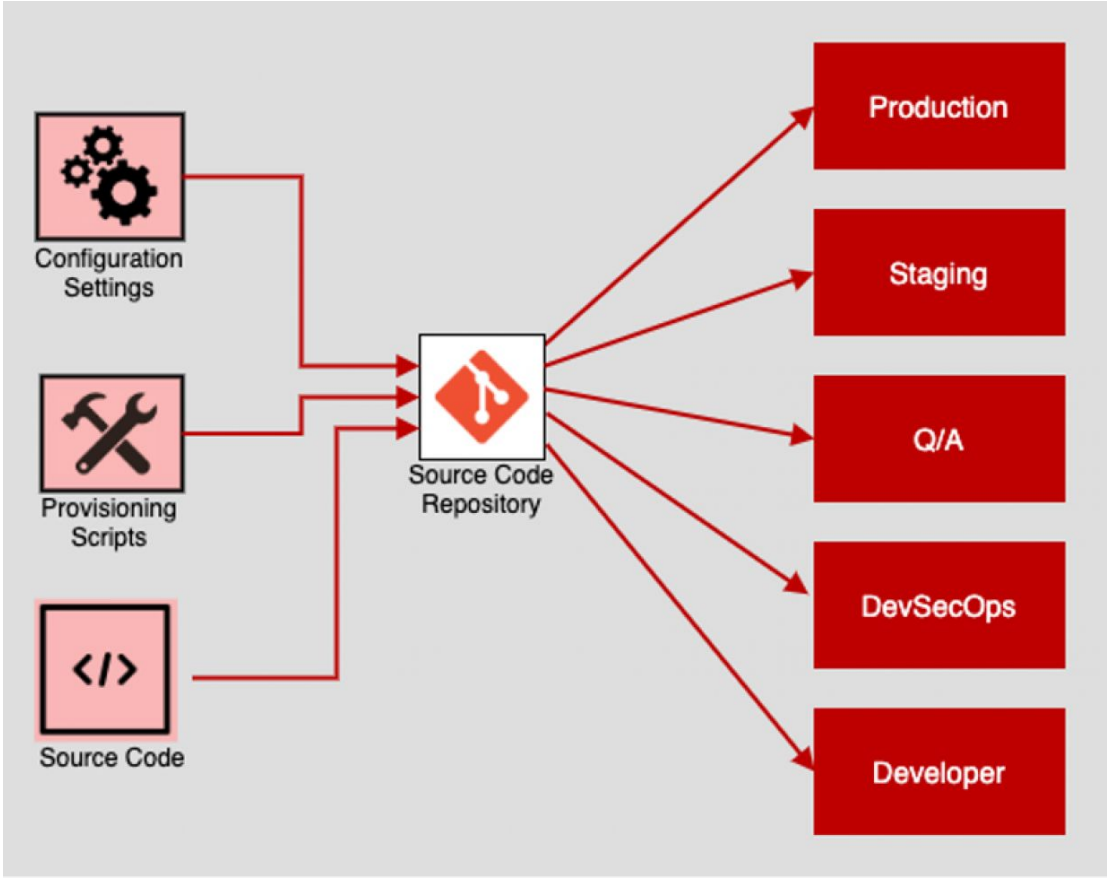
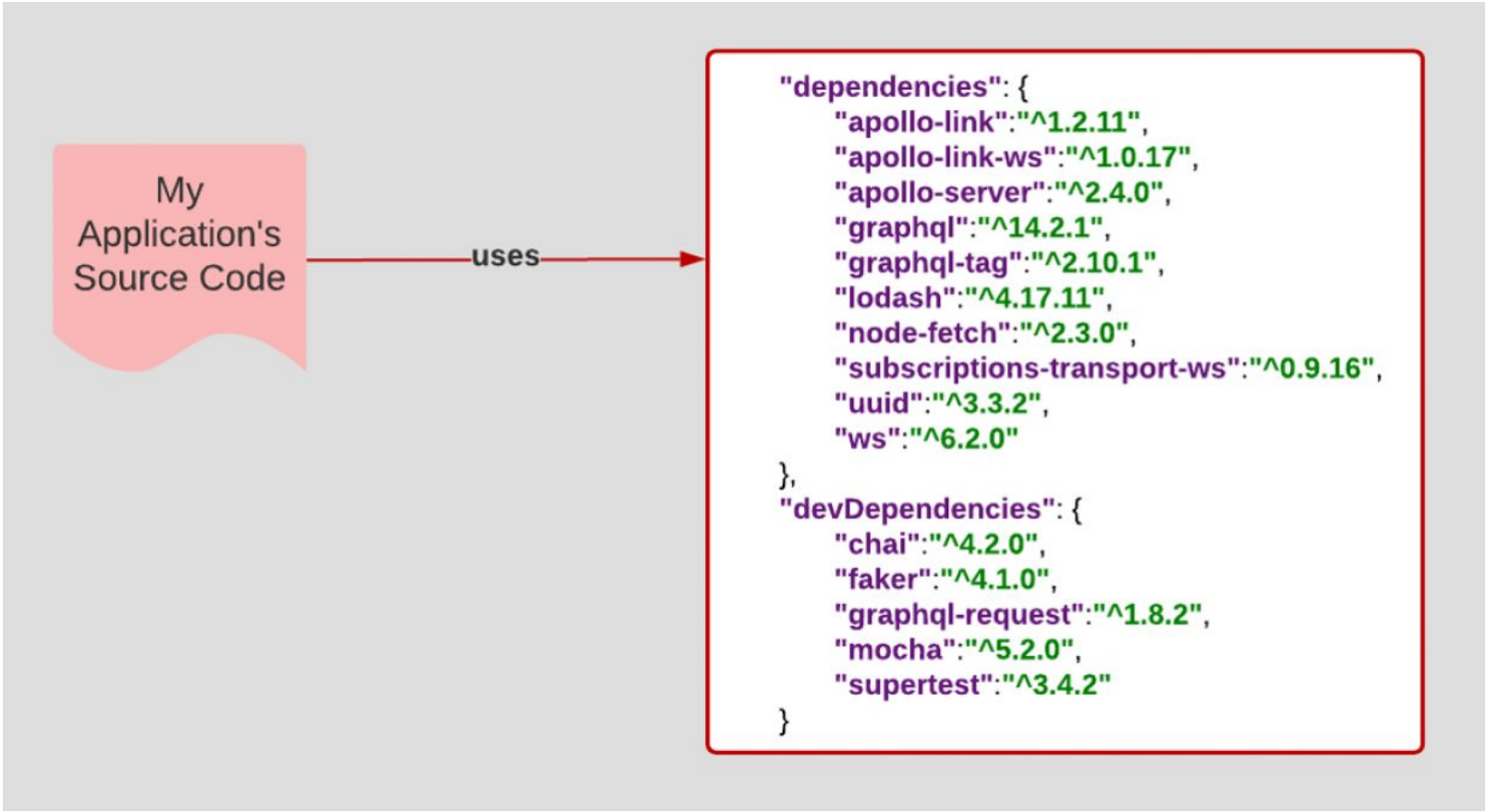
