
Who is DevOps engineer?

— The introduction to the field —

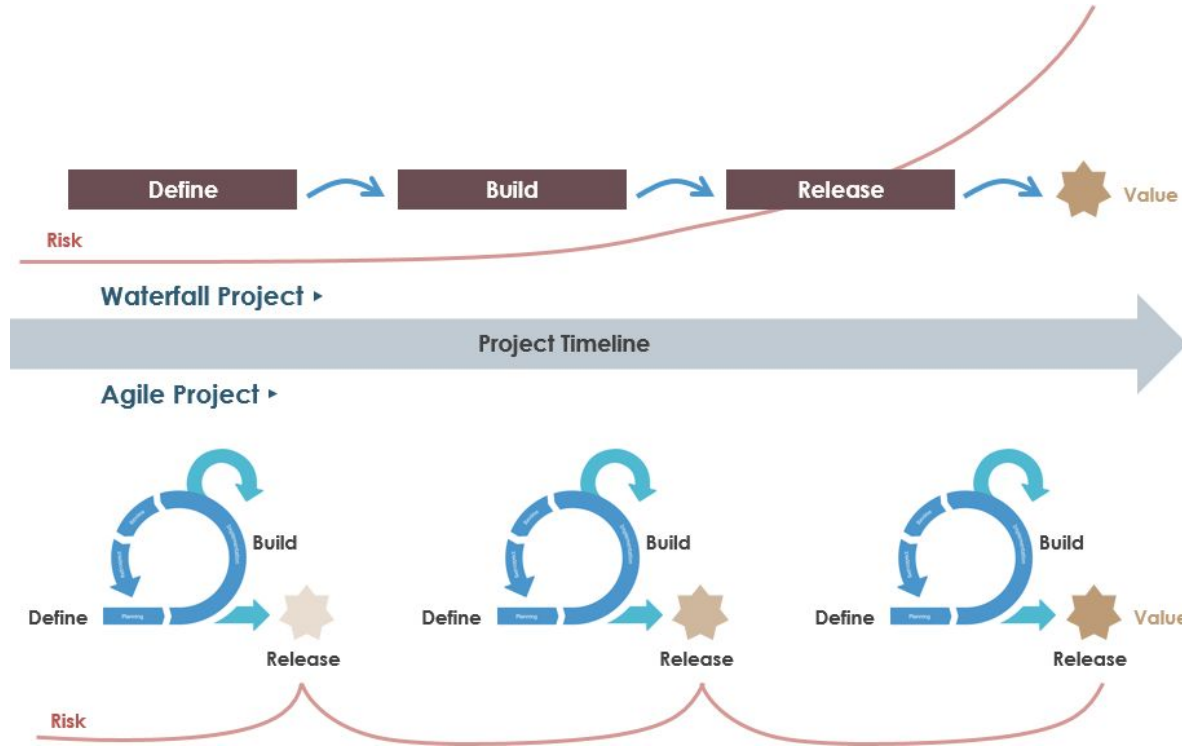
DevOps is a set of practices that combines software development (Dev) and information-technology operations (Ops) which aims to shorten the systems development life cycle and provide continuous delivery with high software quality.

The concept of DevOps is founded on building a culture of collaboration between teams that historically functioned in relative siloes.

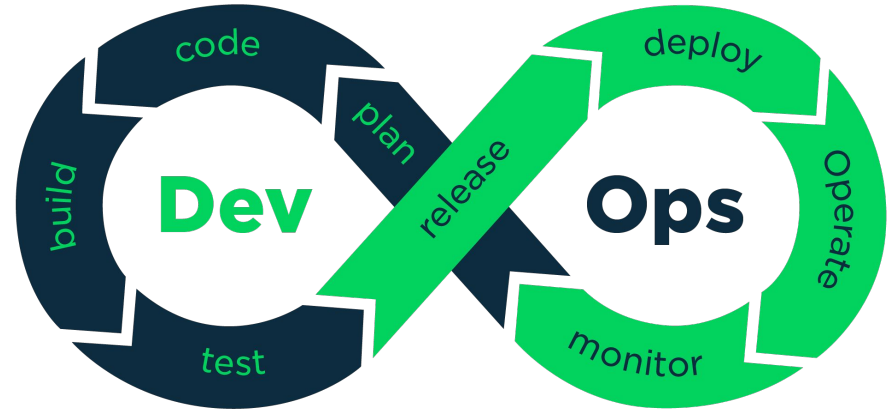
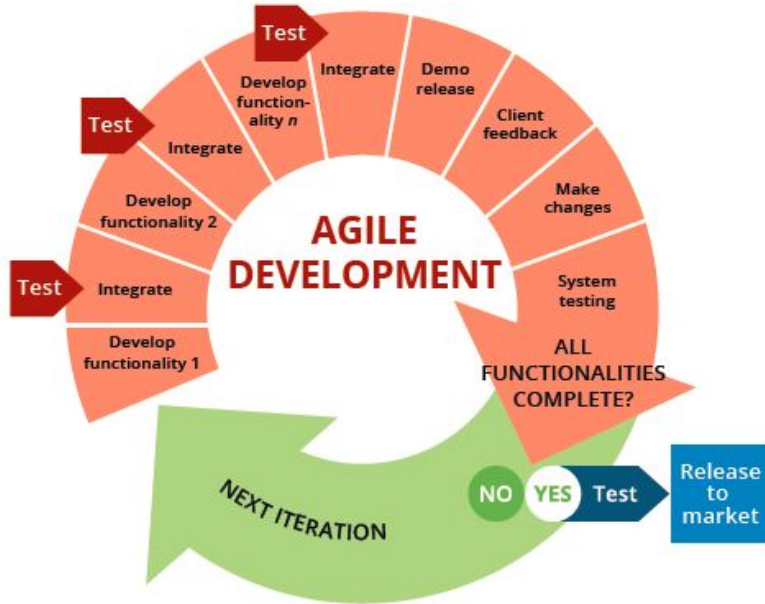
DevOps assimilates development and operations teams to improve the collaboration process. A DevOps Engineer will work with IT developers to facilitate better coordination among operations, development, and testing functions by automating and streamlining the integration and deployment processes.

