Created by
Team

CI/CD

What is Continuous Integration?

Continuous integration (CI) is the practice of automating the integration of code changes from multiple contributors into a single software project. It’s a primary DevOps best practice, allowing developers to frequently merge code changes into a central repository where builds and tests then run. Automated tools are used to assert the new code’s correctness before integration.

What is Continuous Delivery?

Continuous delivery (CD) picks up where continuous integration is over. While CI is the process to build and test automatically, CD deploys all code changes to the testing or staging environment in the build.

CD enables builds to be released to the production environment when needed. Allowing the team to deploy on its own, the CD effectively reduces time on the market.

Pipeline

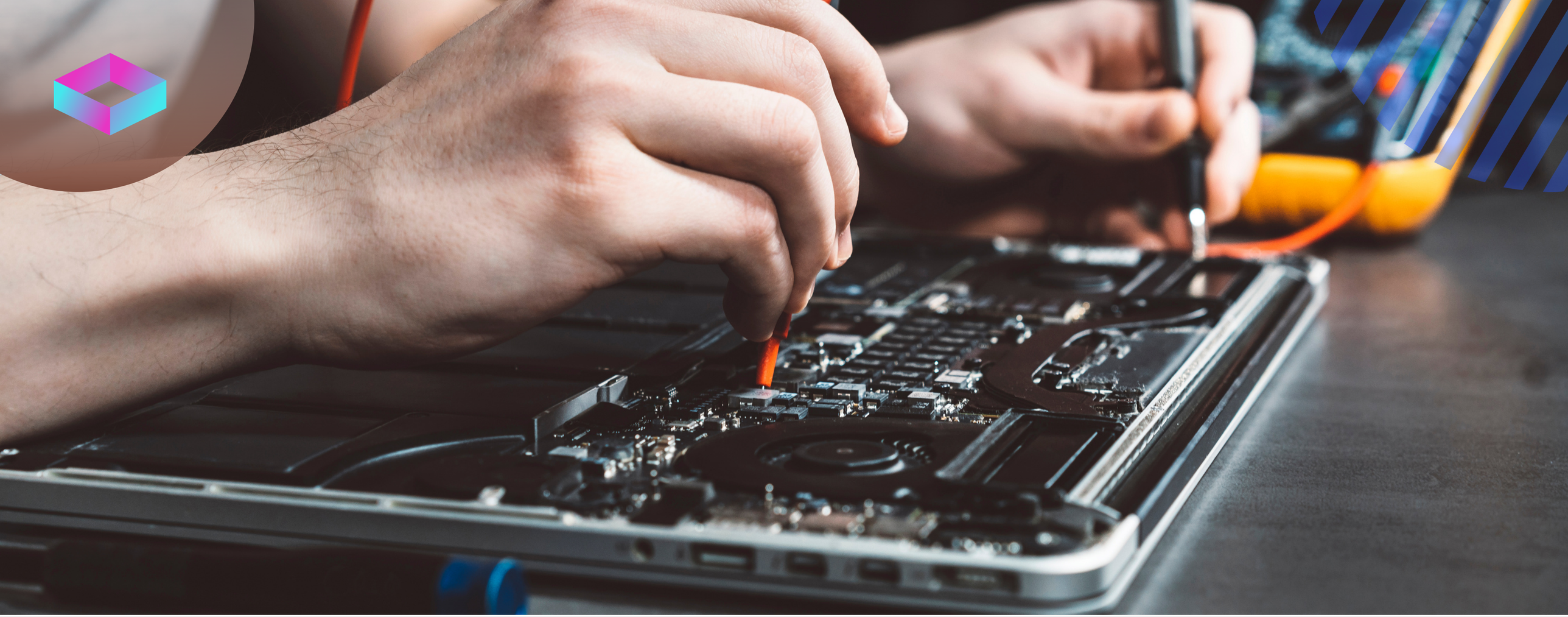
- Commit
- Build
- Automate tests
- Deploy

When the developers make a change, they commit the change to the repository.

Commit

The source code in the repository is integrated into the build.

Build



Automate Tests

Automated tests are being run against the build. Test automation is a key component of any CI / CD pipeline

The built version will be delivered to production

Deploy

Conclusion

Two of DevOps' recommended practises for managing misalignment between developers and the operational team are continuous integration and continuous delivery. Developers may deploy modifications and new features more frequently using automation, while operations teams have improved overall stability