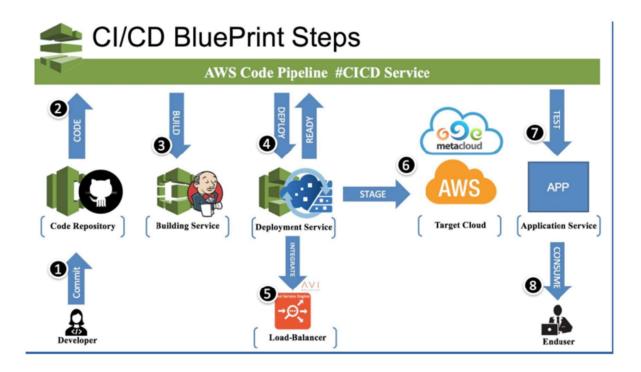
CICD for Udapeople



CICD for One Team



Superior Code Quality

One of the chief technical benefits of CI/CD is that it enhances the overall code quality. A CI/CD pipeline enables developers to integrate their code into a common repository in small batches. Through this repository, developers can share their builds with the entire team rather than working in isolation. Now, the whole team can collaborate for thorough detection and fixation of the most severe bugs.

Reduced Changes & Review Time

Code changes in such an environment are done at an atomic level, which reduces the risk of unintended consequences. Such changes are easy to handle compared to large hefty ones and are easy to fix in case of any issues. Using CI/CD, these code changes can be tested quickly once they are integrated. Such an approach is very beneficial when direct communication is a roadblock or when teams are spread across remote locations

Accelerated Release Cycles

Since the elapsed time to detect and correct production, escapes are shorter; CI/CD enables accelerated release rates. Any software development system can support recurring releases only if code is developed in a continued <u>automated testing pipeline</u>.

Fault Detection & Isolation

Detecting the root cause of a fault and then pointing out the exact location of the fault is one of the most proclaimed benefits of CI/CD. Fault isolation refers to system design, limiting the negative results of an error by pinpointing the cause and location.

Enhanced Test Reliability

Using CI/CD, you can improve test reliability to a great extent. Since specific and atomic changes are introduced to the system, it allows developers or QAs to add more relevant positive and negative tests for the changes. This testing is also referred to as 'Continuous Reliability' within a CI/CD pipeline.

Reduced Backlog

More time for developers or QAs to focus on the big picture instead of spending their valuable time of minute issues.

More time for QAs to find larger problems before being a product is released.

Keeps your clients happy as they end up finding zero to none errors in your product.

Improved Mean Time To Resolution (MTTR)

MTTR is the measure of reliability and maintainability of any or all the repairable features. It gives you a timeline about the average time spent taken up by recovery from a possible failure.

One of the main benefits of CI/CD is that it helps you bring down this number.

Cost Deduction

Using a CI/CD pipeline limits the potential impact and loss that a deployment problem can cause by allowing it to be deployed in non-critical business hours. Also, repeated automated deployments during the development phase help developers catch the errors early before causing any significant damage. Such a pipeline implementation increases code quality, thus increasing overall ROI for the organization.

Conclusion

We can reduce human errors with CD/CI and make fast responsive solution!