<https://www.atlassian.com/devops>

Agile vs Waterfall



Agile & DevOps



“DevOps is Agile applied beyond the software team”

DevOps Practices

Continuous Integration (CI) — Revolves around what is going on at the master branch of code and the ability to test it right away. So running tests throughout the entire build cycle.

Continuous Delivery (CD, Staging) — All the processes are automated until you are ready to deploy to the user, which is a manual push to users.

Continuous Deployment (CD, Production) — The difference between Continuous delivery and continuous deployment is an automated process.

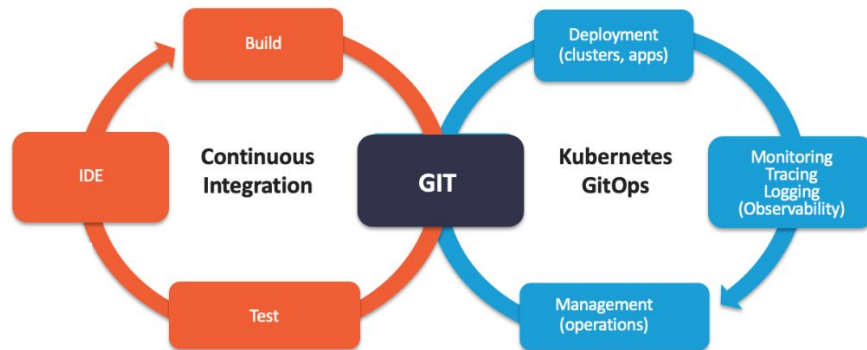
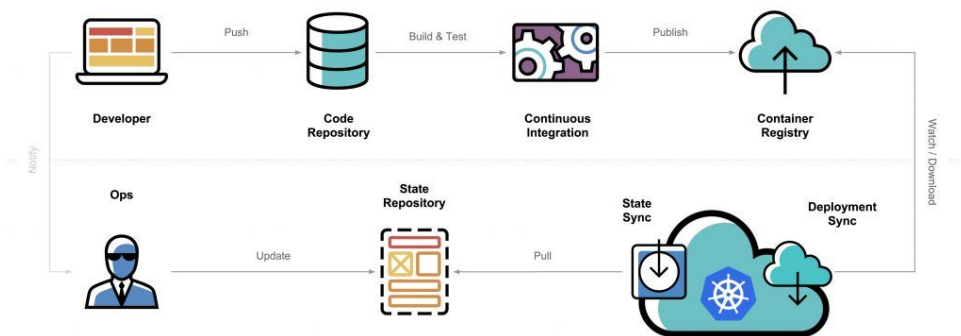
Types

- DEVops (Mostly automation)
- devOPS (Mostly operations support)
- DevSecOps
- GitOps
- SRE

