



How to make Processes Boring by Automating Them

An Introduction to DevOps

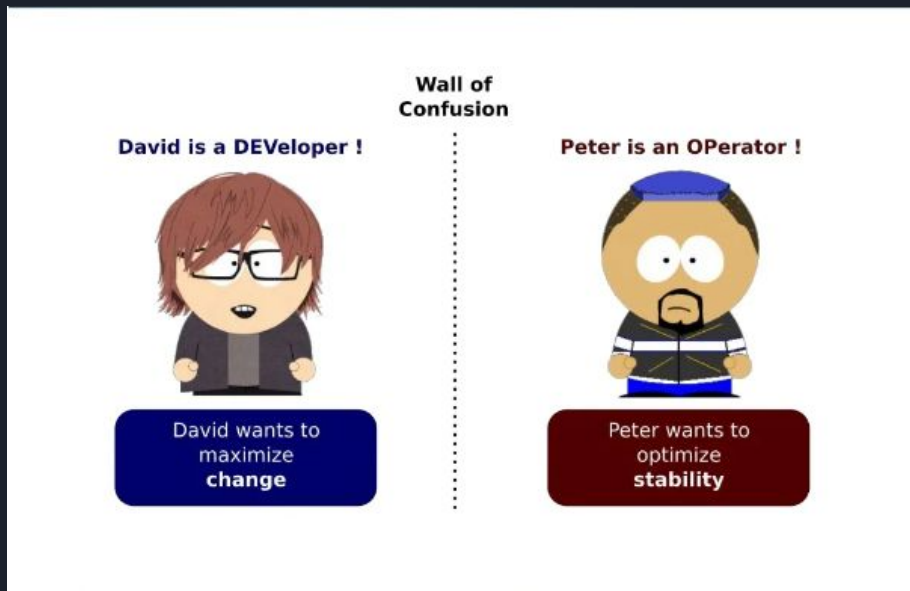
DevOps is a methodology

- A set of principles and practices
- Helps both the dev and the operator reach their goal

Deliver new goals

Product Oriented
(Features, bug fix)

Tries to innovate

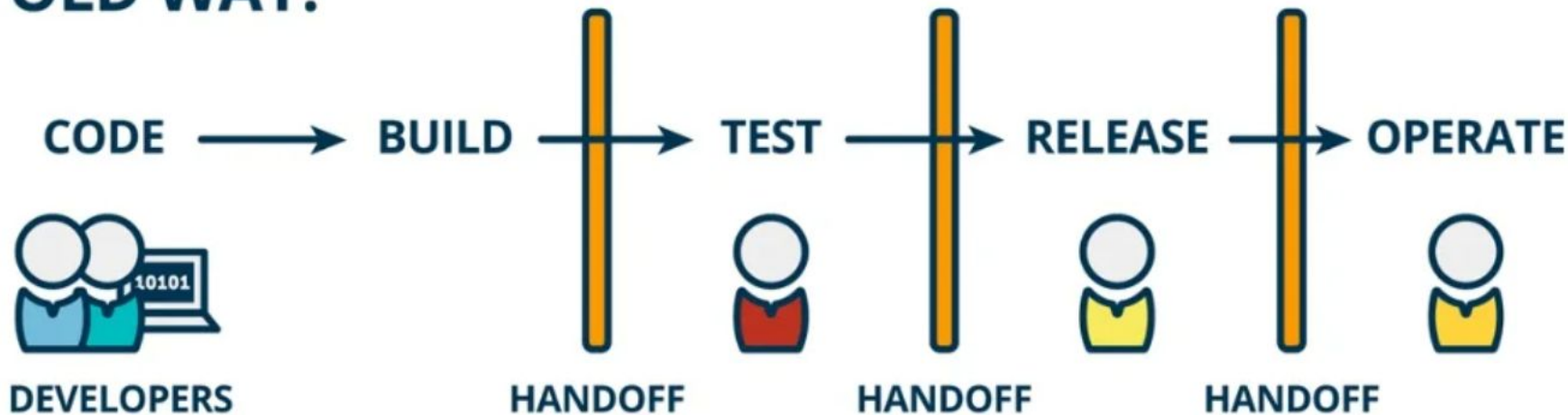


Guarantee stability

Service Oriented
(backups, provision, etc)

Tries to rationalize

OLD WAY:



