DevOps

CI/CD

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

DevOps practices involve continuous development, continuous testing, continuous integration, continuous deployment and continuous monitoring of software applications throughout its development life cycle.

Continuous integration, continuous delivery or continuous deployment

CI/CD bridges the gaps between development and operation activities and teams by enforcing automation in building, testing and deployment of applications. Modern day The CI/CD practice or CI/CD pipeline forms the backbone of modern day DevOps operations.

Benefits of a good CI/CD strategy

Increased speed of innovation and ability to compete in the marketplace

Code in production is making money instead of sitting in a queue waiting to be deployed

Great ability to attract and retain talent

Higher quality code and operations due to specialization

Business benefits of continuous delivery

Continuous delivery improves velocity, productivity, and sustainability of software development teams.

Continuous delivery metrics

OLTP (online transaction processing) and OLAP (online analytical processing) are two well known techniques in the industry.

Key Performance Indicators (KPIs)

Failures on test vs. staging vs. production

Stability index

Code quality index

References

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