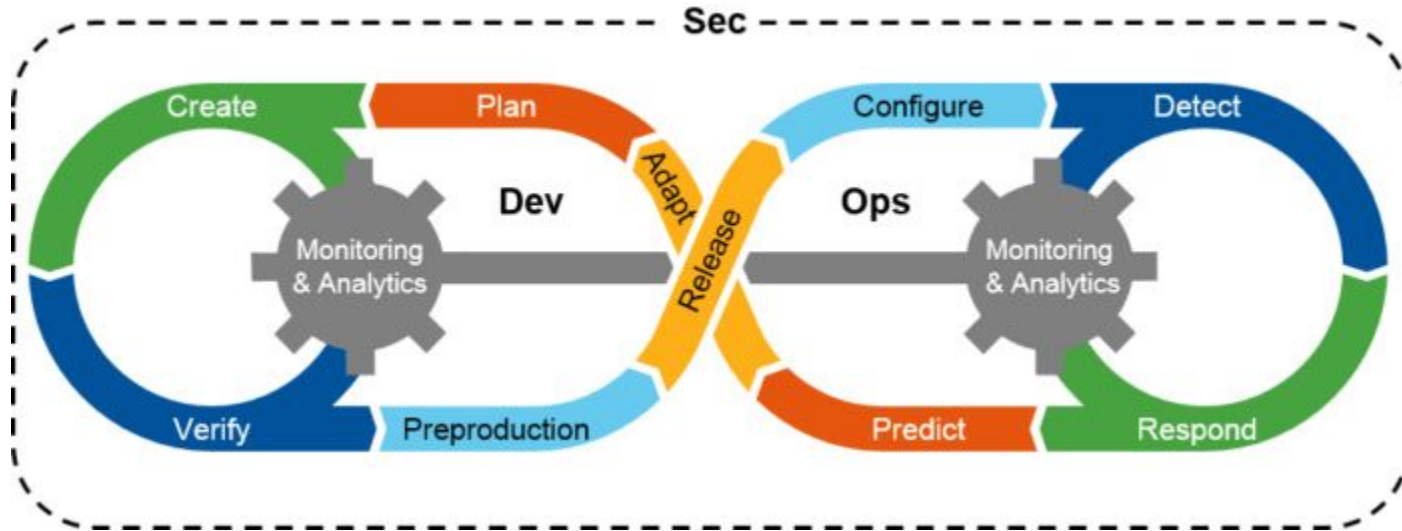
GitOps

GitOps is a paradigm or a set of practices that empowers developers to perform tasks which typically fall under the purview of IT operations. GitOps requires us to describe and observe systems with declarative specifications that eventually form the basis of continuous everything.

CI / CD with GitOps



DevSecOps



DevSecOps is the philosophy of integrating security practices within the DevOps process. DevSecOps involves creating a 'Security as Code' culture with ongoing, flexible collaboration between release engineers and security teams.

SRE

Site reliability engineering (SRE) is an approach to website operations that uses techniques from software engineering to build more reliable websites. ...

The term is related to DevOps, which also mixes software engineering with system administration, but DevOps involves automating manual tasks



<https://medium.com/hackernoon/sre-vs-devops-the-dilemma-f7054714525c>

Requirements

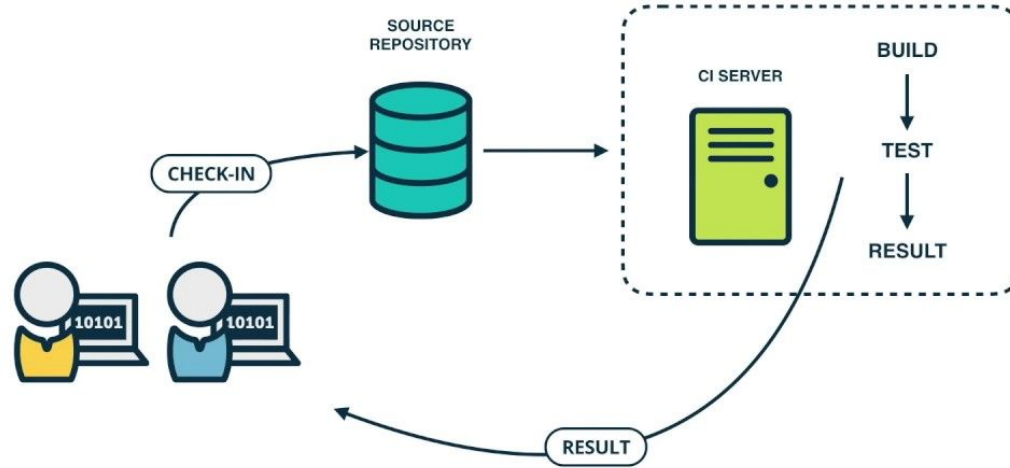
- Agile Project Management
- Cloud Technology
- Container Concepts
- Continuous Integration
- Deployment Automation & Orchestration
- Infrastructure Automation
- Open Source OS
- Orchestration
- Source Control
- Linux/Unix

