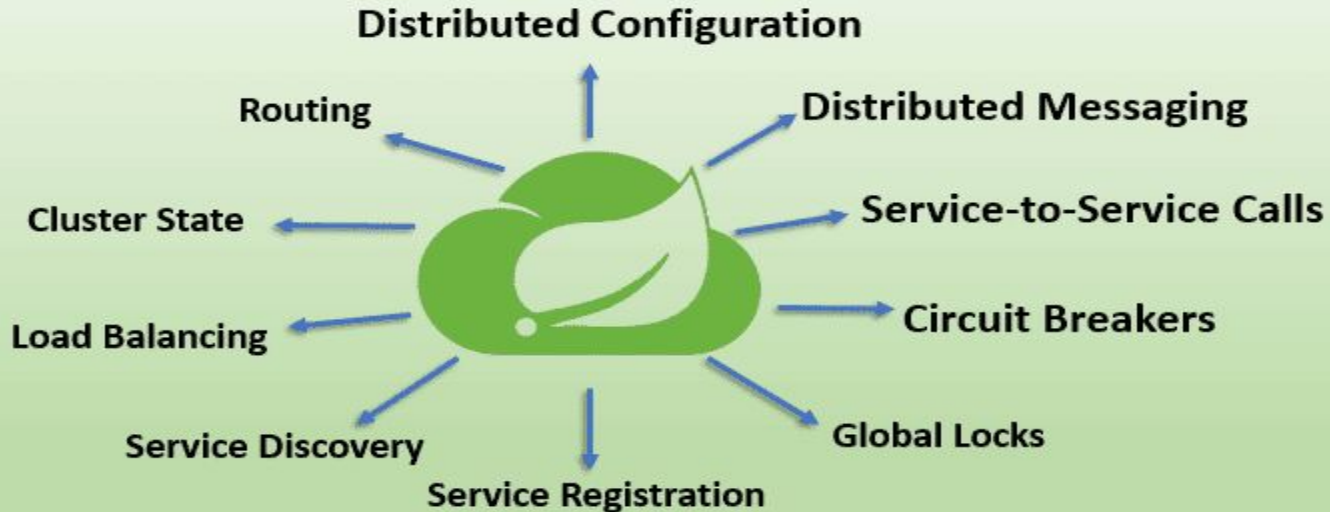


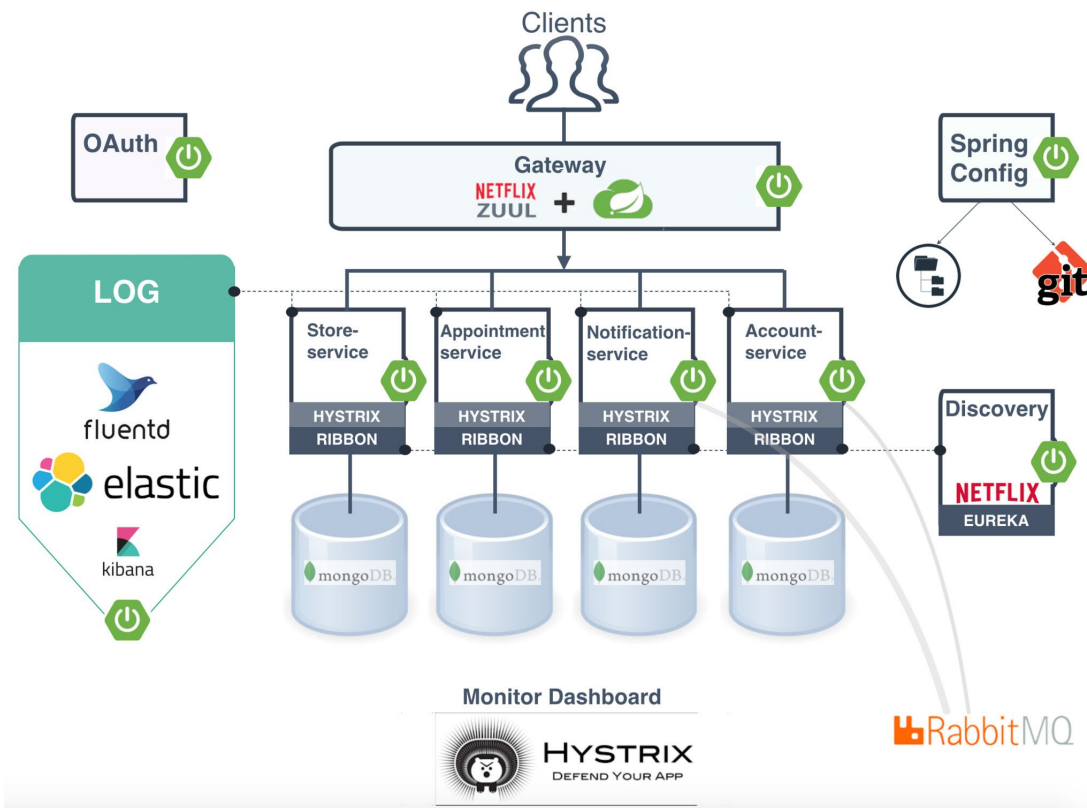
Microservices,
(Security/Inter-communication/Message Queue/
Streaming, ETL) Docker/ Kubernetes, Framework
Spring Cloud, SQL/ NoSQL