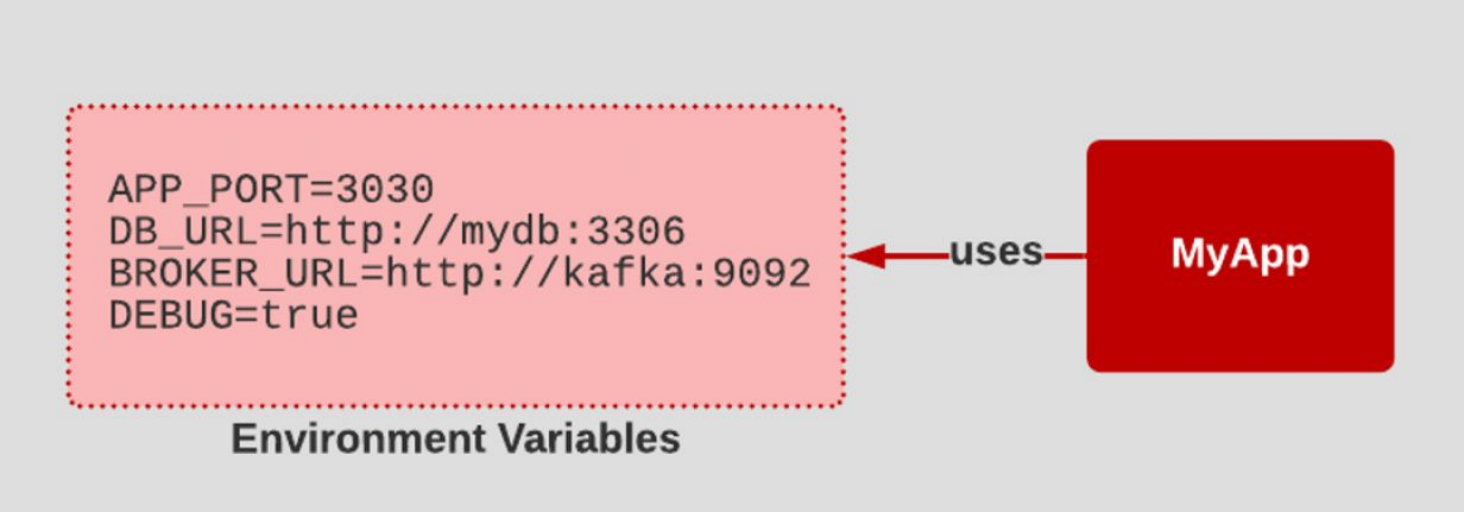
Codebase


