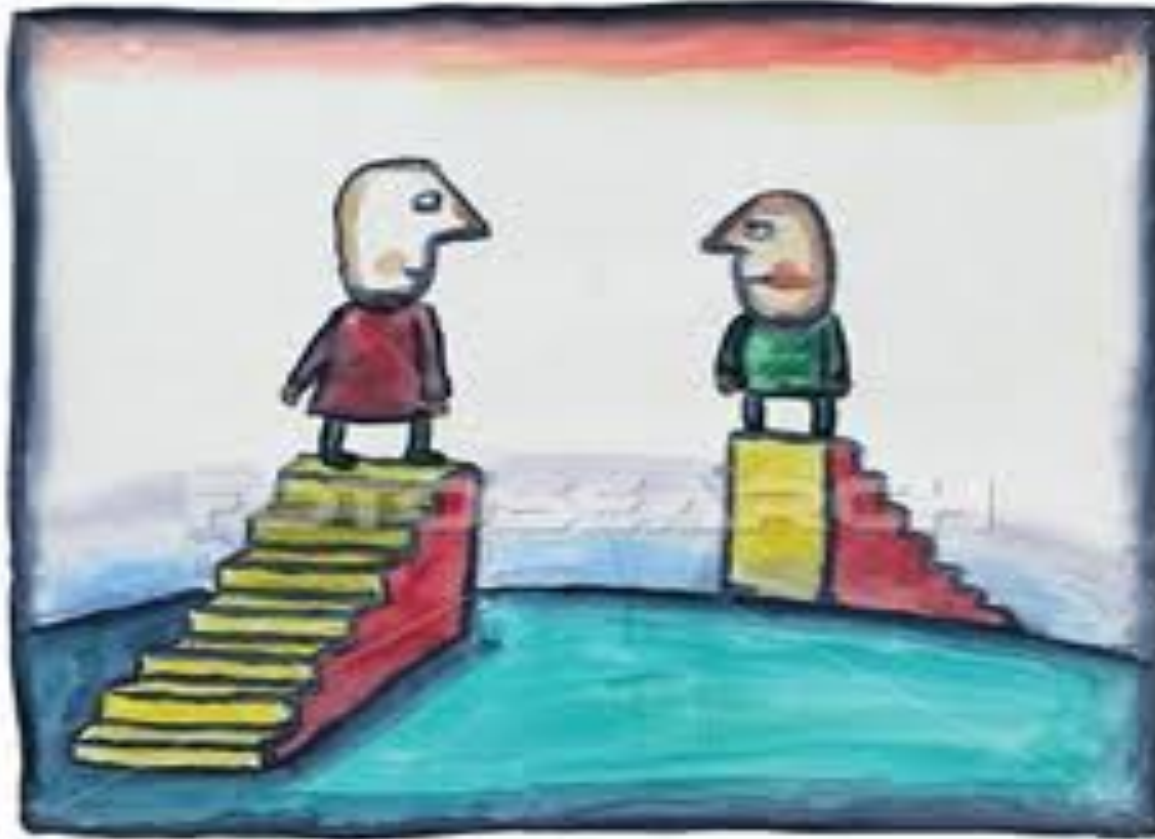


AGILE LOAD TESTING

BJÖRN BESKOW

2015-01-29 | CALLISTAENTERPRISE.SE

BRIDGING THE GAP





“These are not the requirements the business communicated to us!”

AGILITY IS WILLINGNESS TO LEARN



“Experience is simply the name we give our mistakes.”

