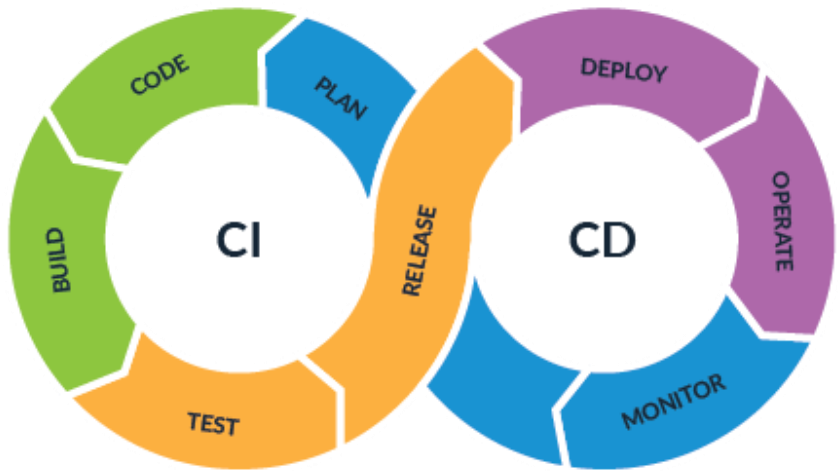


Cloud DevOps – CI/CD

FUNDAMENTALS AND BENEFITS

- Deepa SJ

Overview



A compound of development (Dev) and operations (Ops), DevOps is the union of people, process, and technology to continually provide value to customers.

DevOps enables formerly siloed roles—development, IT operations, quality engineering, and security—to coordinate and collaborate to produce better, more reliable products.

What is CI/CD?

Continuous delivery (CD) is the automated delivery of completed code to environments like testing and development. CD provides an automated and consistent way for code to be delivered to these environments.

Continuous deployment is the next step of continuous delivery. Every change that passes the automated tests is automatically placed in production, resulting in many production deployments.

Benefits of DevOps

Continuous Integration helps,

- Reduce or avoid manual test, thus, to be **more productive** and **avoid costs**
- Discover what is wrong before going to production thus **avoid the bad development costs**
- Focus on improving features rather than code review thus **accelerating time to market and increase revenue**

Continuous Deployment helps,

- Deploy new feature maintaining old version, **avoid losing revenue** caused by bad deployment and **maintaining system stability and reliability**
- Create and make infrastructure inactive when not required which helps to **reduce cost**

DevOps Practices

Continuous integration and continuous delivery (CI/CD)

Version Control

Agile software development

Infrastructure as Code

Configuration management

Continuous monitoring