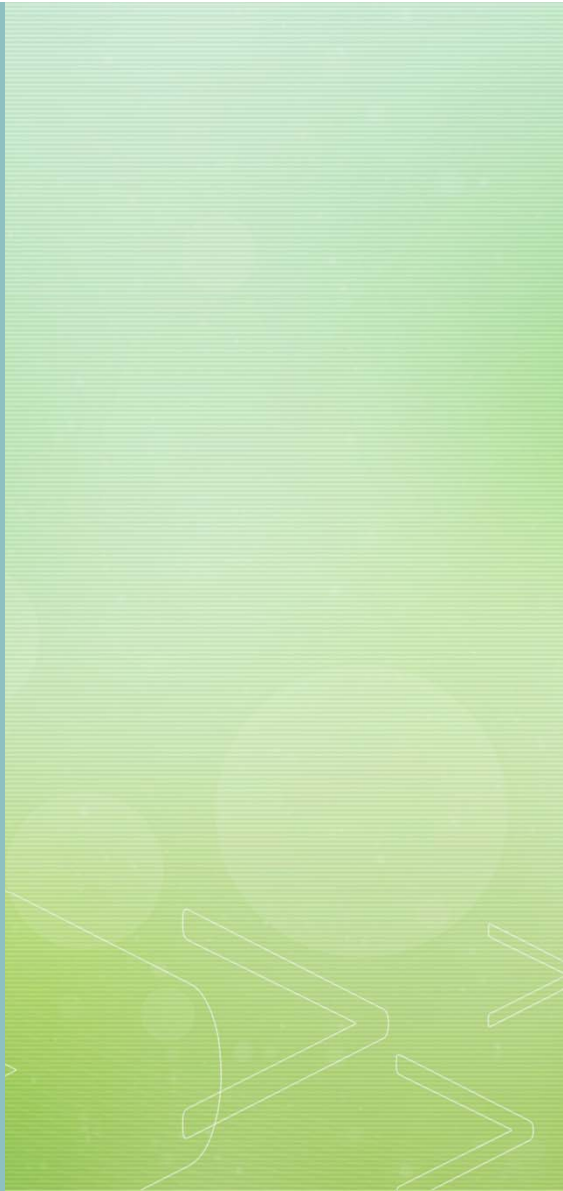




CI / CD

Continuous Integration
Continuous Deployment



What is CI?

CI is referred to “Continuous Integration”: is all about the source code in which Developers practicing continuous integration merge their changes back to the main branch as often as possible. The developer's changes are validated by creating a build and running automated tests against the build. By doing so, you avoid integration challenges that can happen when waiting for release day to merge changes into the release branch.

What is CD?

CD referred to “Continuous Deployment” is all about built code and deployment in which automates the release of a production-ready build to a code repository, continuous deployment automates releasing an app to production.

CI/CD is giving Continuous Delivery

Continuous
Integration + Continuous
Deployment = Continuous
Delivery

Continuous delivery is a software development practice where code changes are automatically prepared for a release to production

Why CI/CD?

- Less bugs get shipped to production as regressions are captured early by the automated tests
- Building the release is easy as all integration issues have been solved early.
- Less context switching as developers are alerted as soon as they break the build and can work on fixing it before they move to another task.
- Testing costs are reduced drastically – your CI server can run hundreds of tests in the matter of seconds.
- Your QA team spends less time testing and can focus on significant improvements to the quality culture.

Why CI/CD?

- Developing faster as there's no need to pause development for releases. Deployments pipelines are triggered automatically for every change.
- Releases are less risky and easier to fix in case of problem as you deploy small batches of changes.
- Customers see a continuous stream of improvements, and quality increases every day, instead of every month, quarter or year.