Configuration Settings
Provisioning Scripts
Source Code
Source Code Repository
Production
Staging
Q/A
DevSecOps
Developer

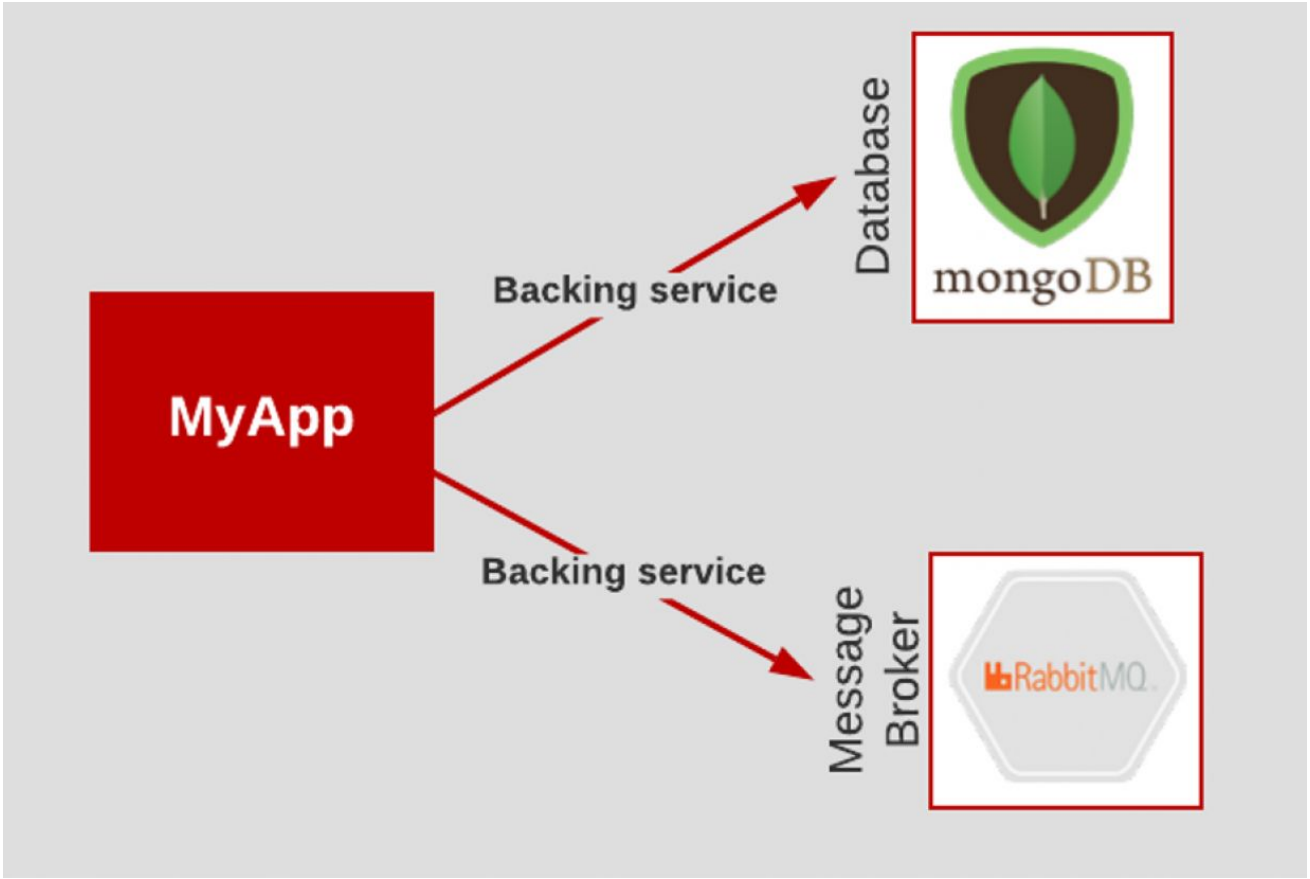