Spring cloud

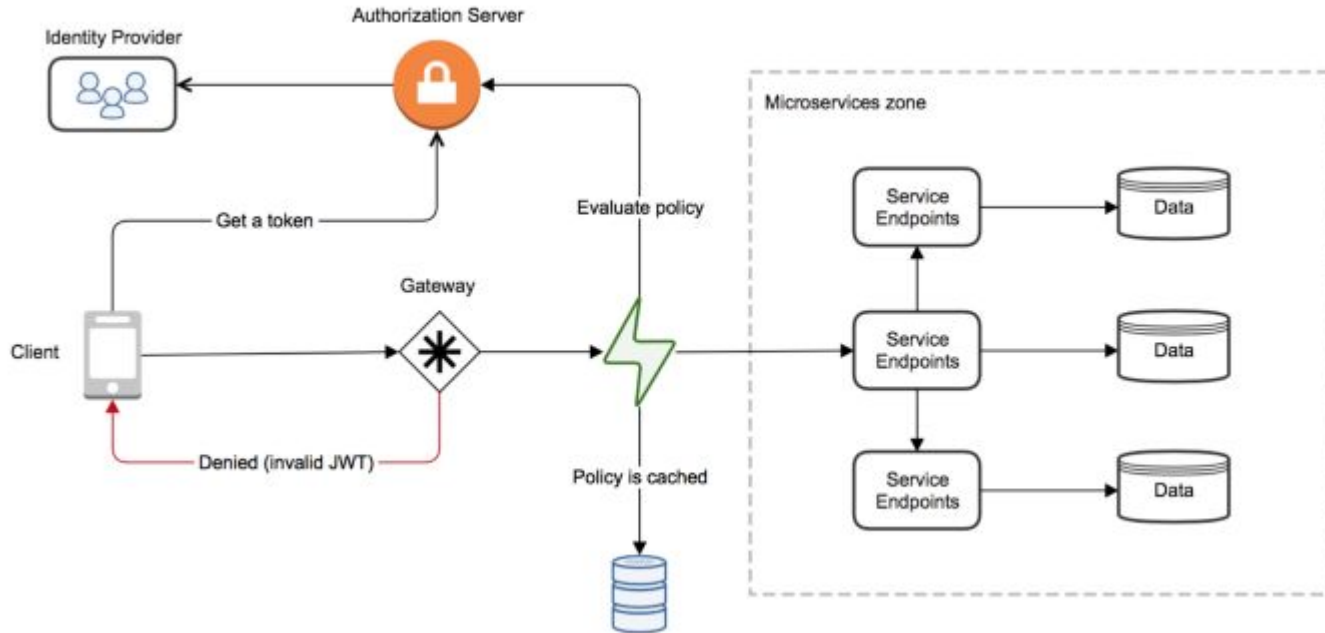
What is Spring Cloud?



