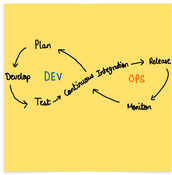
DevOps Roadmap

WHAT IS DEVOPS?

Dev - Development
(Developing a product)

Op - Operations
(Releasing a product)



Traditionally, in Software industry, these two areas were kept separate. The developers wrote the code and the operations team dealt with production and maintenance.

DevOps is a culture where there is transparency between two areas of work.

DevOps culture makes use of some tools and techniques that effectively integrates development and operations. Hence DevOps approach is being able to continuously deliver results faster than traditional way.

The role of DevOps Engineer is to introduce tools and processes to make life cycle of software development better i.e coding to deployment to maintenance to updates.

1) Coding
2) Building
3) Testing
4) Releasing
5) Deploying
6) Operation and Maintenance

① PROGRAMMING LANGUAGE

- GO
- Python

② SERVER ADMINISTRATION

- Linux
- UNIX

③ NETWORKING & SECURITY

- TCP/IP
- PROTOCOLS

④ SERVERS

- Web Servers
  - Apache
  - Nginx
  - Tomcat
- Caching
  - Redis
  - Memcache
- Databases
  - NoSQL
    - MongoDB
    - AWS
    - GCP
  - SQL
    - MySQL
    - PostgreSQL

⑤ INFRASTRUCTURE AS CODE

Configuration Management

- Ansible

⑥ CONTAINERS

- docker

⑦ ORCHESTRATION

- kubernetes

⑧ INFRASTRUCTURE PROVISIONING

- Terraform

⑨ CI/CD

- Jenkins
- Github Actions

⑩ MONITORING & LOGGING

- Prometheus
- Thanos

⑪ CLOUD

- aws
- Azure