Dependencies



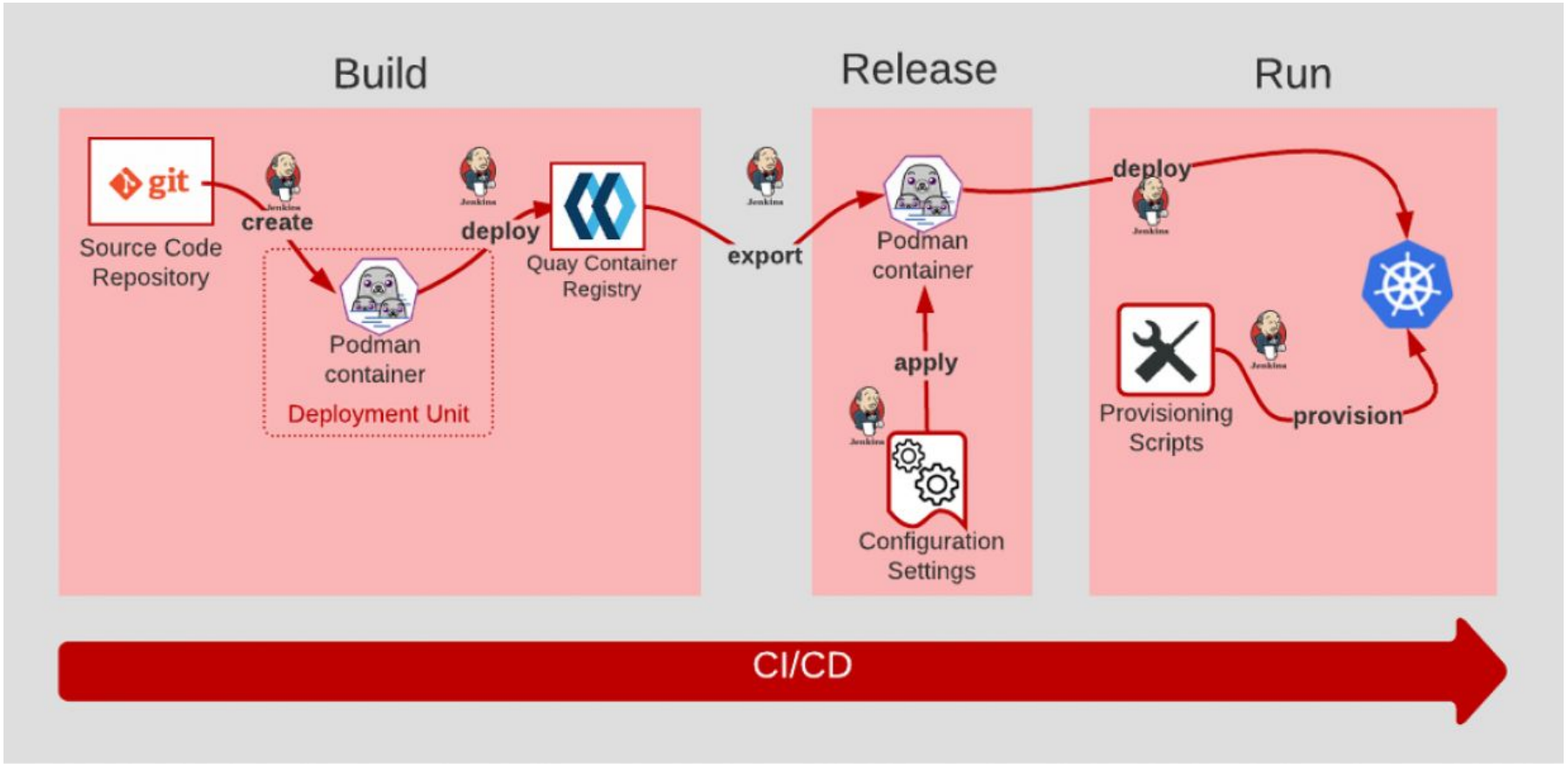
Config


APP_PORT=3030
DB_URL=http://mydb:3306
BROKER_URL=http://kafka:9092
DEBUG=true
Environment Variables
uses
MyApp

