

# SELLING CI/CD

Fundamentals and Benefits of CI/CD to Achieve, Build, Deploy and Automate Processes for Cloud-Based Software Products

# Overview of CI/CD

Continuous integration/continuous delivery (CI/CD) is a software development practice that involves continuously integrating code changes into a codebase and constantly delivering software updates to users. The goal of CI/CD is to enable faster, more reliable software delivery by automating critical parts of the software development and deployment process.

# Pros of CI/CD

- Faster software delivery: CI/CD allows developers to quickly and easily integrate and deploy code changes, reducing the time it takes to get updates to users.
- Improved code quality: By automating the build and testing process, CI/CD helps ensure that code changes are thoroughly tested before deployment, leading to higher code quality.
- Reduced risk: With CI/CD, developers can quickly identify and fix issues in code changes before they are deployed to production, reducing the risk of disruptions or downtime.
- Greater collaboration: CI/CD promotes collaboration between developers by making it easy for them to share code changes and get feedback from their colleagues.

# Implementation

To leverage upon CI/CD for a cloud-based software product, there is need to set up a continuous integration (CI) pipeline that automatically builds and tests code changes as they are committed to the codebase (online-repository).

It is also required to set up a continuous delivery (CD) pipeline that automatically deploys code changes to production or staging environments. This can typically be done using tools such as Jenkins, Circle CI, or GitHub Actions.

# Conclusion

Once your CI/CD pipeline is in place, software development and deployment processes such as code builds, tests, and deployments can always be automated. This will eventually help in delivering software updates more quickly and with excellent reliability, improving product's overall quality and stability, hence reducing cost and increasing revenue.