

CI/CD: Accelerating the Development and Deployment Processes

The Way CI/CD Improves Your Company's Performance Through Automation



What is Continuous Integration?

- Continuous Integration (CI) is the integration of all the developer's code into a main pipeline **frequently**
- CI includes the building, testing, and analyzing of the software
- CI benefits:
 - Address bugs quicker
 - Receive recurrent feedback
 - Improves code quality
- Moreover, CI includes automated testing of the build that saves time in testing and increases the development efficiency



What is Continuous Deployment?

- Continuous Deployment (CD) is automating the deployment process and quickly delivering software updates as soon as they are ready.
- CD includes deploying, verifying, and promoting the software
- CD benefits:
 - Accelerate deployment speed and lessens human error
 - Decrease downtime from a deploy-related crash or major bug
 - Faster software production to market



Why adopt CI/CD?

- CI/CD is becoming more significant than ever. It's improving the agile methodology, which reduces the time it takes to produce a good quality product for the market.
- CI/CD improves your business in many ways:
 - Infrastructure automation in creation, monitoring, and cleanup
 - increases the deployment speed since there is a less human intervention which creates more time to work on features that entails more revenue
 - Reduces downtime through frequent monitoring notifications to quickly respond to any malfunction avoiding downtime costs.
 - Reduces costs from unused resources by cleaning them up frequently



Why adopt CI/CD?

- CI/CD improves your business in many ways:
 - Frequent integration and automatically tests the software before/after deployment
 - Reduces costs since developers don't need to spend time on problems from other developers' code
 - Avoid costs by automatically testing the software, which reduces bugs, so there is less time spent on testing
 - Increases revenue by automated testing that speeds up the time for the software to market, hence increasing the code quality.