

The background features abstract, overlapping green geometric shapes in various shades of green, creating a modern and dynamic look. The shapes are primarily located on the left and right sides of the slide, framing the central text.

# CI/CD

# Concepts and Advantages

by FABIO JAREMCIUC

# Continuous Integration

or just the CI as it is known, is a software development practice in which you **compile and test software whenever a developer sends code** to the application, and it happens several times a day.

CI is the first step to spread the DevOps culture in your team and the **beginning to achieve Continuous Delivery**

# Deployment Continuous

Is an extension of continuous integration, with the aim of **minimizing the time** between the development of a new feature and its use in production.

It consists of a **set of practices that automate the infrastructure** and software delivery. In case of errors, the entire infrastructure can be destroyed without much effort

# Continuous Delivery

Continuous Delivery is what we call a **series of practices designed to ensure that the code can be deployed quickly and safely** in production, providing all changes in a work environment and ensuring that business applications and services work as expected through **rigorous automated testing**.

It aims to **deliver software faster and safer** through short circles

# Why is CI / CD so important?

The software development process becomes **more solid and reliable** with CI / CD.

The source code is **tested frequently** and reports with possible improvements are made available by tools (example, SonarQube)

The deployment is automated and **less susceptible to human errors**

Communication between the business team and the development team **becomes better**

Last but not least, **developers can focus their attention on development** and the business team has **less wasted resources**

## Why not try it?

The benefits of implementing CI / CD are **enormous for the development and business team**. The **savings** in financial and computational resources are remarkable, same for the **code quality** and the final **software** delivered.