

# TeamCity

## Delivering Quality Software, on Time

**Václav Pech**

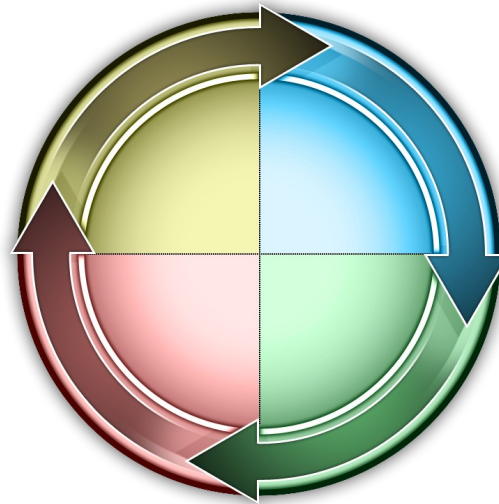
Software Developer and Product Evangelist  
JetBrains, Inc.



# Part 1: Continuous integration

Compile

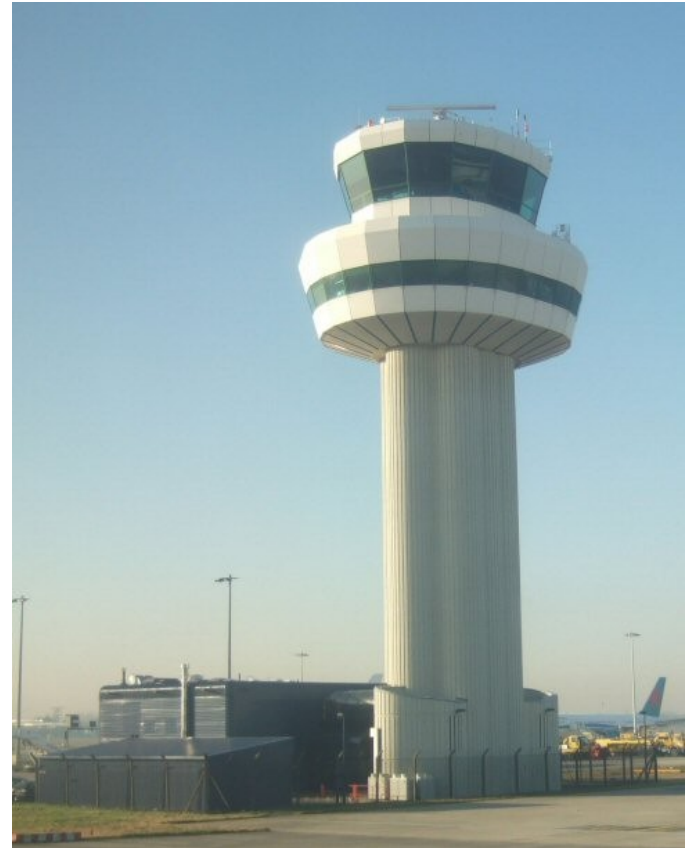
Test / Analyse



Trigger (by change)

Report

# Better Control



# Fast Progress



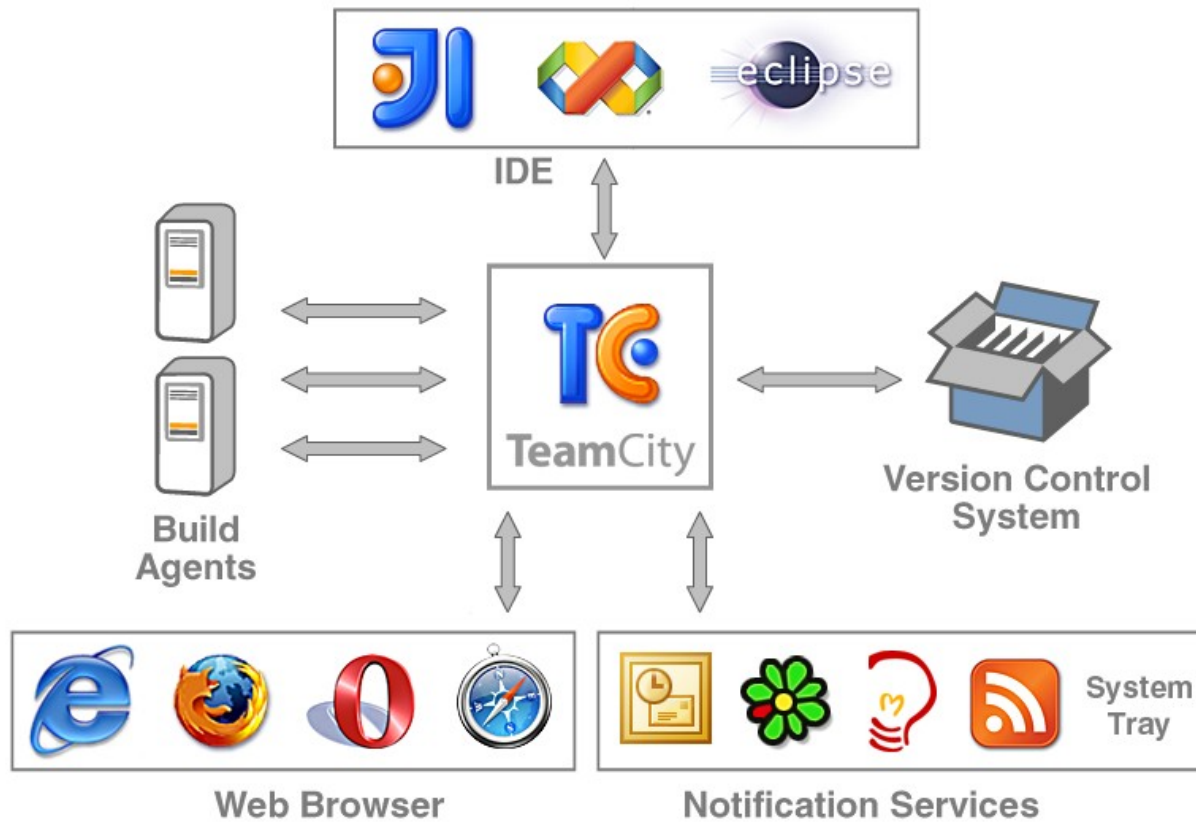
## TeamCity is a ...