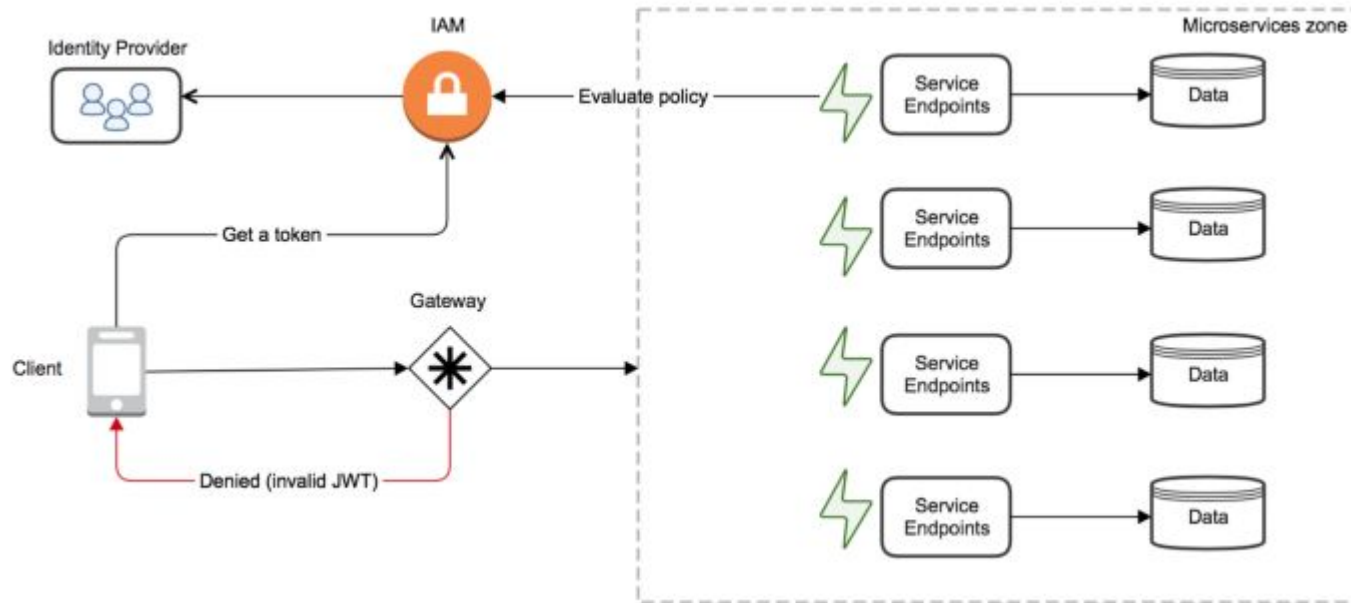
Spring cloud + Netflix OSS



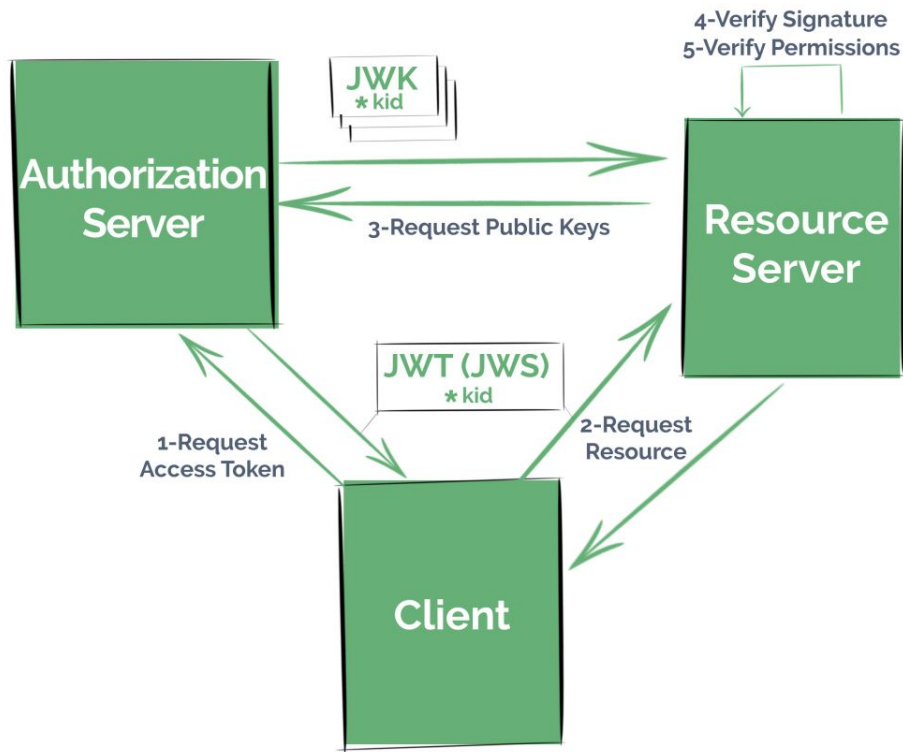
Security pattern



Security pattern



Security



JWT

JWT JSON WEB TOKEN



HEADER
ALGORITHM
& TOKEN TYPE

```
{  
  "alg": "HS256",  
  "typ": "JWT"  
}
```

+

PAYLOAD
DATA

```
{  
  "sub": "1234567890",  
  "name": "John Doe",  
  "admin": true  
}
```