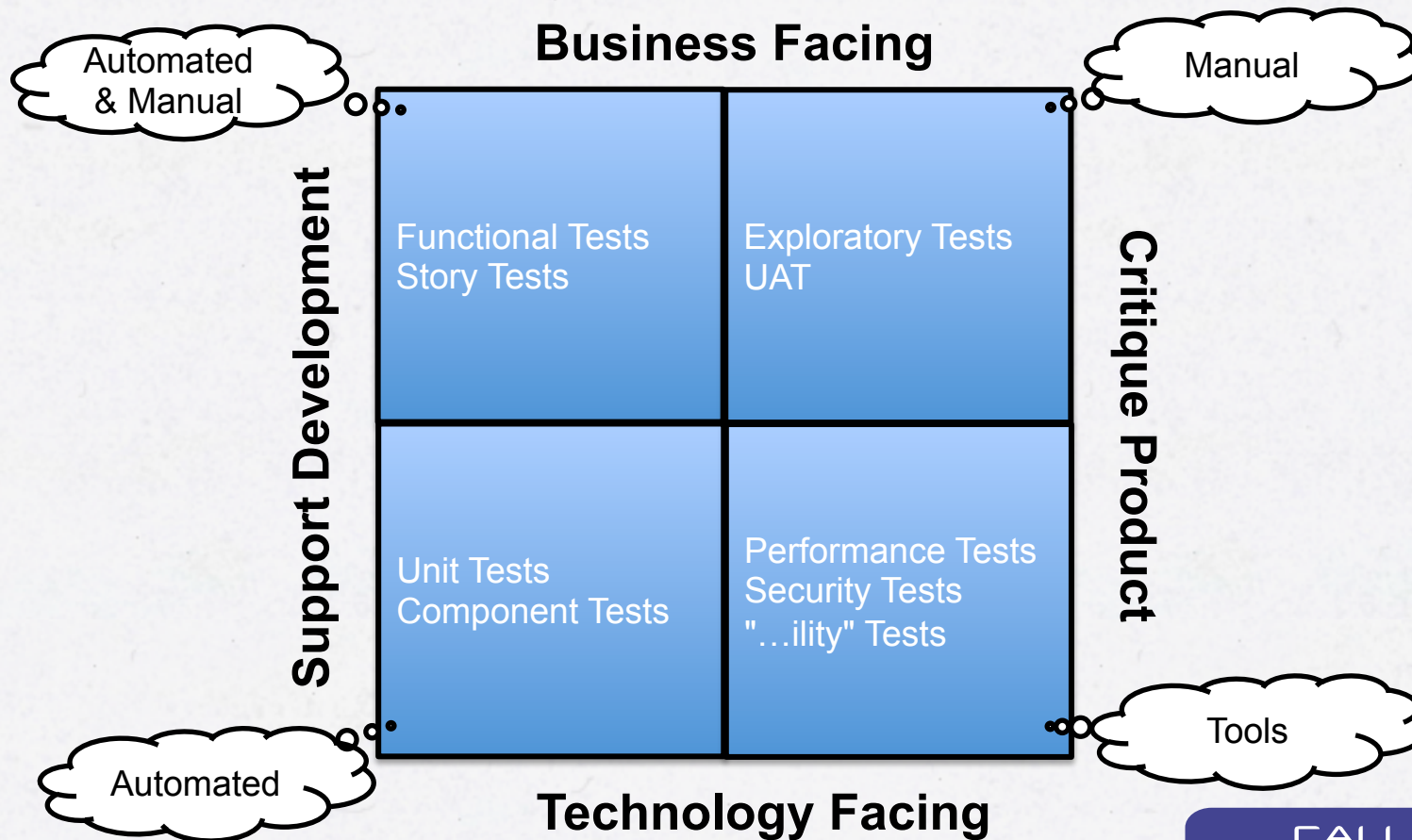
Oscar Wilde

QUALITY ASSURANCE PRECEDES QUALITY ASSESSMENT

- Testing is about **Quality Assurance**, not just **Quality Assessment**
- Quality Assessment only *indirectly* affects quality
- Testing *reveals information*
- Testing helps *focus project activity*