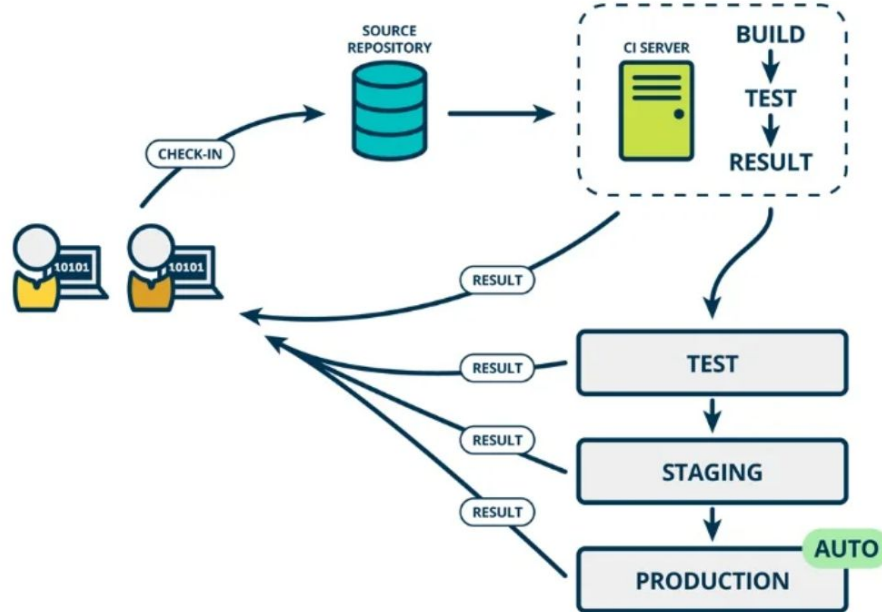
how many weeks, months, or years?!!

Why the Need for Automation

- Humans make mistakes
- Human brain is terribly bad at repetitive tasks
- Human is slow compared to a bash script
- Human not reliable



Concept of DevOps



How Tech Giants handle their product?



- > 800 dev, 400 ops, 180'000 servers (= 450 servers / ops)
- > 1 deployment each day
- > Concept of deployment rings

