

A decorative graphic on the left side of the slide. It consists of a blue parallelogram and a light green parallelogram, both tilted at an angle. The blue shape is in the foreground, and the green shape is partially behind it. They are set against a dark blue background with faint, lighter blue diagonal stripes.

What is CI/CD



Continuous integration/Continuous Delivery

A continuous integration and continuous deployment (CI/CD) pipeline is a **series of steps that must be performed in order to deliver a new version of software**. CI/CD pipelines are a practice focused on improving software delivery throughout the software development life cycle via automation.



Fundamentals Of CI/CD

- **Continuous Integration**

*The practice of merging all developers' working copies to a shared mainline several times a day. It's the process of "**Making**"*

Related tasks

- Compile
- Unit Test
- Static Analysis
- Dependency vulnerability testing
- Store artifact

- **Continuous Delivery**

*software engineering approach in which the value is delivered frequently through automated deployments. Everything related to deploying the artifact fits here. It's the process of "**Moving**"*

Related tasks

- Creating infrastructure
- Provisioning servers
- Copying files
- Promoting to production
- Smoke Testing (aka Verify)
- Rollbacks

Benefits of CI/CD

- Higher efficiency
- Reduced risk of defects
- Faster product delivery
- Efficient testing & monitoring
- Cost-effectiveness





Business Value

- **Continuous Integration**

- Reduce code conflicts
- Faster merging
- Catch compile error

This translated to:

- Increase in revenue
- Cost reduction
- Cost protection

- **Continuous Delivery**

- Faster and more frequent production deployment
- Automated rollbacks

This translated to

- Increase market share
- Faster feature delivery