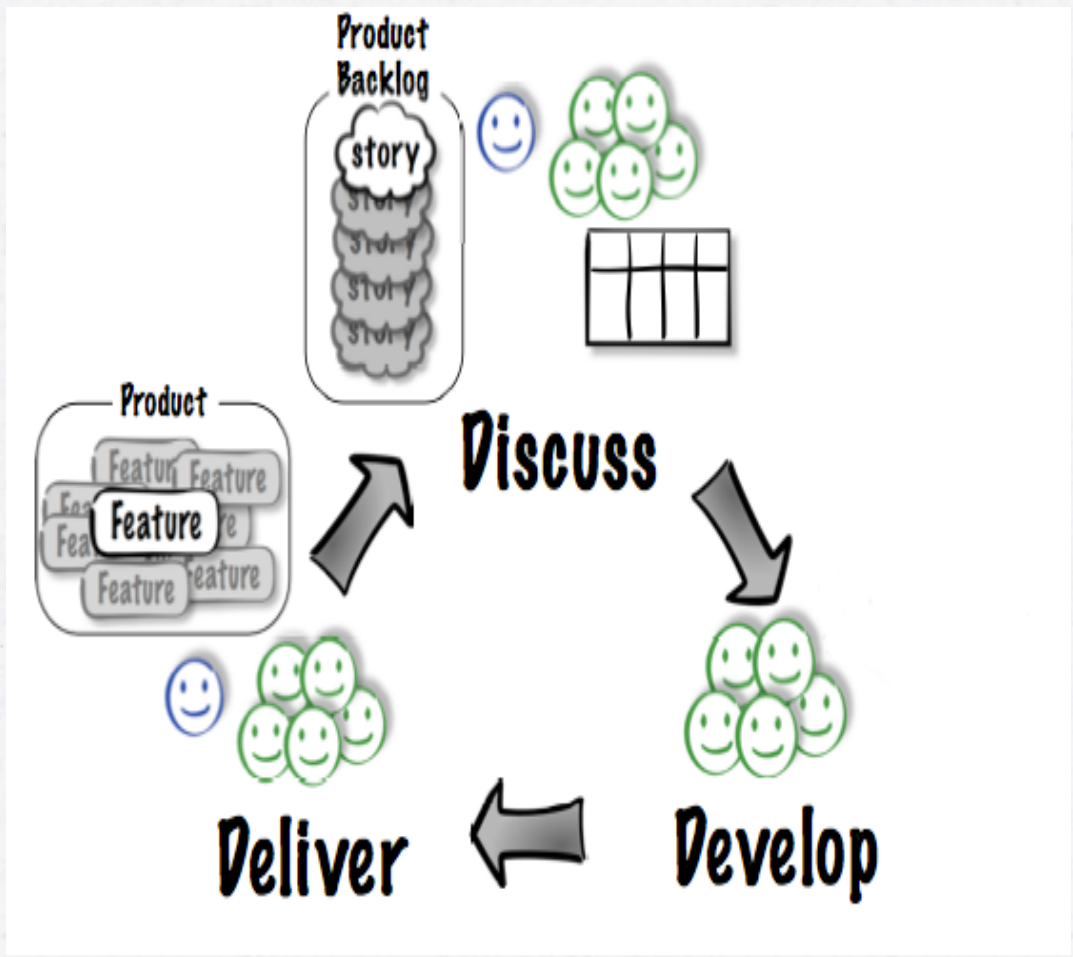
AGILE TESTING PURPOSES: WHY DO WE TEST?