<https://www.bmc.com/blogs/devops-engineer-roles-and-responsibilities/>

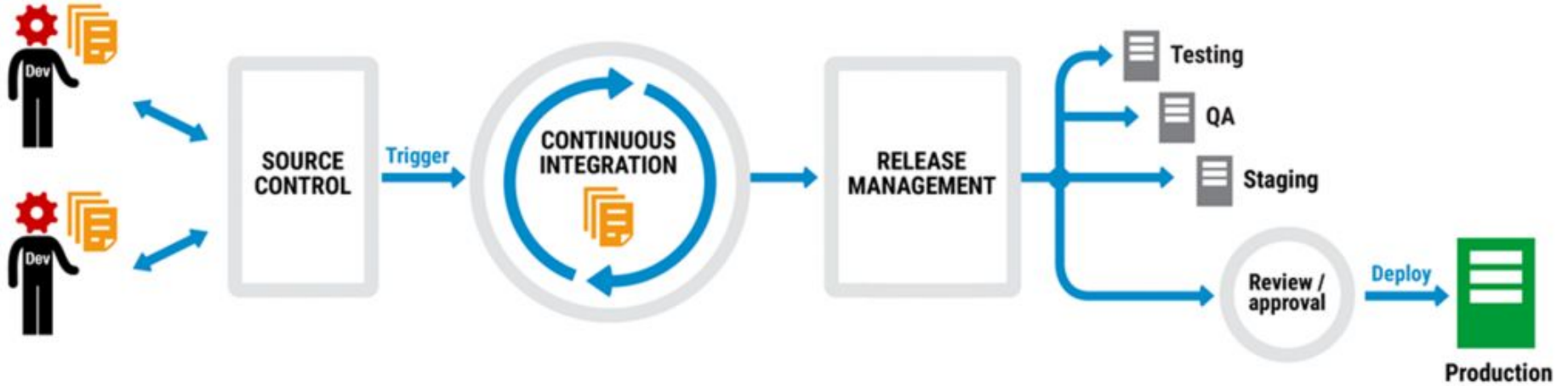
CI



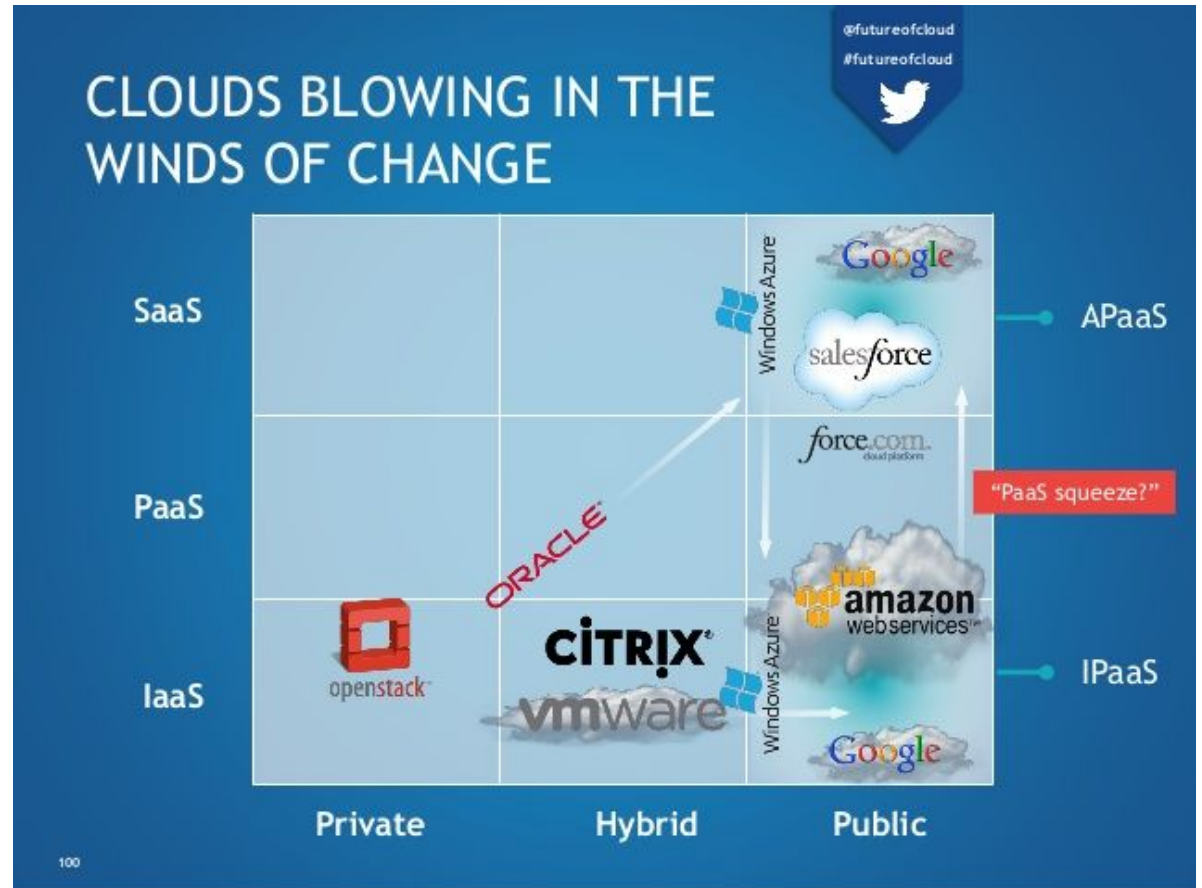
Continuous Integration (CI)