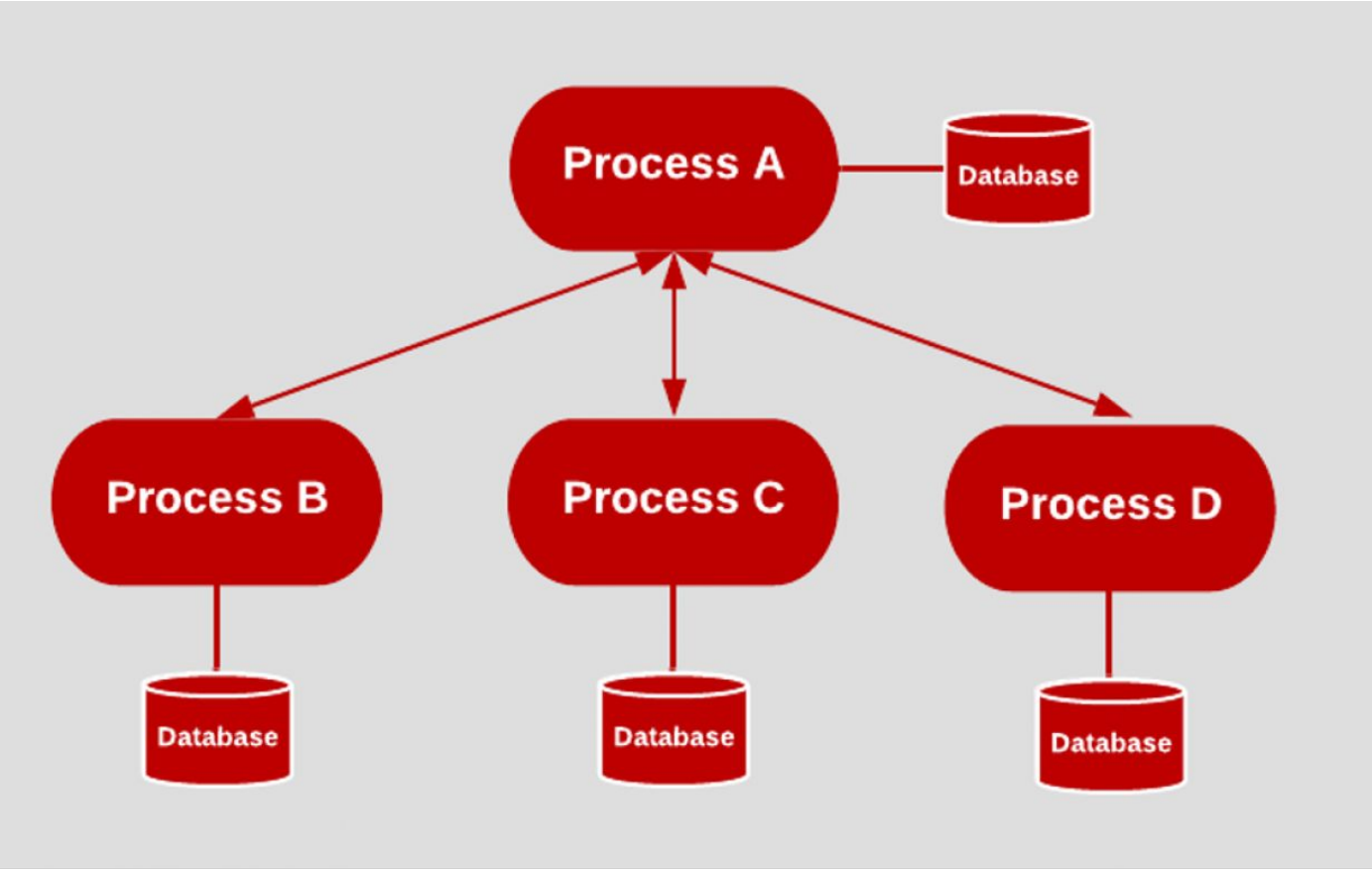
Backing Services



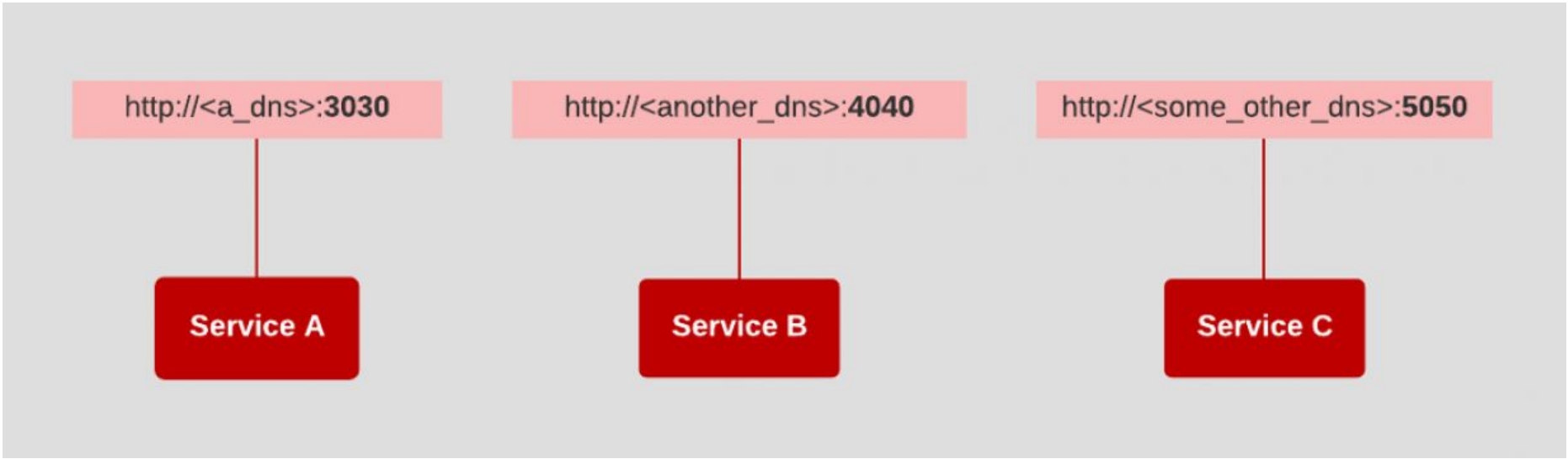
Build, Release, Run



Processes


Process A
Database
Process B