TDD

**ALL CODE IS GUILTY
UNTIL PROVEN INNOCENT**

CODESMACK

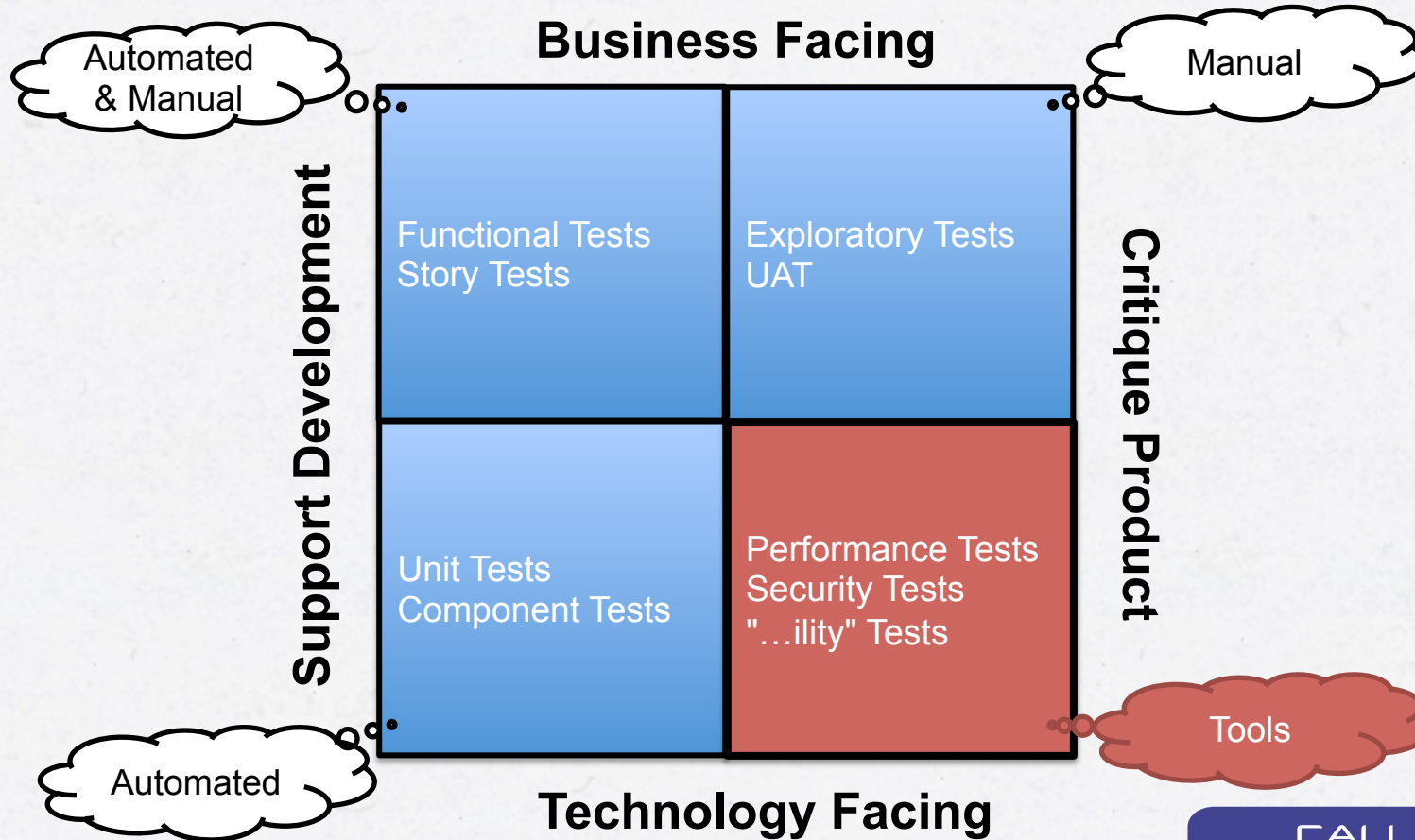




WHAT ABOUT NON-FUNCTIONAL ASPECTS?



WHAT ABOUT NON-FUNCTIONAL ASPECTS?



- What are the real requirements, anyway?
- How can we possibly verify that (in just 2 weeks)?
 - Data
 - Load





Performance

Search and replace:

Replacing 100 occurrences of a
4-character string in a 25MB
document has to take $< 750ms$

