

# Distributed Systems

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# Distributed Systems

- A distributed system is a collection of entities, each of which is autonomous, programable, asynchronous and failure prone, and which communicate through an unreliable communication medium.

# Tendencies in distributed systems

- Microservices connected architectures
- Distributed computing architectures

# Questions

Which are the building blocks of a distributed system?



# Microservices architectures

- DevOps
- Infrastructure as Code
- Version control system (Git)
- CI/CD (Continuous Integration, Delivery & Deployment)
- Service Discovery
- Intercommunication (Publish-Subscribe, Message queues)
- Monitoring

# Activity

- Each person or group will be assigned one item from the prev slide. You have to explain why your assigned item might be considered as a building block of a distributed system

# DevOps

## DevOps Enabler Tools v2 (Caution!!!! : Consider only after DevOps mindset is established)

### Infra-as-code



### CI/CD



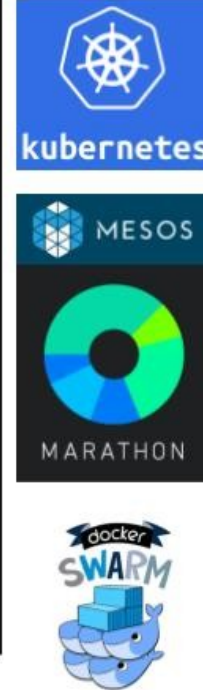
