CI/CD - A Better Way to Develop and Deliver Products to Market

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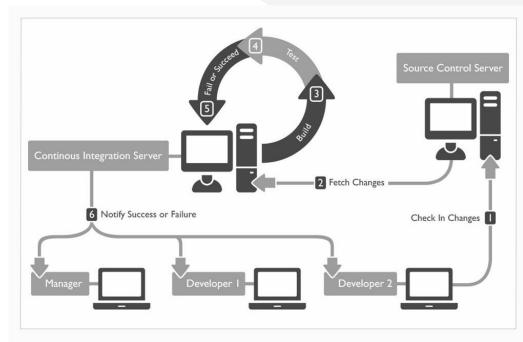
Agenda

- 1. What is **CI**?
- 2. What is **CD**?
- 3. What will CI/CD help us **Avoid**?
- 4. What will CI/CD help us **Gain**?

What is CI?

Continuous Integration

- Several times every day, developer branches are ready to be merged with the main branch
- Automating the branches merge is Continuous Integration
- CI emphasises test automation and produces high-quality deployable artefacts

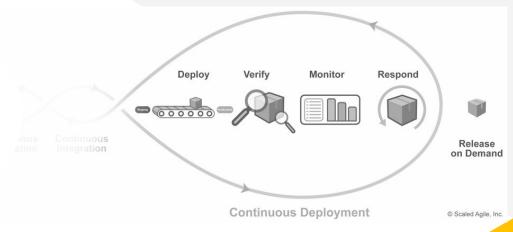


Typical CI process (source: www.pepgotesting.com)

What is CD?

Continuous Deployment

- Code updates to an application are automatically pushed into the production environment as part of Continuous Deployment without any human intervention.
- Smoke tests serve as the foundation for this automation.
- This mechanism directly delivers new updates to users of the software after they pass those tests.



Typical CD activities (source: <u>www.scaledagileframework.com</u>)

What will CI/CD help us <u>Avoid?</u>



Fewer production issues and less testing time

Avoid conspicuous or expensive security vulnerabilities

Less human errors and quicker deployments



What will CI/CD help us <u>Gain?</u>



INCREASE IN REVENUE

Quicker release of new features that provide value

Time to market is reduced

REVENUE PROTECTION

Reduced downtime caused by a major bug or crash related to deployment

Immediate undo to get the production back to normal