- 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**

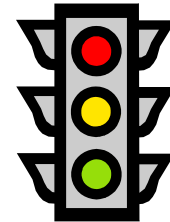
- Multi-platform testing
- Easy administration
- Optimized task distribution

## 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:

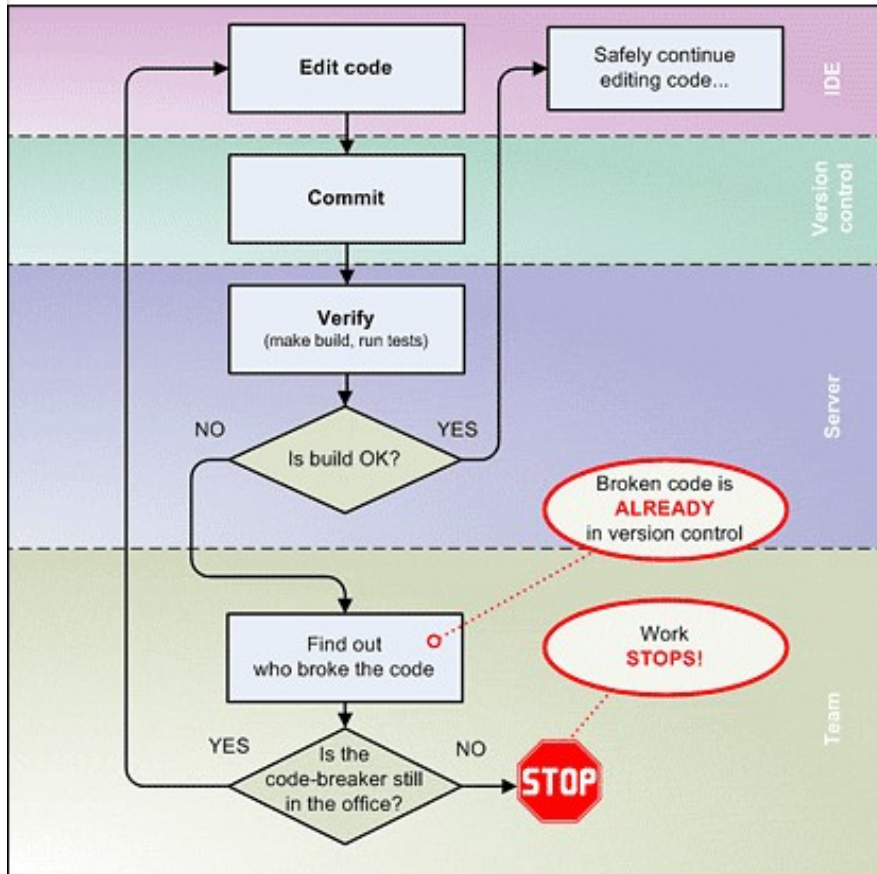
- Broken builds after commit
  - 5 o'clock checkin case

## **Solution: Pre-tested commit**

- The server integrates your local changes before committing to VCS

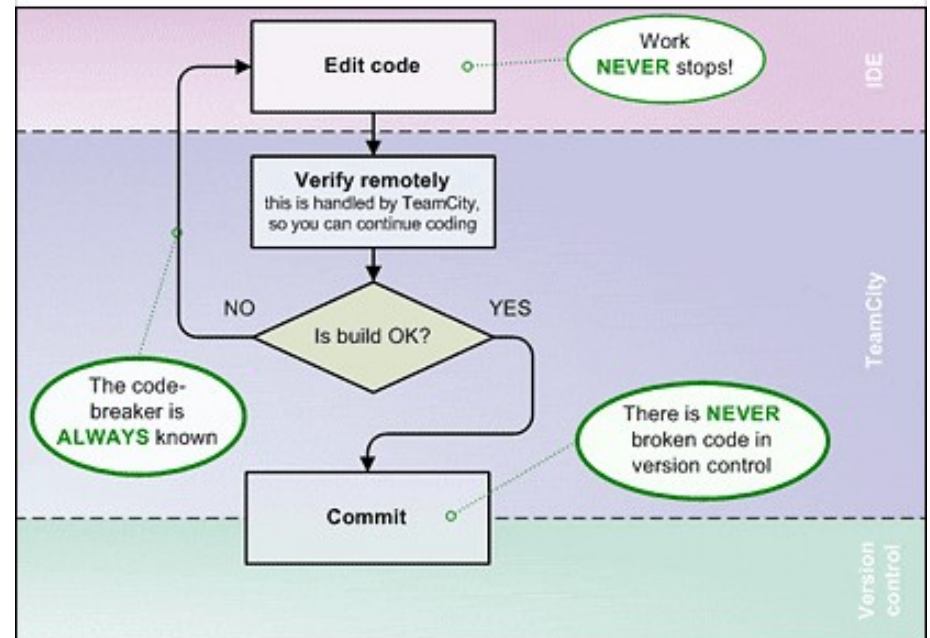
## Standard scenario

Edit → Commit → Verify



## Improved TeamCity scenario

Edit → Verify → Commit



## Summary

- Fast feedback
- IDE integration
- Pre-tested commit

– **Contact me: [vaclav@jetbrains.com](mailto:vaclav@jetbrains.com)**



# Questions