+

SIGNATURE
VERIFICATION

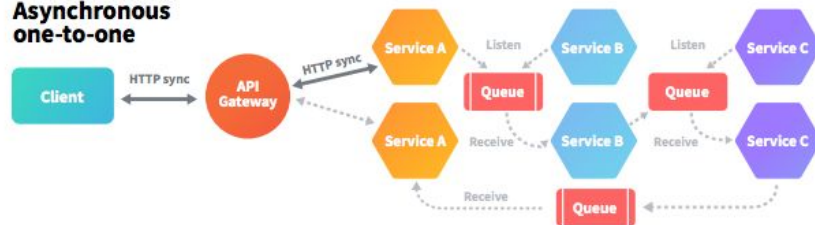
```
HMACSHA256(  
  base64UrlEncode(header) + "." +  
  base64UrlEncode(payload), secretKey)
```

Inter-com

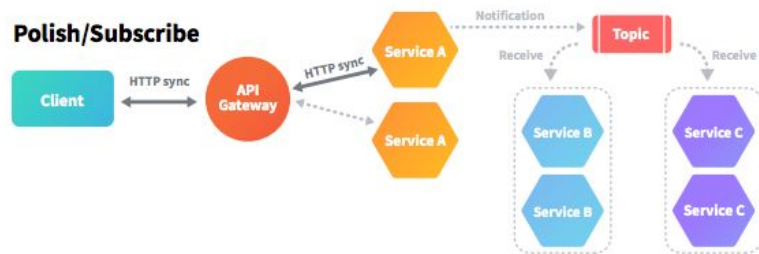
