CI/CD

Continuous integration and continuous deployment (CI/CD) is a set of ideas, processes, and capabilities that enables software changes to be delivered to users in a timely, repeatable, and secure manner by introducing automation into software development processes.

Purpose

- Developers frequently commit codes to version control systems such as GitHub, which start the CI process. The code quality can be determined by scanning or analyzing it with static code analysis tools. The CI process creates the final build after running automated tests, such as unit and integration tests.

Benefits

- Higher efficiency
- Reduced risk of defects
- Faster product delivery
- Quick rollback if required
- Efficient testing & monitoring
- Cost-effectiveness