Continuous integration vs. continuous delivery vs. continuous deployment

Continuous integration

- Compile/Lint
- Merge/Integrate
- Unit Tests
- Integration Tests
- Verify Dependency Security

What you gain

- Less bugs get shipped to production as regressions are captured early by the automated tests.
- Building the release is easy as all integration issues have been solved early.
- Less context switching as developers are alerted as soon as they break the build and can work on fixing it before they move to another task.
- Testing costs are reduced drastically your CI server can run hundreds of tests in the matter of seconds.
- Your QA team spend less time testing and can focus on significant improvements to the quality culture.

Continuous delivery

- Deploy to Test Env
- Team Test
- Deploy to Client Test Env
- Create Infrastructure
- Deploy to Production
- Rollbacks
- Promoting Production



What you gain

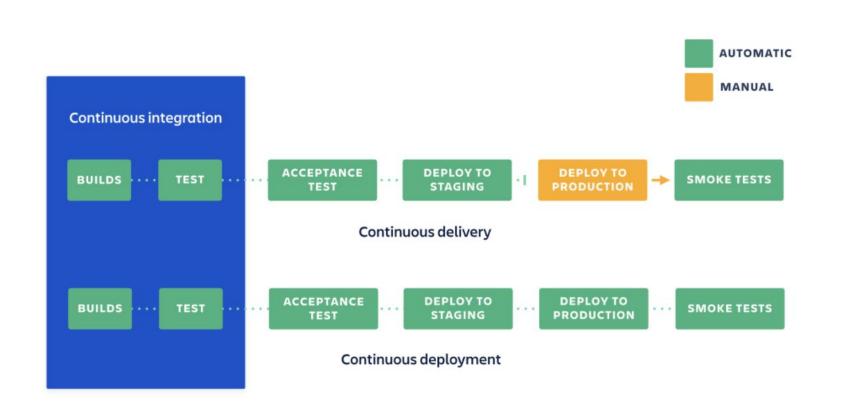
- The complexity of deploying software has been taken away. Your team doesn't have to spend days preparing for a release anymore.
- You can release more often, thus accelerating the feedback loop with your customers.
- There is much less pressure on decisions for small changes, hence encouraging iterating faster.

Continuous deployment

- One step further than continuous delivery.
- Every change that passes all stages of your production pipeline is released to your customers.
- No human intervention, and only a failed test will prevent a new change to be deployed to production.

What you gain

- You can develop faster as there's no need to pause development for releases. Deployments pipelines are triggered automatically for every change.
- Releases are less risky and easier to fix in case of problem as you deploy small batches of changes.
- Customers see a continuous stream of improvements, and quality increases every day, instead of every month, quarter or year.



Business Benefits

- Bring Products to Market Faster
- Allows Developers to Deliver Products Consumers Want Now.
- Boosts DevOps efficiency
- Improves App Quality
- Supports Cloud-Based App Development
- Reduce Costs and Boost Profits
- Gain Real-Time Visibility of the Development Process