

Continuous Integration

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History

- Proposed as part of Extreme Programmings
- Was Intended to be used with test driven development
- At the beginning everyone ran the tests before checking the code in
- Now build servers run the tests after checking the code in

Principles

- Maintain a Single Source Repository.
- Automate the Build
- Make Your Build Self-Testing
- Everyone Commits To the Mainline Every Day
- Every Commit Should Build the Mainline on an Integration Machine
- Keep the Build Fast
- Test in a Clone of the Production Environment
- Make it Easy for Anyone to Get the Latest Executable
- Everyone can see what's happening
- Automate Deployment

Martin Fowler 2006

Pros / Cons

Pro

- Broken code is detected immediately
- Avoid complicated merges after lengthy development
- Immediate feedback to developers
- Constant availability of a working build
- Automated tests are required

Contra

- Initial Setupq
- Automated tests are required

Jenkins

Travis CI

Cloud Based Continuous Integration

Fragen ?

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Quellen

- http://en.wikipedia.org/wiki/Continuous_integration
- <http://www.martinfowler.com/articles/continuousIntegration.html>
- <http://jenkins-ci.org/>
- <https://travis-ci.org/>
- Xxx