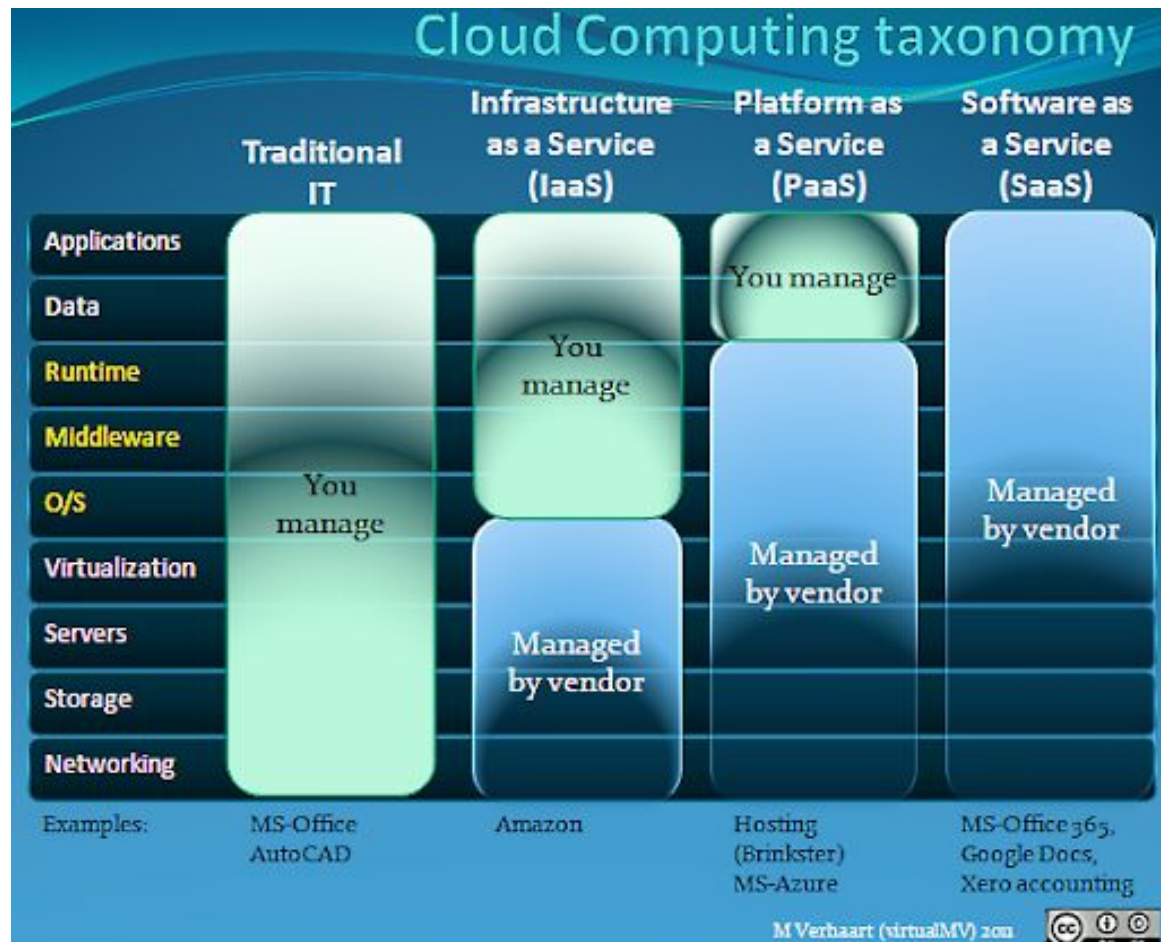
CD



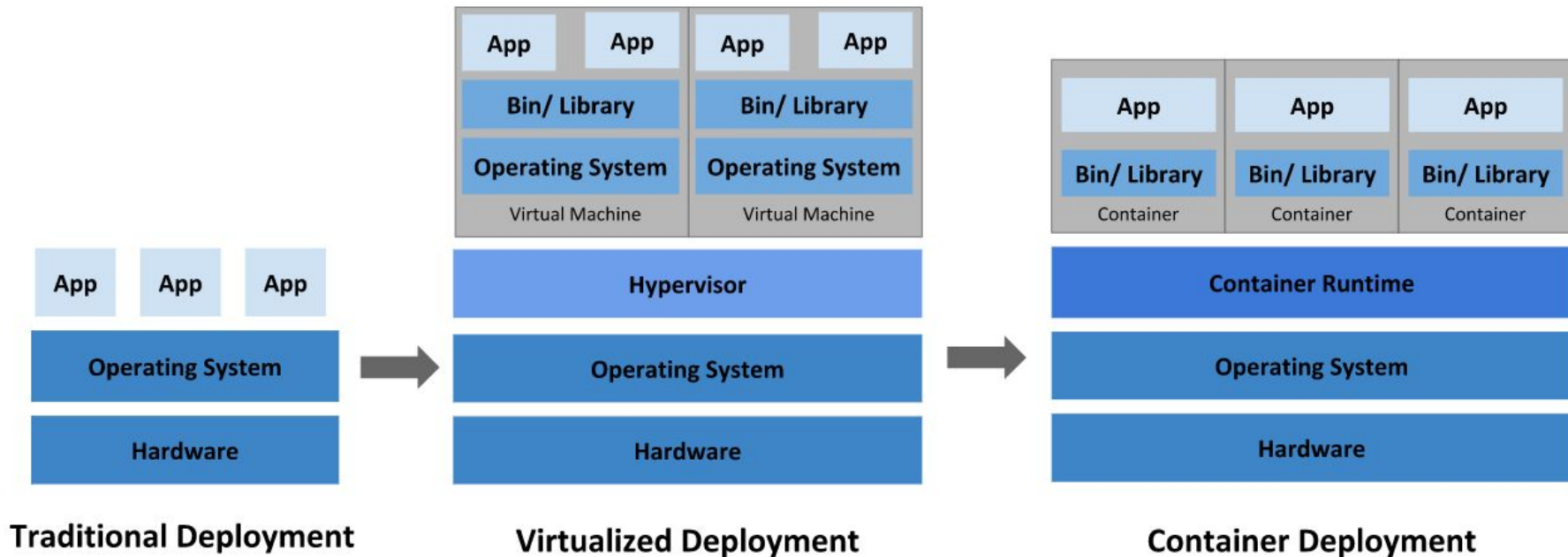
Cloud



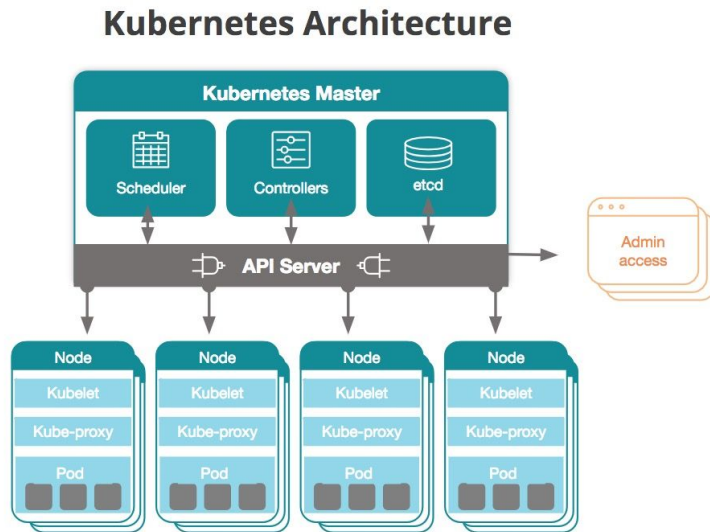
Cloud taxonomy



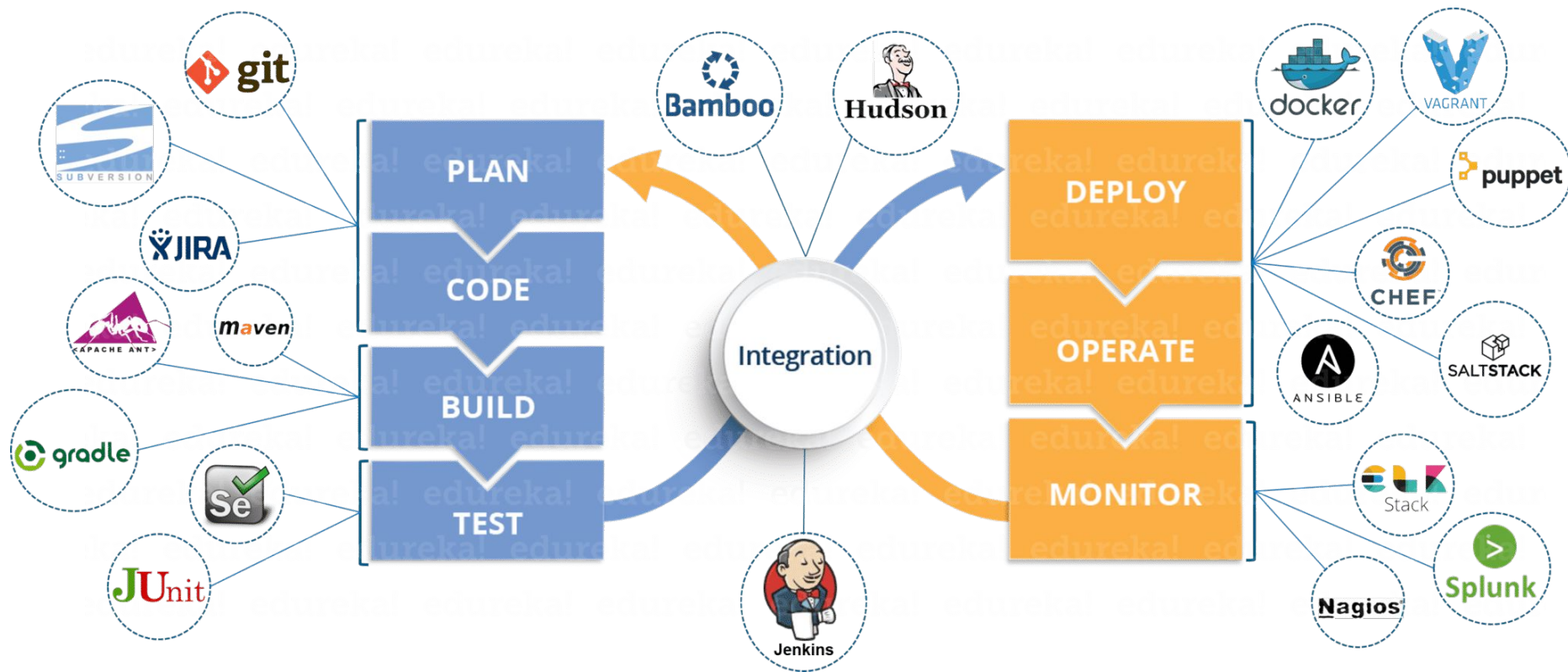
Containerization



Container orchestration



<https://kubernetes.io/docs/concepts/overview/what-is-kubernetes/>



Collaborate

Application Lifecycle Mgmt.



