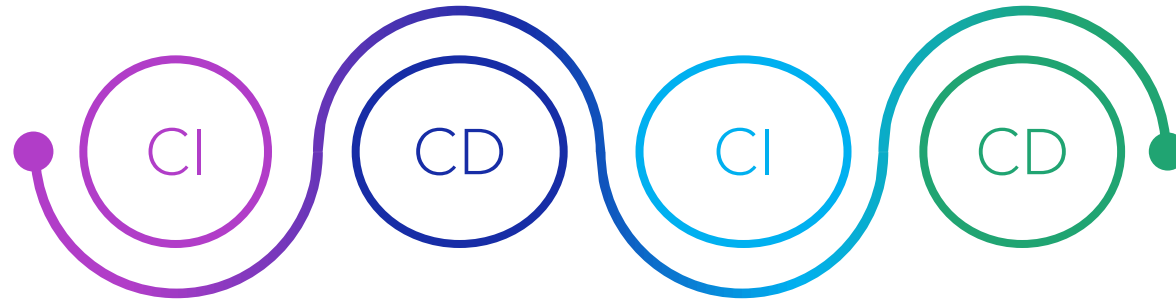




# Continuous Integration / Continuous Deployment (CI/CD)

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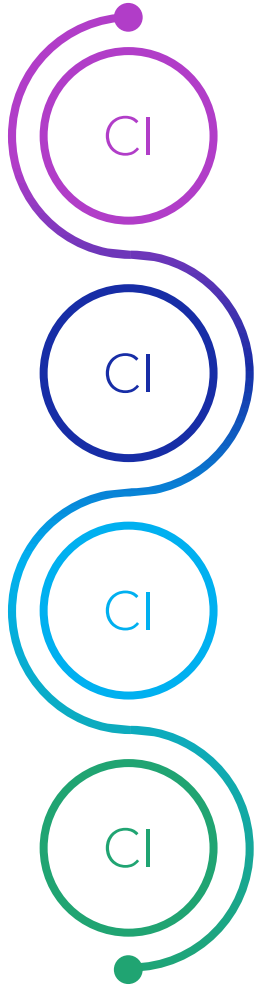




A set of development practices aimed at automating the building, testing, and deployment of applications.

**Continuous Integration** CI automates the process of testing and building code. It allows developers to merge their code to a central repository, where testing, building and analysis is done.

**Continuous Deployment** Deployment follows once code has been built & tested. CD is the process that automates the delivery of that code into production. With this approach, value is delivered to the customer frequently through automated deployments



CI automates vulnerability testing, thus the occurrence of costly security loopholes. This avoids cost and protects our customer confidence

Automated Testing in CI catches errors early, avoiding cost, since less developer time is spent on testing

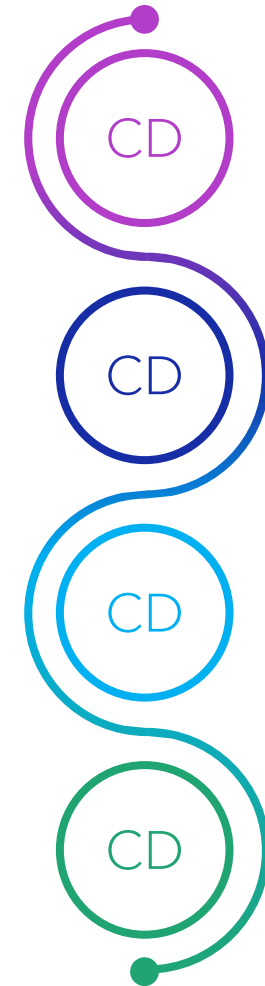
With CI, bugs that would break production are caught during automated testing, meaning fewer bugs are experienced in production. This protects revenue and prevents customer churn

CD automates the process of infrastructure creation allowing us faster, more accurate deployments. This lessens the probability for human error

Automated Infrastructure cleanup in CD reduces our overall costs since we incur less infrastructure costs from unused resources

Faster and more frequent production deployments due to CD mean that new value-generating features are released more quickly to our customers, increasing revenue.

During upgrades, automated rollback triggered by failure would protect revenue, by quickly reverting production to working state when failure occurs



Investing in CI/CD would make delivery of value to our customers more intuitive & feedback-based, ensuring that provision of services is customer centric.

