# JRebel: From Problem to Idea to Product

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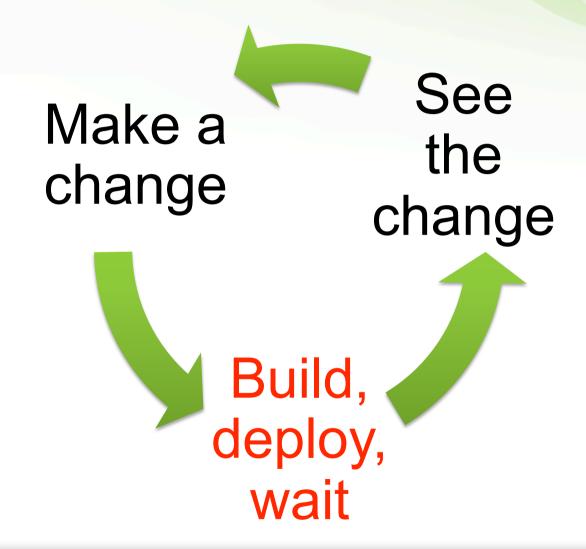
engineer, scientist, OSS committer, speaker, entrepreneur, avid traveler and couch surfer



# THE PROBLEM



#### Turnaround cycle

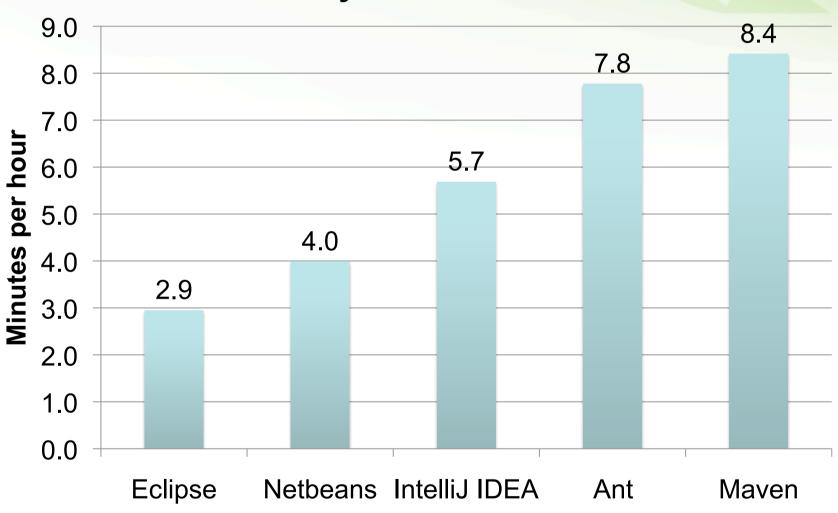




# **DEMO**

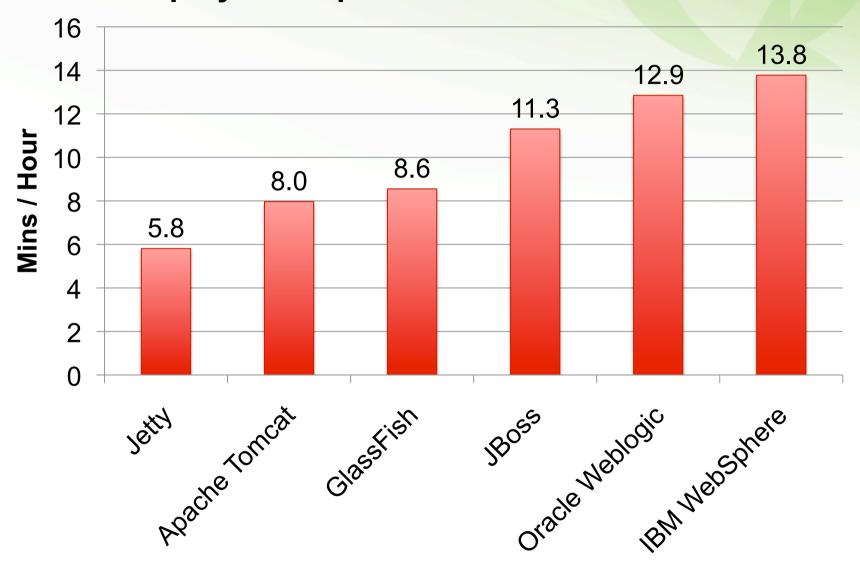


# Time spent on incremental builds, per hour, by build tool





#### Redeploy time spent on Java EE Containers



#### **Turnaround**

8.7 to 22.2 minutes/per hour

14.5% to 37% of development time

4.4 to 11.1 fulltime work weeks a year

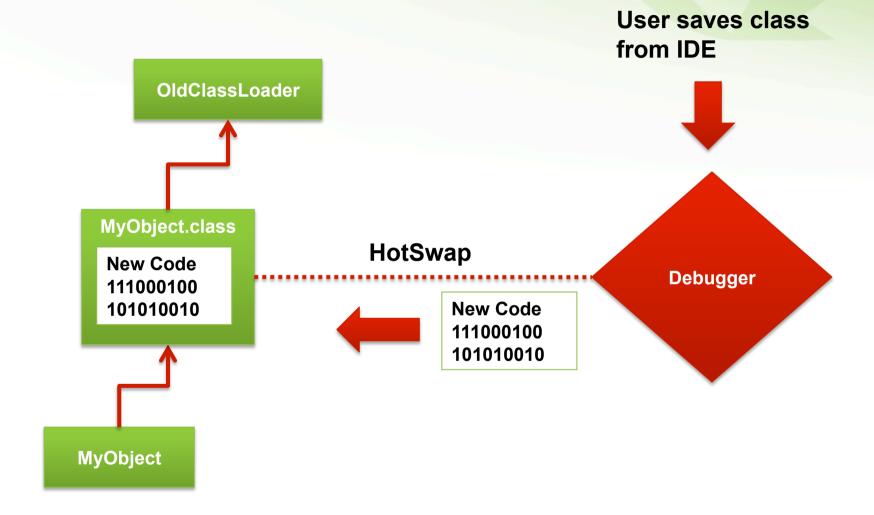
 assuming 48 work weeks a year, 5h a day coding, 8h workday



## **IDEA #1**

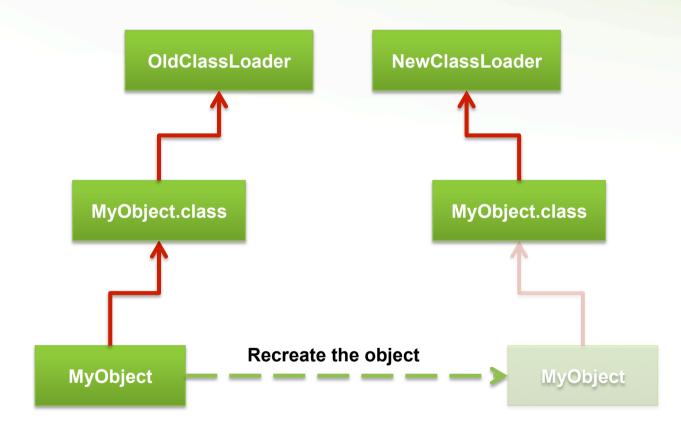


#### HotSwap



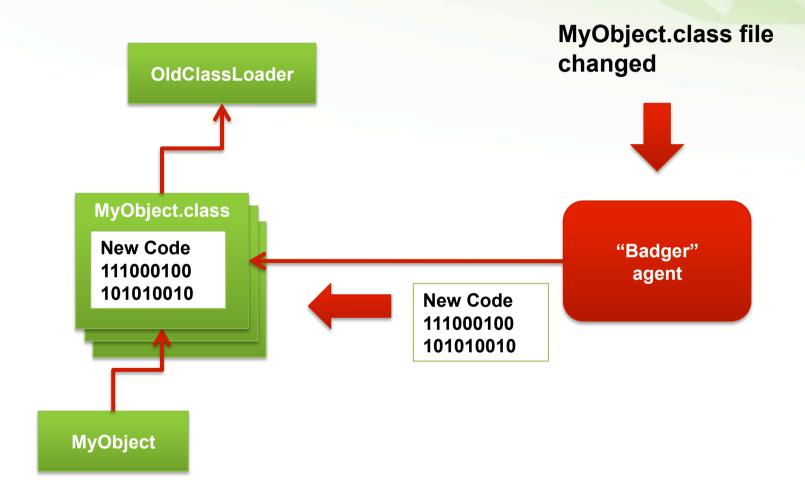


#### Reloading an Object





#### "Badger"





#### "Badger" Features

	HotSwap	"Badger"
Changing method bodies	+	+
Adding/removing methods	-	+
Adding/removing constructors	-	+
Adding/removing fields	-	+
Adding/removing classes	-	+
Adding/removing annotations	-	+
Replacing superclass	-	-
Adding/removing implemented interfaces	-	-



# **DEMO**



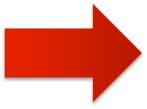
## THE PRODUCT

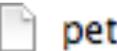




- ▶ 📆 Deployment Descriptor: petclinic
- ▼ 🎥 Java Resources: src
  - ▶ Æ org.springframework.samples.pet
    - jdbc.properties
    - log4j.properties
    - messages.properties
    - x rebel.xml
  - Libraries
- A JavaScript Support
- build

- ▶ ₩ebContent
  - & build.xml
  - x jetty.xml
  - petclinic.war
  - ReadMe.txt





petclinic.war



# **J**Rebel







**Open-Source API** 



A rough estimate: Over the last 30 days JRebel prevented the need for at least 422 redeploys/restarts. Using industry standard build and redeploy times, JRebel saved you between 11.3 and 22.9 hours.



# **DEMO**



#### EoP

- Turnaround takes 4 to 11 fulltime work weeks a year
- JRebel costs \$149 per developer seat and reduces turnaround by at least 80%
- JRebel does
  - class versioning
  - workspace-deployment archive mapping
  - framework configuration management