Communication & ChatOps



Knowledge Sharing



Build

SCM/VCS



CI



Build



Database Management



Test

Testing



Build



Deploy

Deployment



Config Mgmt./Provisioning



Artefact Management



Run

Cloud / IaaS / PaaS

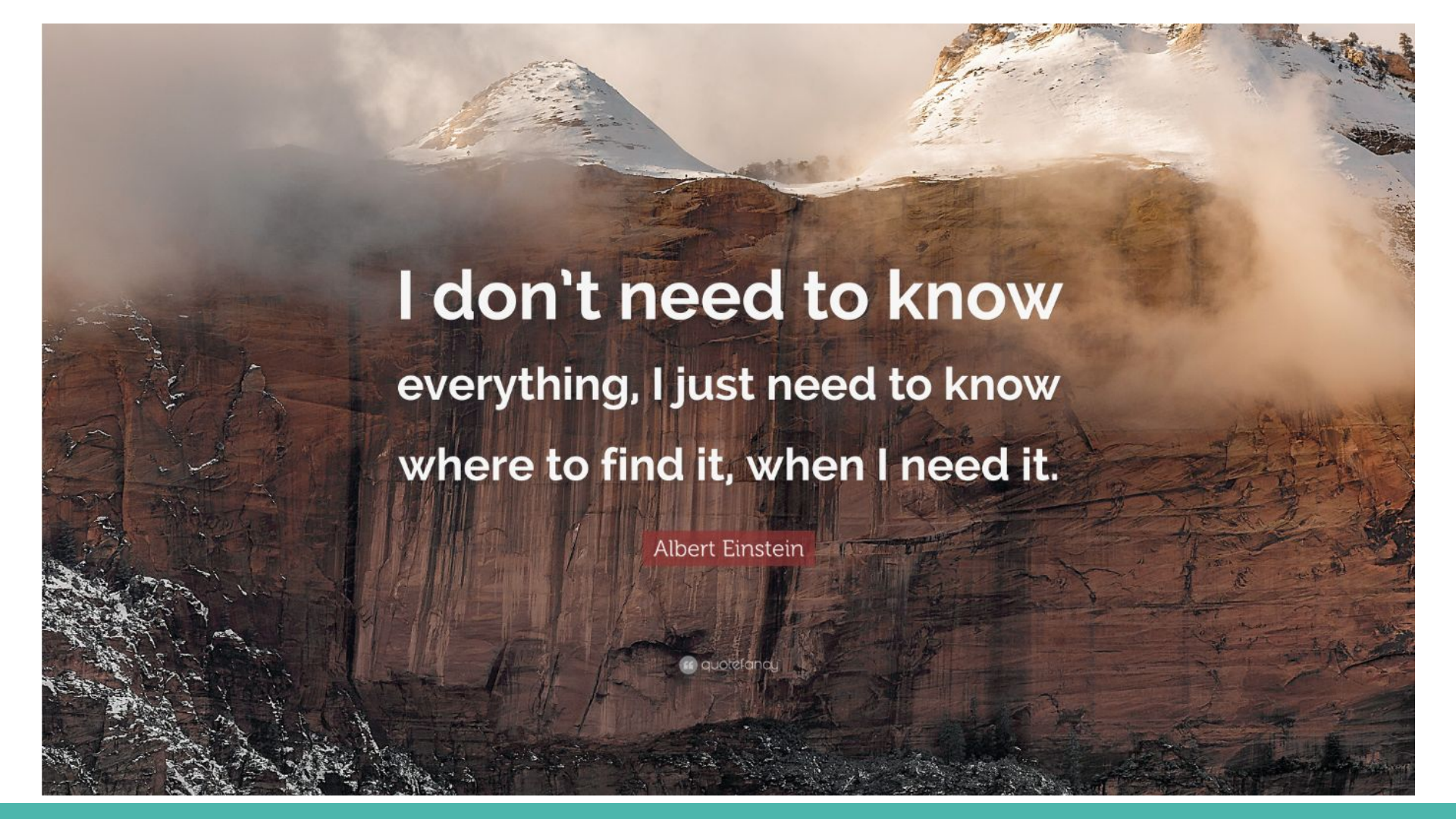


Orchestration & Scheduling



BI / Monitoring / Logging





**I don't need to know
everything, I just need to know
where to find it, when I need it.**

Albert Einstein

Wanna some money?

Become a DevOps :-)

Devops Engineer Salaries in San Francisco, CA Area

233 Salaries Updated Mar 18, 2020

Industries Company Sizes Years of Experience

Average Base Pay

\$130,899 /yr

31% above national average

Additional Cash Compensation ⓘ