Synchronous



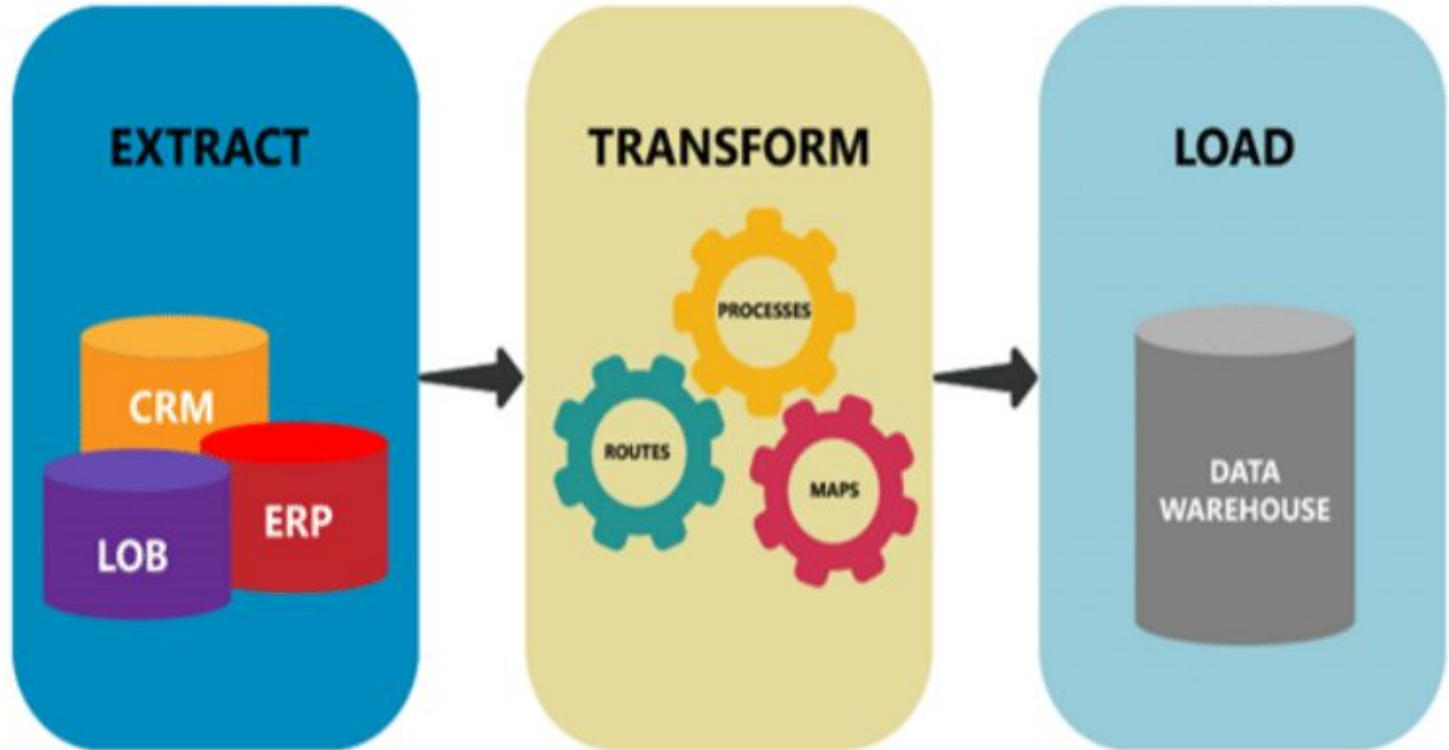
Asynchronous one-to-one



Polish/Subscribe



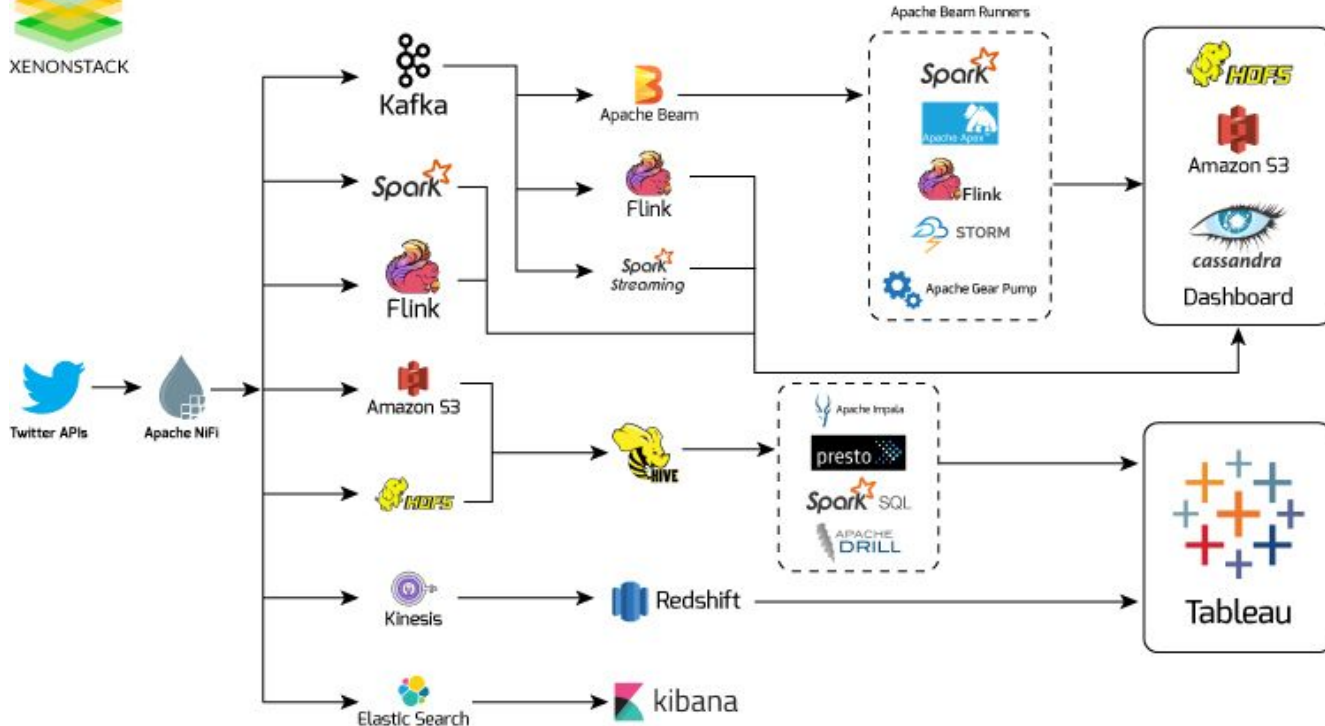
ETL (extract, transform, load)



