

TeamCity

Delivering Quality Software, on Time

Václav Pech

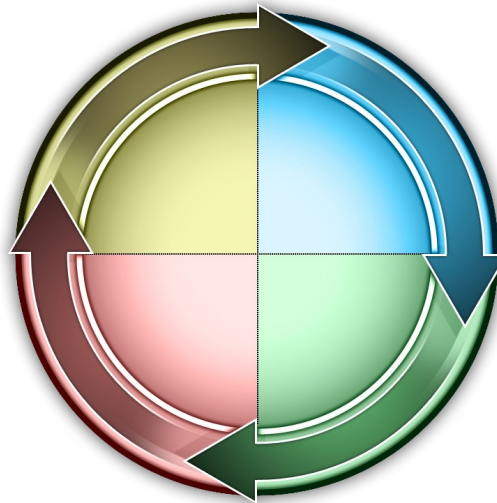
Software Developer and Product Evangelist
JetBrains, Inc.



Part 1: Continuous integration

Compile

Test / Analyse



Trigger (by change)

Report

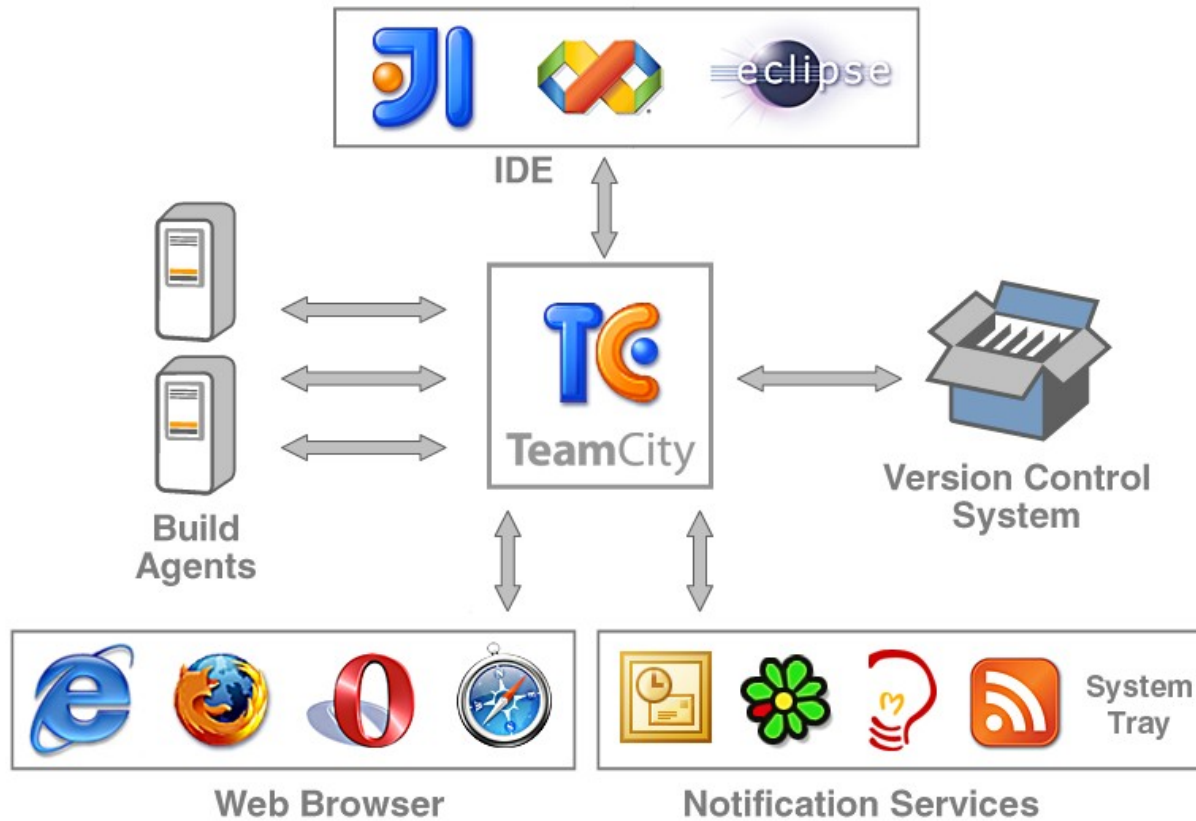
TeamCity is a ...

- Continuous integration tool
 - Quality control
 - Team cooperation
 - IDE-independent
 - Java + .Net

Integration

- CVS, SVN, ClearCase, ...
- Ant, Maven 2, IntelliJ IDEA, Nant, ...
- Email, RSS, Jabber, IDE, Windows Tray
- Eclipse, IntelliJ IDEA, Visual Studio
- JUnit, TestNG, EMMA, Cobertura

Architecture



Part 2:

- TeamCity solving problems

Problem:

- Administration headaches
 - Multiple projects and build configurations
 - Cumbersome administration of multiple build machines

Solution: Distributed builds



Solution: Distributed builds

- Multi-platform testing
- Easy administration
- Optimized task distribution

Problem:

- Notification spam
 - People stop reading notifications
 - People stop reading notifications
 - People stop reading notifications
 - People stop reading notifications
 - People stop reading notifications
 - People stop reading notifications
 - People stop reading notifications
 - People stop reading notifications

Solution: Clean and fast notifications

- Relevant
- Convenient
- Early



Problem:

- Nobody fixes the build

Solution: Take responsibility

- Indicate explicitly that you're fixing it

Problem:

- Locating failures

Solution: IDE integration

- Show results just as if ran locally
- Direct links to the source code

Problem:

- Developers don't check code quality often enough
 - Interrupts work flow
 - Takes time, decreases productivity

Solution: Server checks for quality

- Inspections
 - 700+ rules for Java, JavaScript, HTML, XML, ...
- Code coverage
- Code duplicates

Problem:

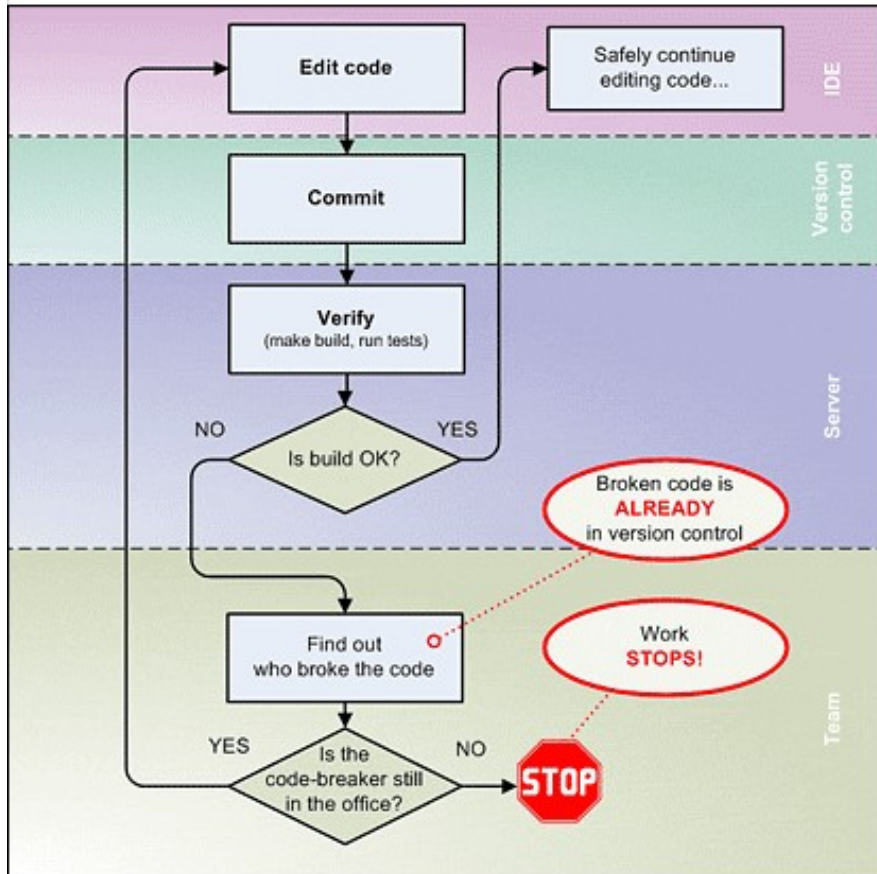
- Broken builds after commit
 - 5 o'clock checkin case

Solution: Pre-tested commit

- The server integrates your local changes before committing to VCS

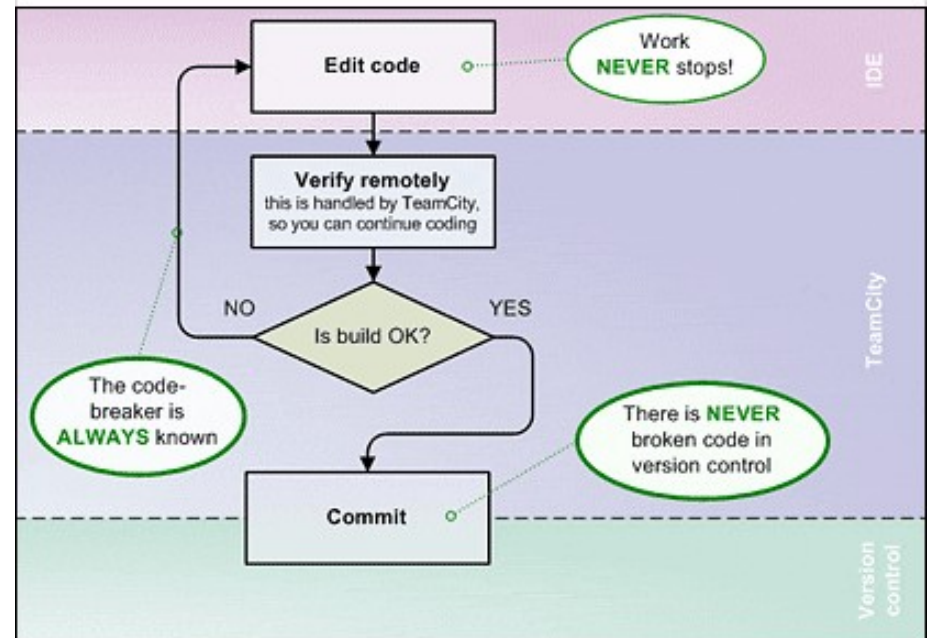
Standard scenario

Edit → Commit → Verify



Improved TeamCity scenario

Edit → Verify → Commit



Summary

- CI is a must but has obstacles
 - TeamCity makes CI smooth
 - Free Professional Edition
- **Contact me: vaclav@jetbrains.com**



Questions