Average \$10,735

Range \$3,126 - \$23,847



How much does a Devops Engineer make in San Francisco, CA?
The average salary for a Devops Engineer is \$130,899 in San Francisco, CA. Salaries estimates are based on... [More](#)

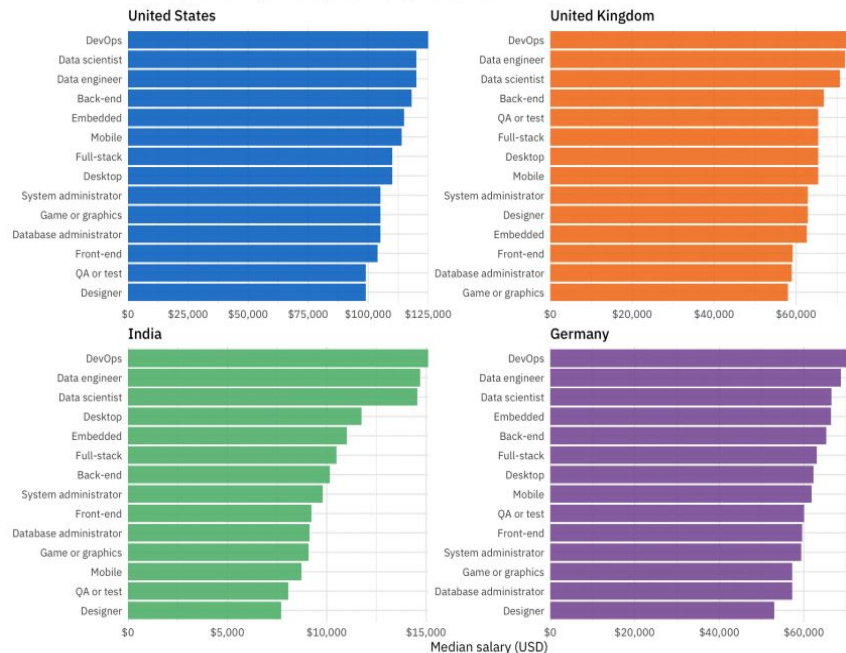


Salaries for Related Job Titles

Linux Administrator	\$59K
Site Reliability Engineer	\$134K
Linux Systems Administrator	\$84K
Release Engineer	\$104K
Systems Engineer	\$89K

Median salary for different types of developers

Developers working in DevOps are the highest earners



https://www.glassdoor.com/Salaries/san-francisco-devops-engineer-salary-SRCH_IL.0,13_IM759_KO14,29.htm

<https://jaxenter.com/devops-careers-stackoverflow-163127.html>