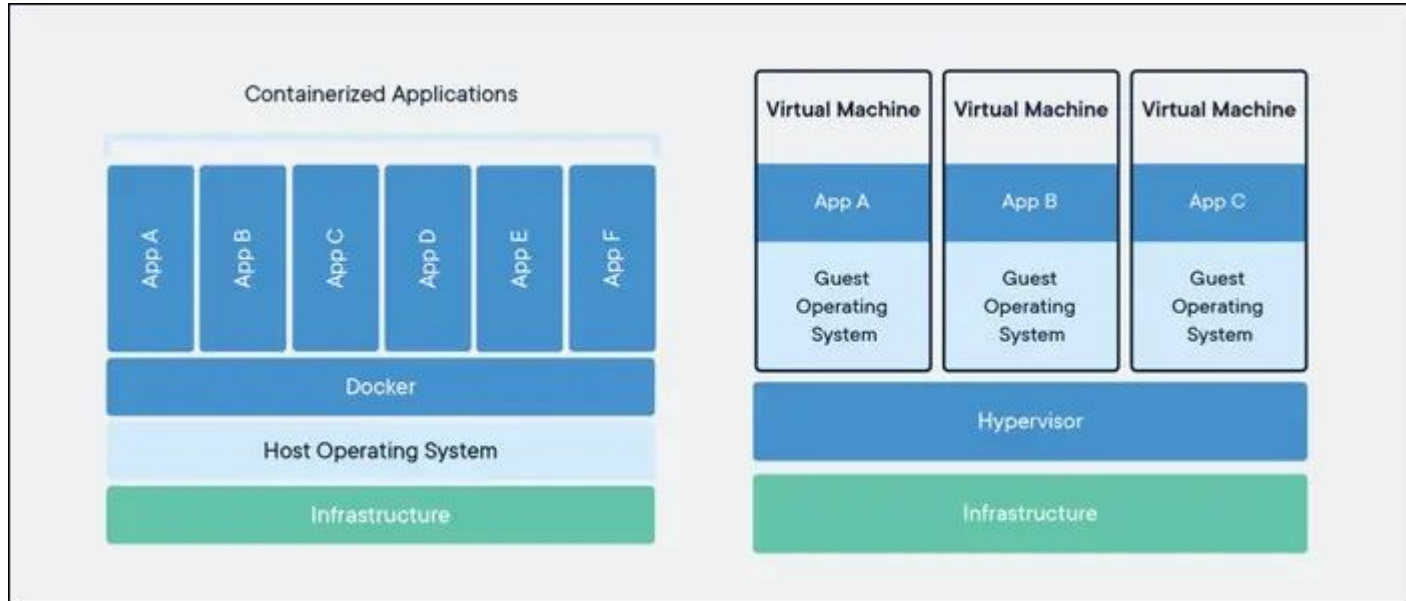
ETL (extract, transform, load)



