

Continuous Integration and Automated Code Review in Open Source Projects

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What is *Continuous Integration*?

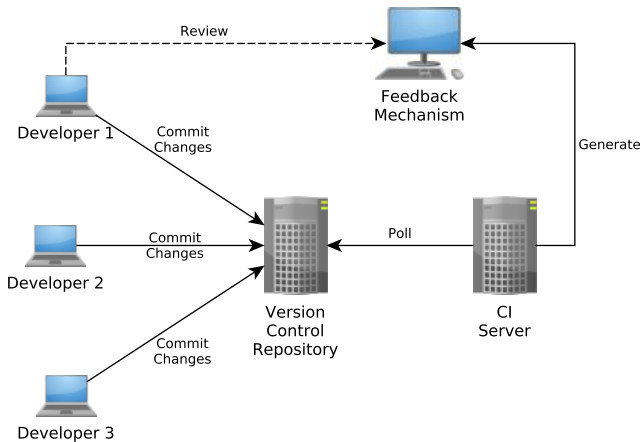
What is *Automated Code Review*?

Where is it used and why?

How it works?

- common part of fast software development
- adaptive development technique
- reduce integration problems
- integrations are verified via automated tests and builds
- popular in open source projects which are frequently developed by a group of people
- available CI services: *Travis CI, Jenkins, TeamCity, ...*

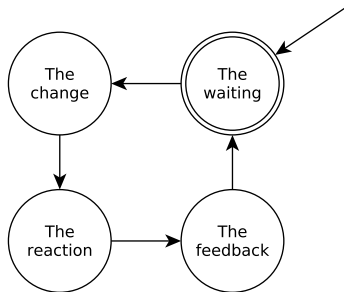
Components of continuous integration system



The basics of CI

Stages of CI:

- 1 The change
- 2 The reaction
- 3 The feedback
- 4 The waiting



Types of code review:

- manual code review
 - collaborative inspection and discussion with project members
 - slow (nearly 100 lines of code per hour)
 - pair programming
- automated code review
 - matching set of rules
 - static analysis
 - analytic method
 - detection of basic mistakes and vulnerabilities
 - reduce code review duration

Thank You For Your Attention !