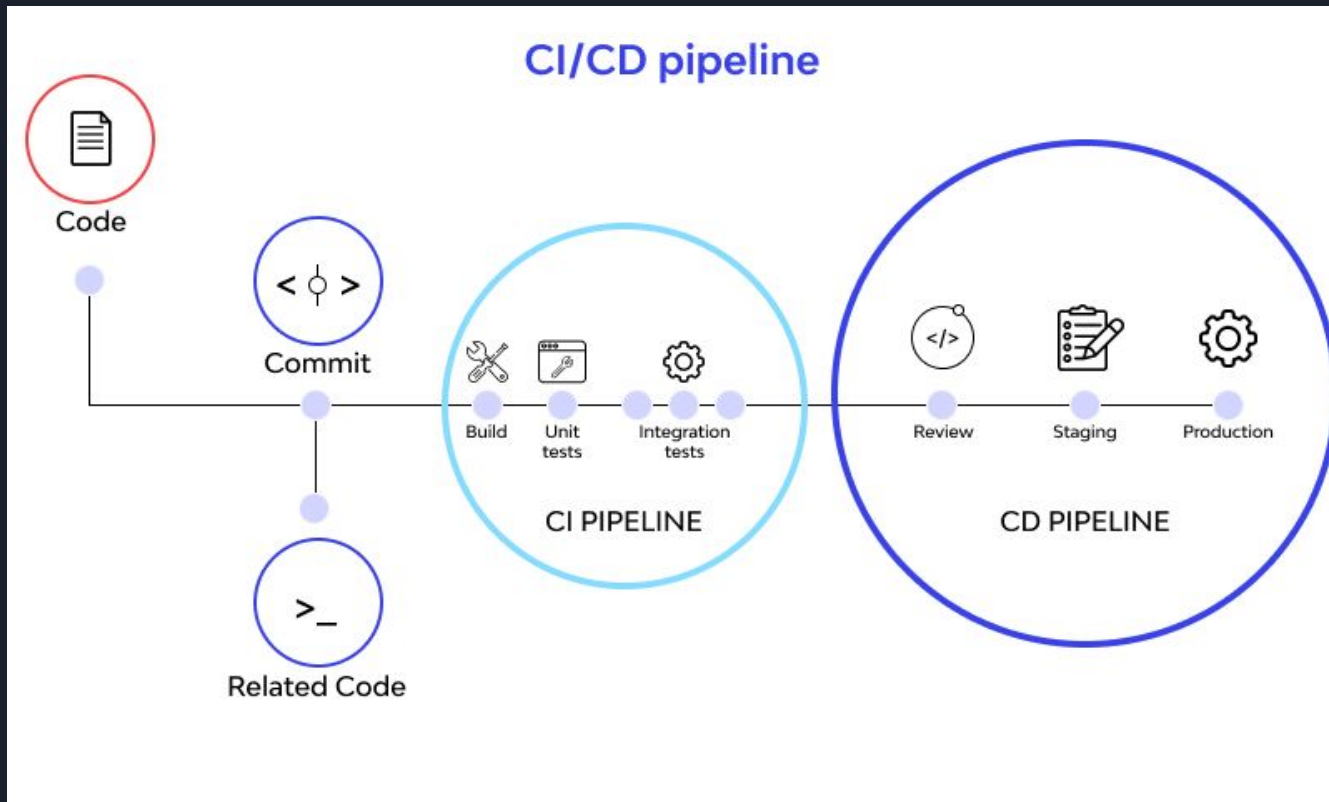


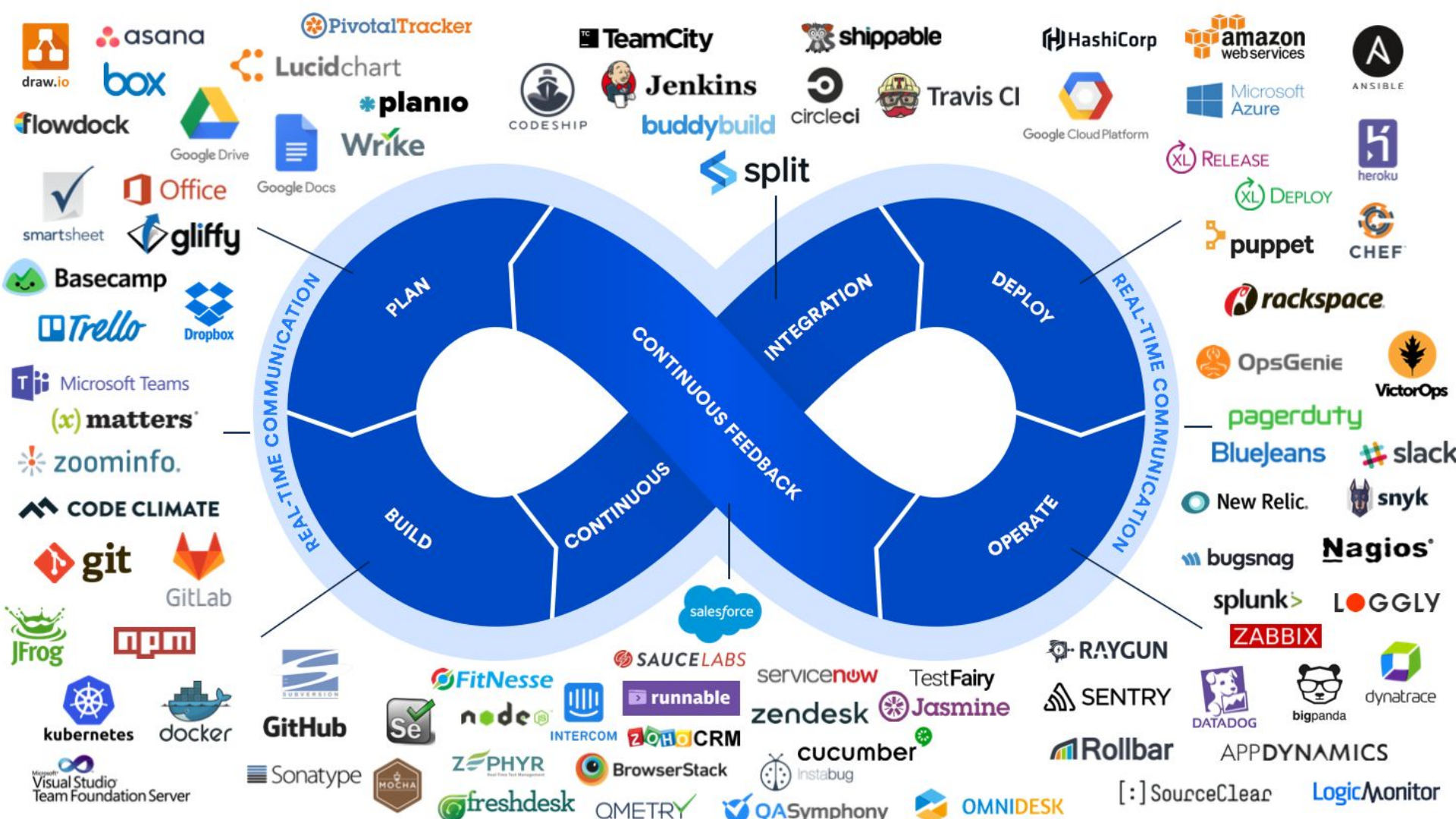
- > A deployment somewhere in datacenters every 11 seconds
- > At any moment, an average of 10'000 servers are being updated



- > Everything is in the cloud (AWS)
- > « Design For Failure » :
 - + the software is designed to tolerate
 - + they test it all the time, in production.
 - + 65'000 failure tests, in production, by killing random virtual machine !!! ... and measuring that everything is alright !

Continuous Integration/Continuous Delivery







Some Resources

<https://github.com/MichaelCade/90DaysOfDevOps>

<https://github.com/bregman-arie/devops-resources>

<https://resources.github.com/devops/>

<https://github.com/Lets-DevOps/awesome-learning>