Process C
Process D
Database
Database
Database

Port Binding



Concurrency

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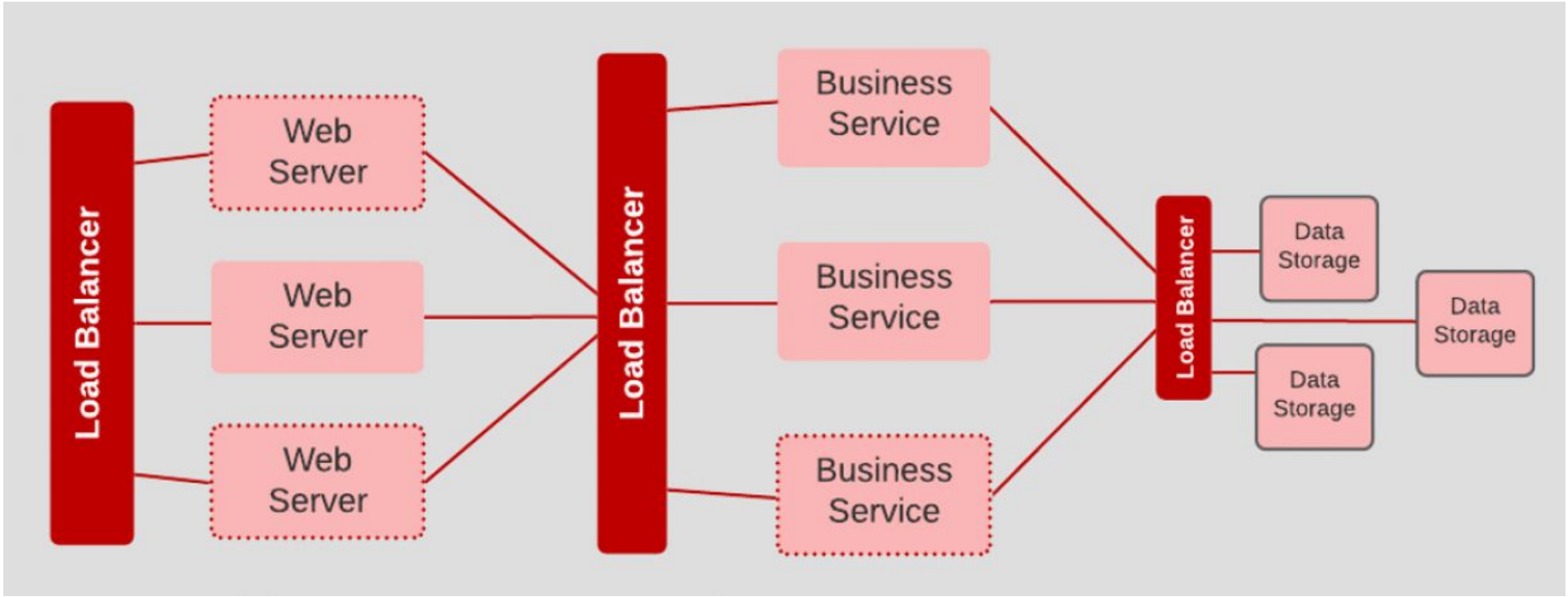