### Test Automation



### Container



### Orchestration



### Deployment



### Measurement



### ChatOps



# Infrastructure as code

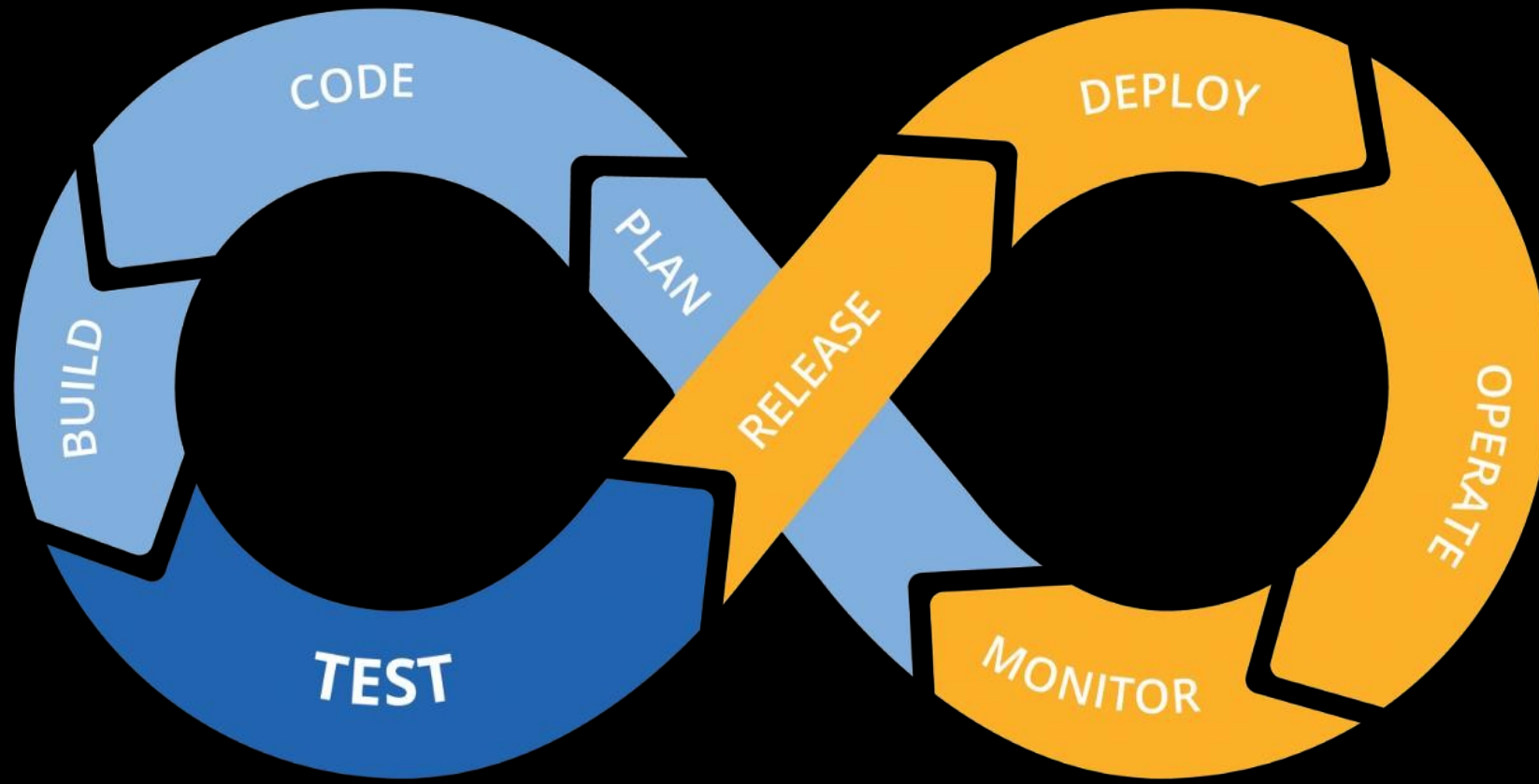




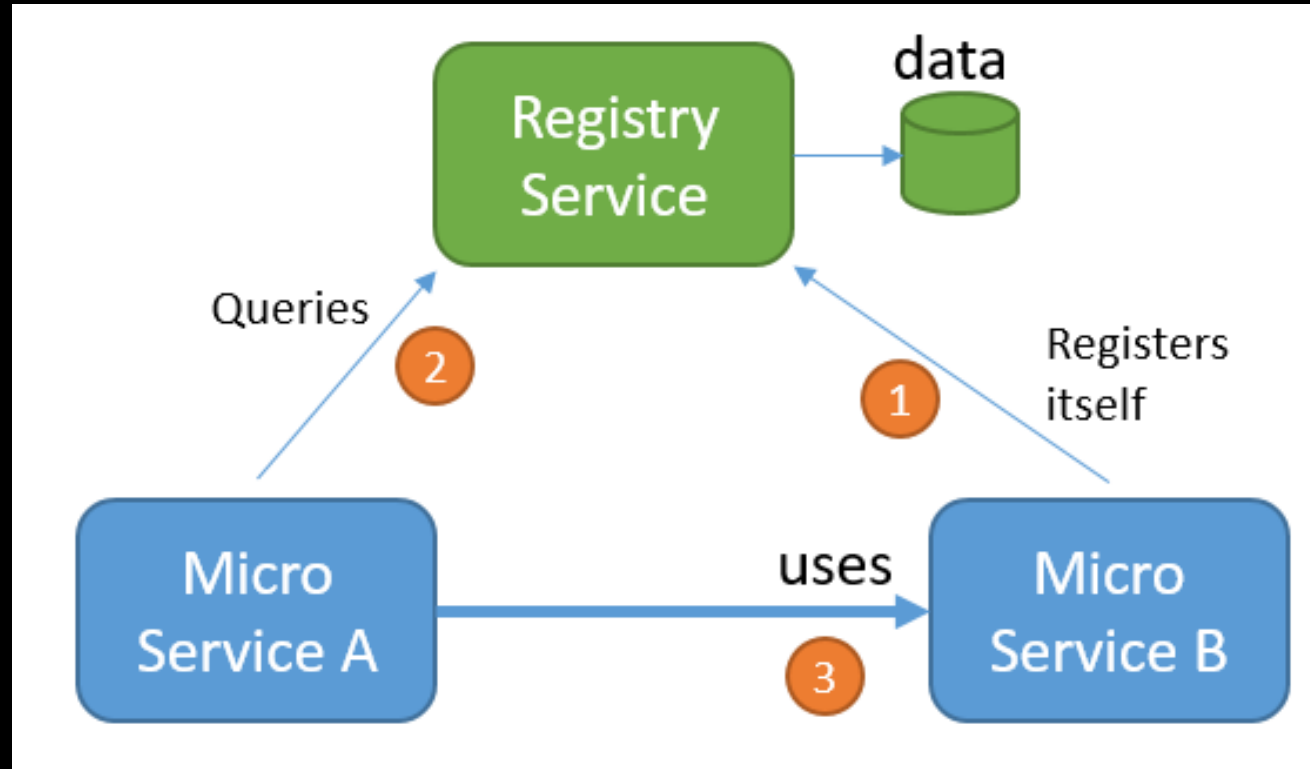
# Version control system



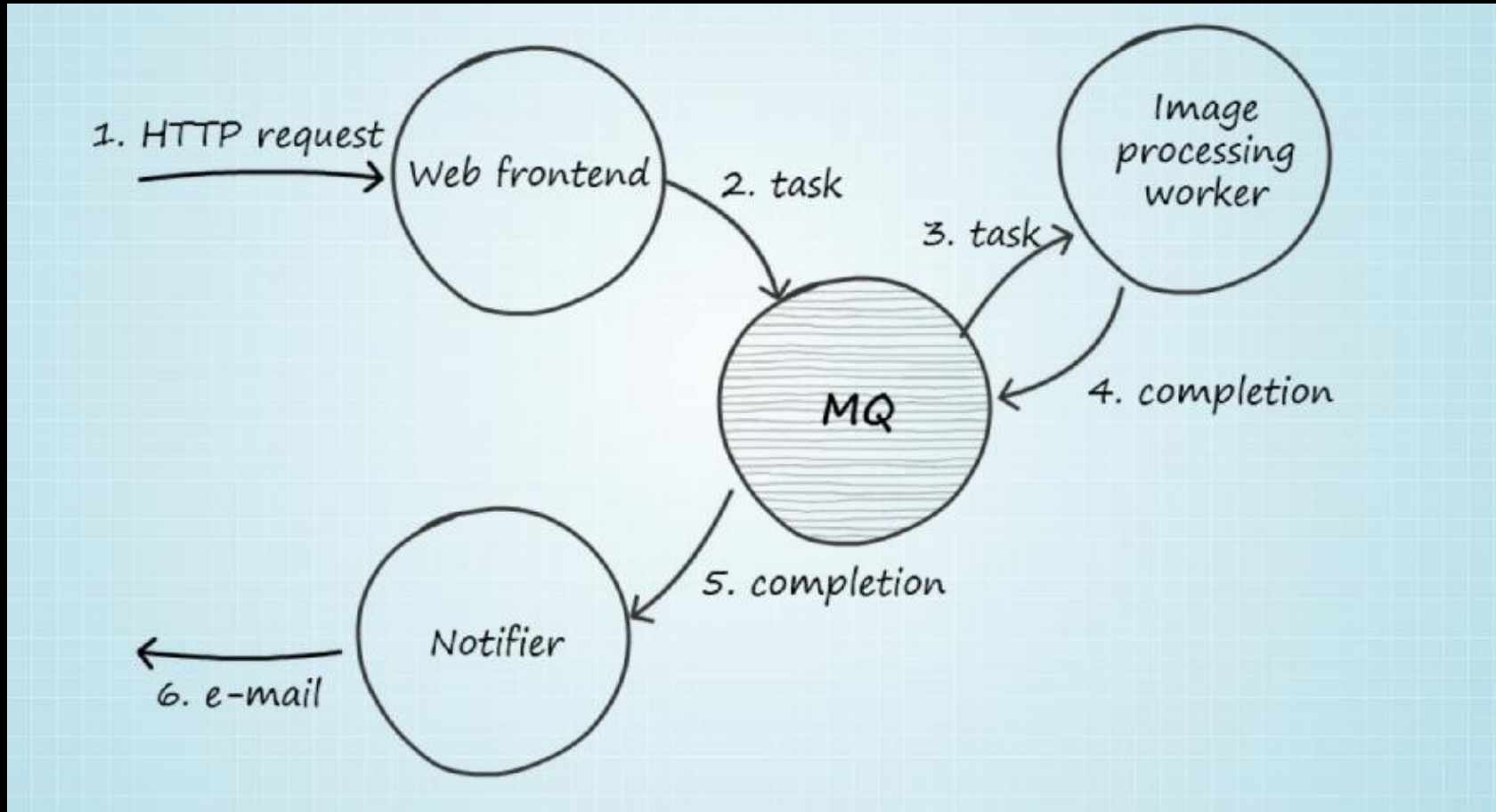
# CI/CD



# Service Discovery



# Intercommunication



# Monitoring



# Questions

Where is security?



# Questions?

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