FUNDAMENTALS AND BENEFITS OF CI/CD



+ **AUTOMATIC** MANUAL **Continuous integration** ACCEPTANCE **DEPLOY TO** SMOKE TESTS STAGING Continuous delivery ACCEPTANCE **DEPLOY TO DEPLOY TO SMOKE TESTS** STAGING **PRODUCTION** Continuous deployment Image Source: https://www.atlassian.com/

CI/CD - Overview

CI - Continuous integration:

 A process of continuously checking in the latest copy of source code to a shared version control system where all the developers of a team can check out the latest change

CD - Continuous Deployment :

- Automated deployment
- Change run through the CI/CD pipeline and passing builds get deployed automatically



- Manual effort reduced which equates to reduced opportunity for human error.
- From end users perspective, this means high-quality change can be put to use at a much higher **velocity**, thus driving **business growth**
- Customers can see a number of enhancements in **short duration**
- Long term cost benefits due to reduced error and quicker deliveries
- Testing cost reduced due to automated tests
- Team can spend less time working on repeated process and focus on improving quality -> productivity increased
- Reduced risk in deployments and in case of issues, it gets easier to fix