Disposability

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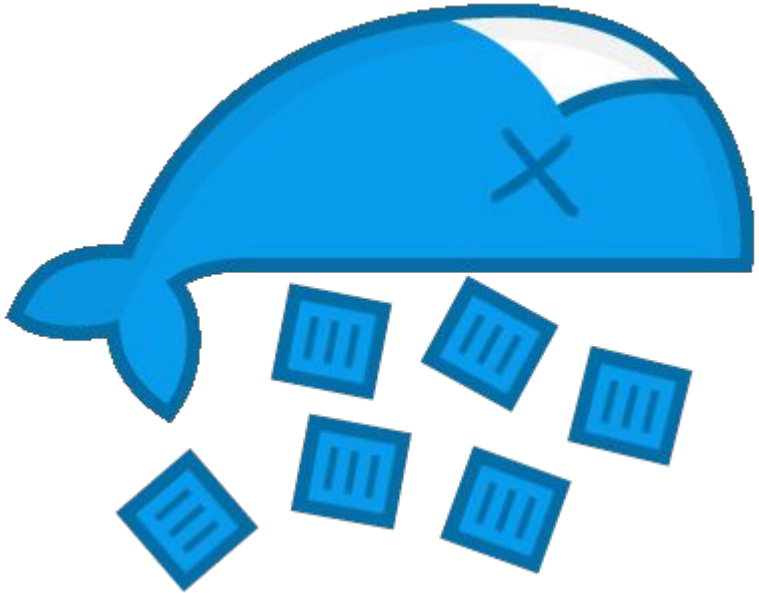
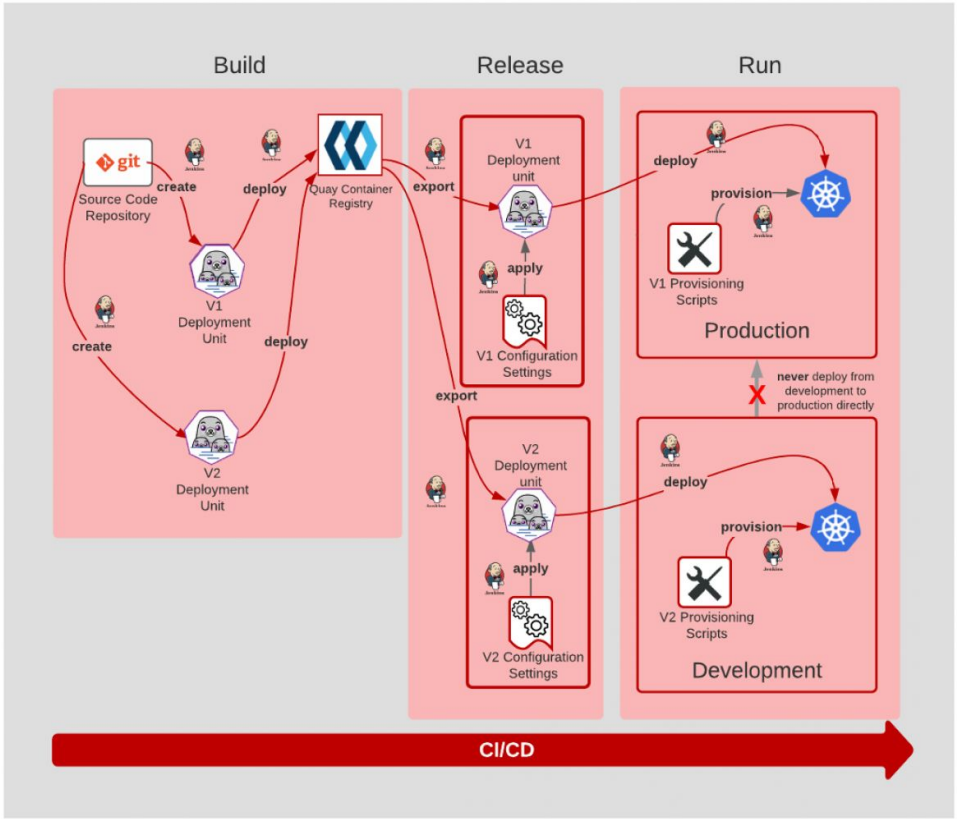
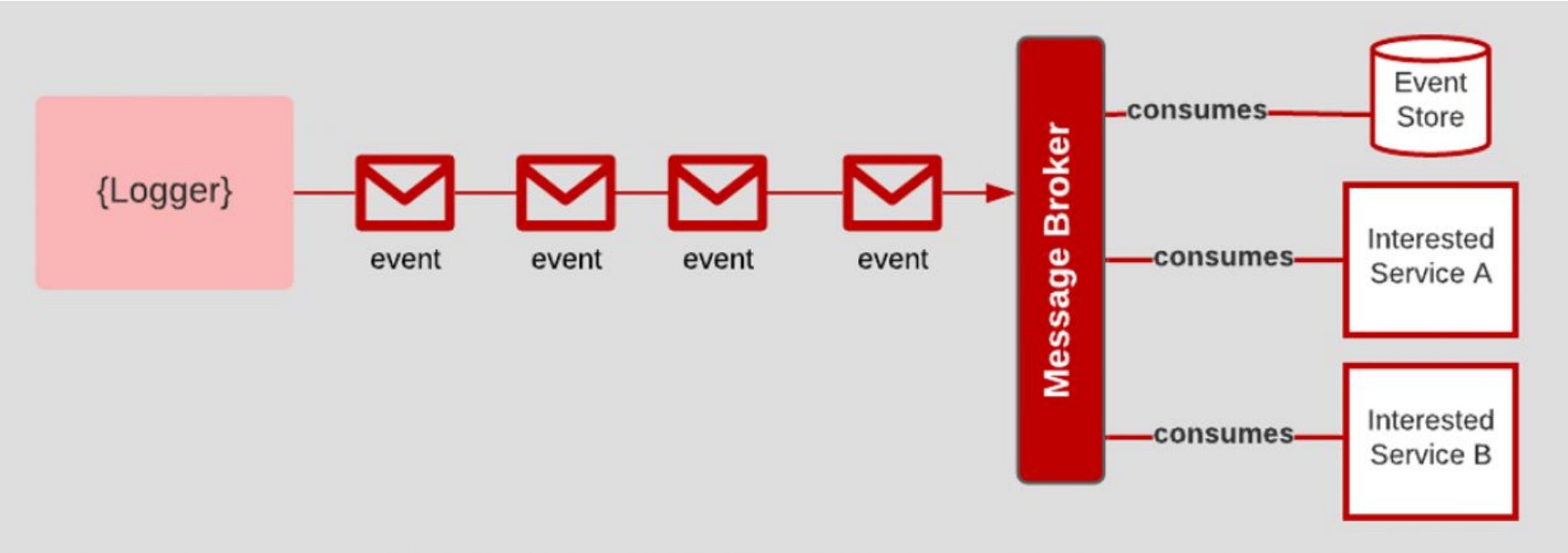