Building Data Lake with Apache NiFi

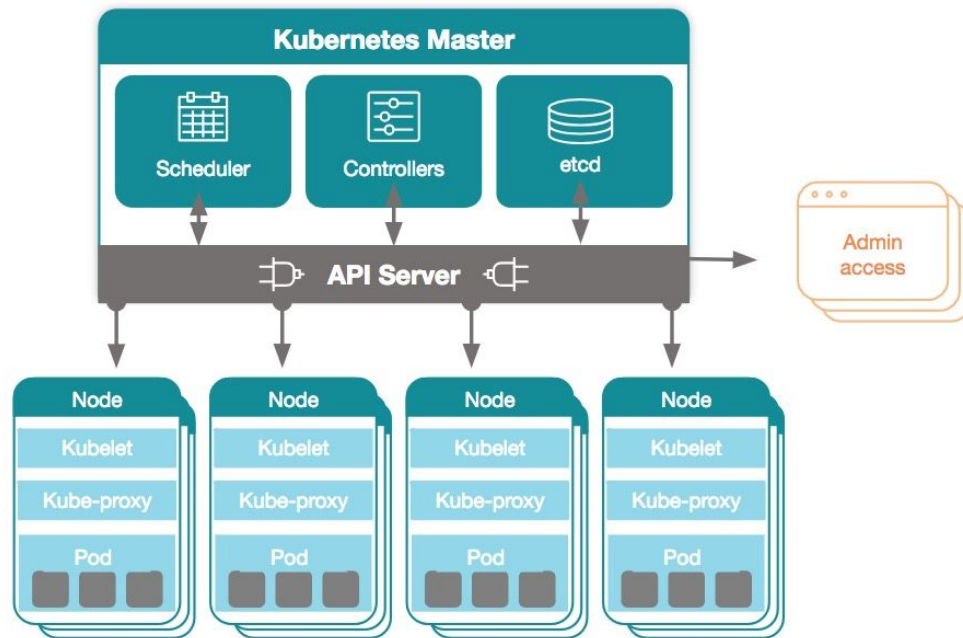


Docker

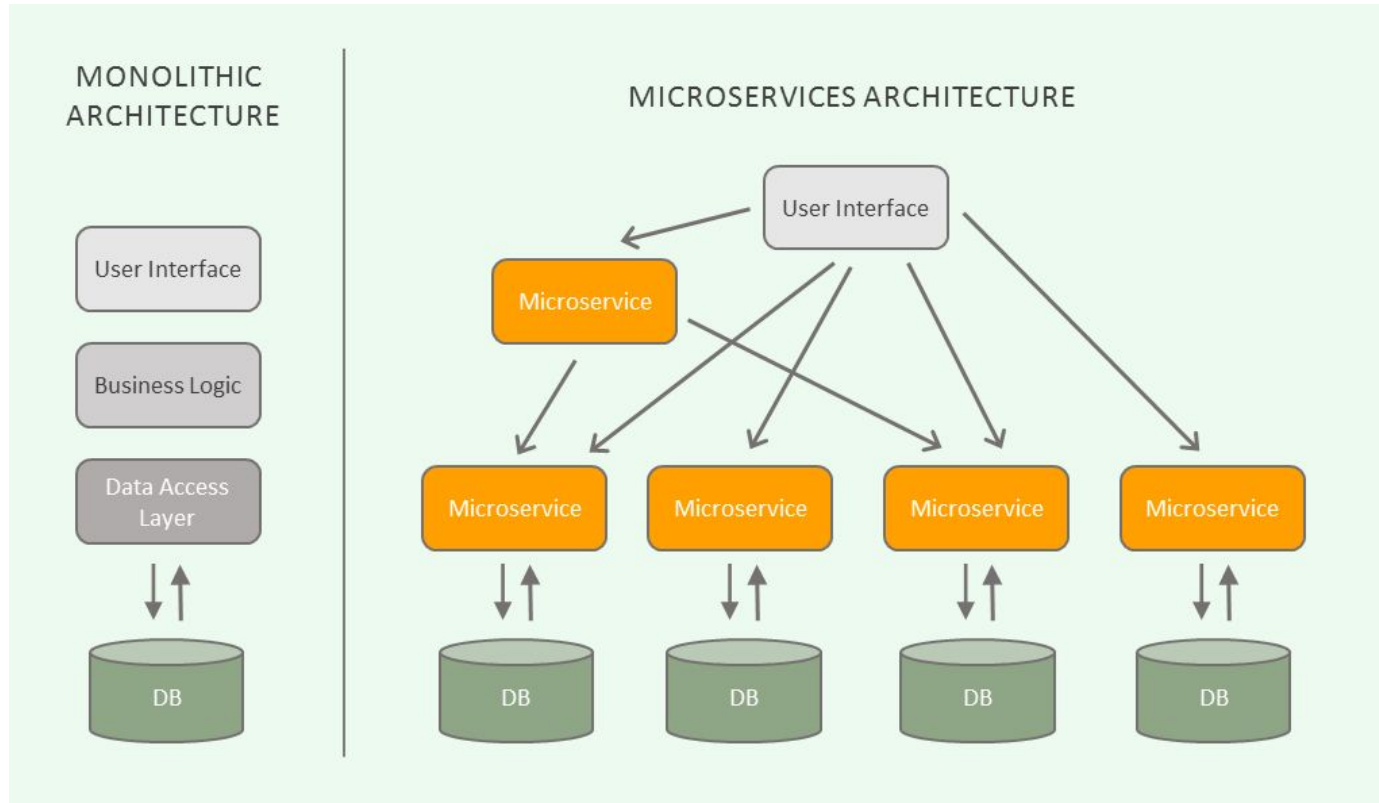


Kubernetes

Kubernetes Architecture



Microservices



Microservices