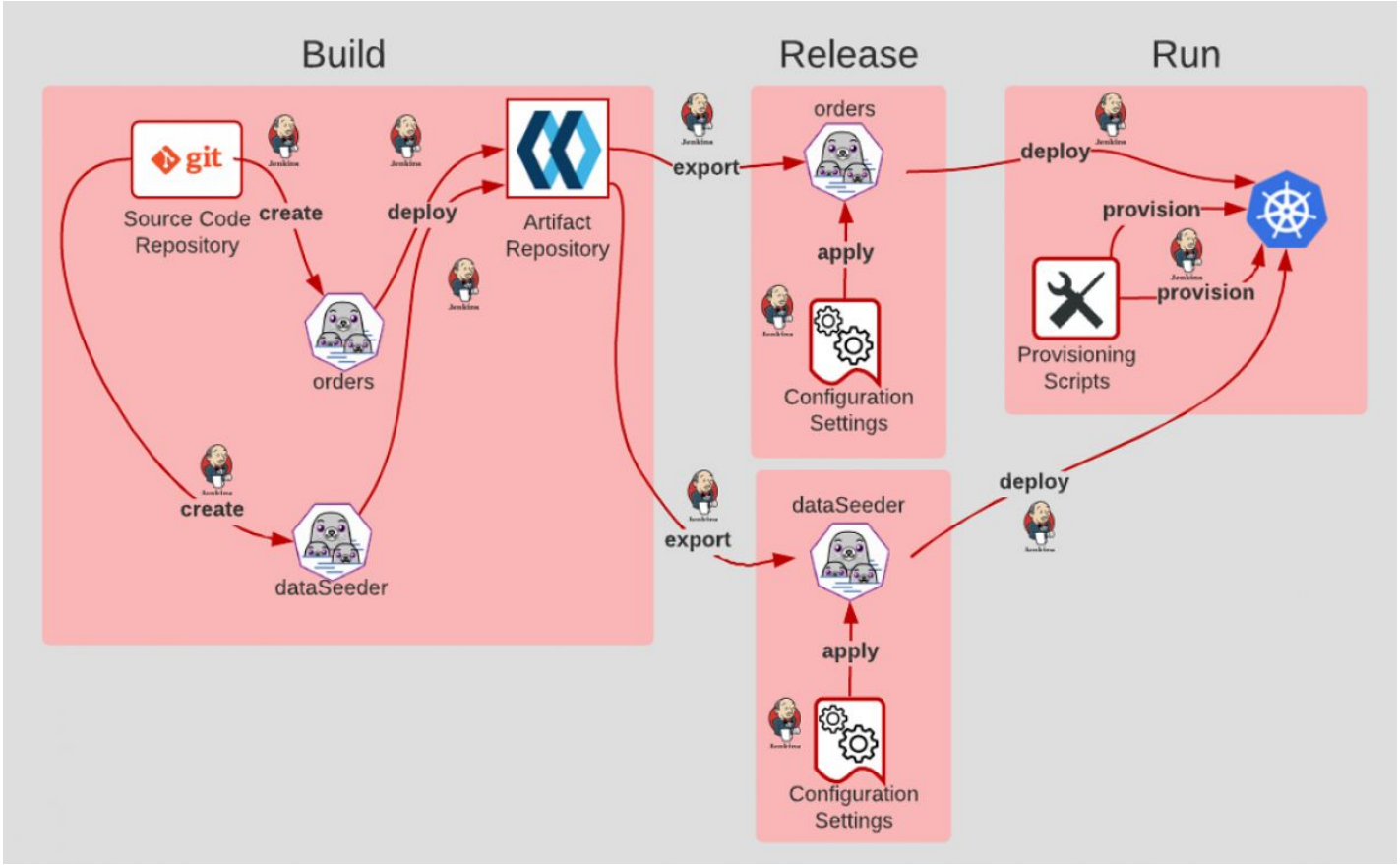
Dev/Prod Parity



Logs


{Logger}
event
event
event
event
Message Broker
consumes
Event Store
consumes
Interested Service A
consumes
Interested Service B

Admin Processes



Factores culturales

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Código

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Observability

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Prometheus

Grafana

Observability

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Super poderes al código

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Open Tracing 1.3	Open API 1.1	Rest Client 1.2	Config 1.3
Fault Tolerance 2.0	Metrics 1.1	JWT Propagation 1.1	Health Check 1.0
CDI 2.0	JSON-P 1.1	JAX-RS 2.1	JSON-B 1.0

Preguntas?