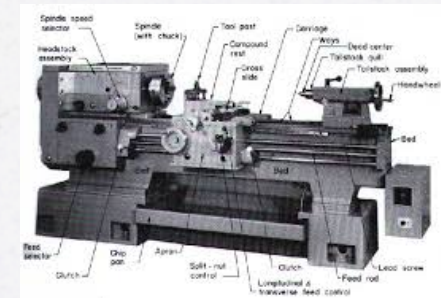


AUTOMATION CHALLENGES

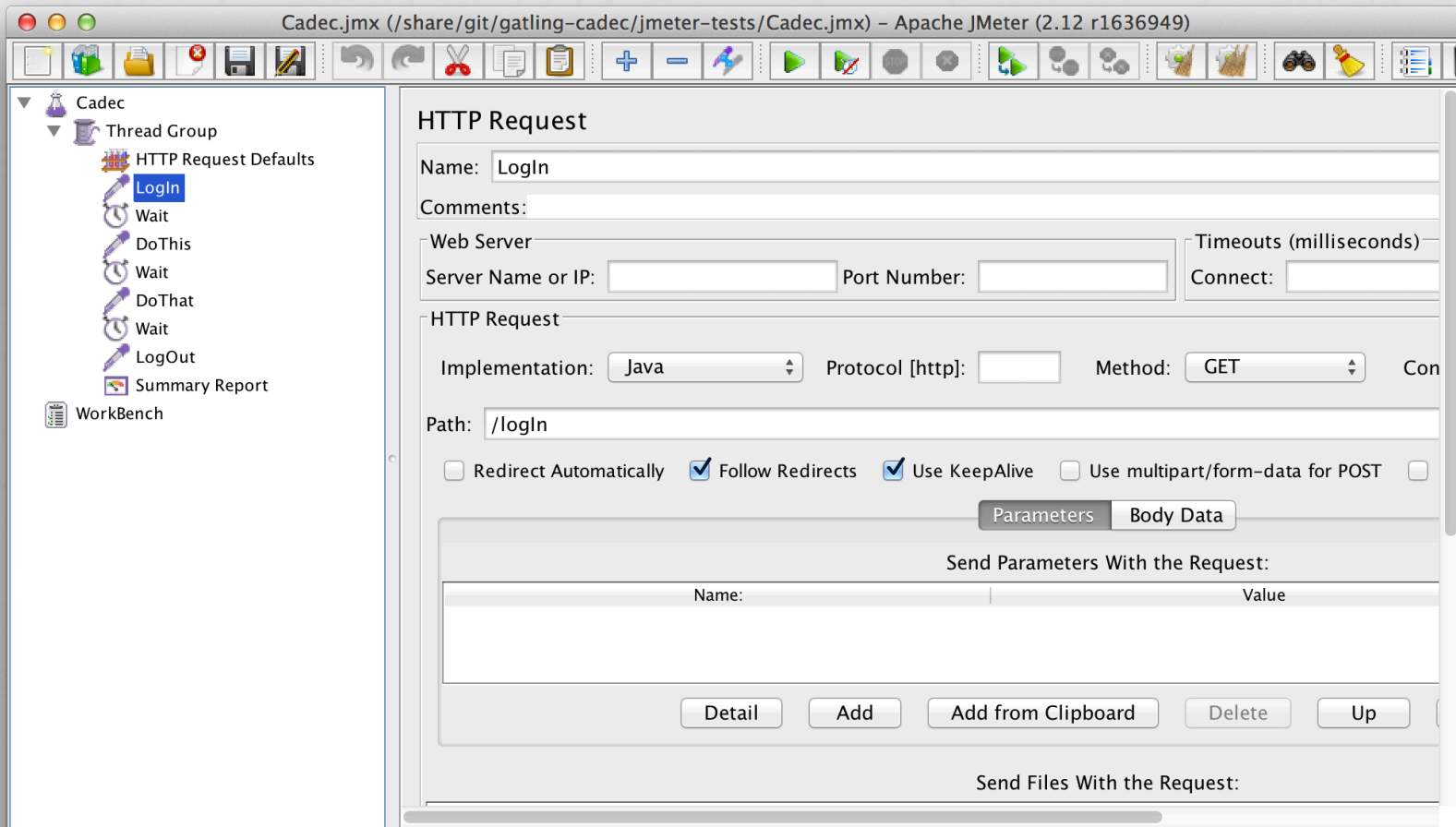
- Generate sufficient data
- **Generate sufficient load**

LOAD TESTING TOOLS

- Historically, Load Testing tools have been complex and expensive
 - LoadRunner
 - Rational Performance Tester
 - ...
- Lately, they have been challenged by open source alternatives
 - Apache JMeter
 - LoadUI
 - Grinder
 - ...



JMETER WITH FRIENDS: ISSUE #1 GRAPHICAL USER INTERFACE



Severely affects maintainability



Clumsy integration with build automation and Continuous Integration tools



Blocking I/O

means

1 user = 1 thread

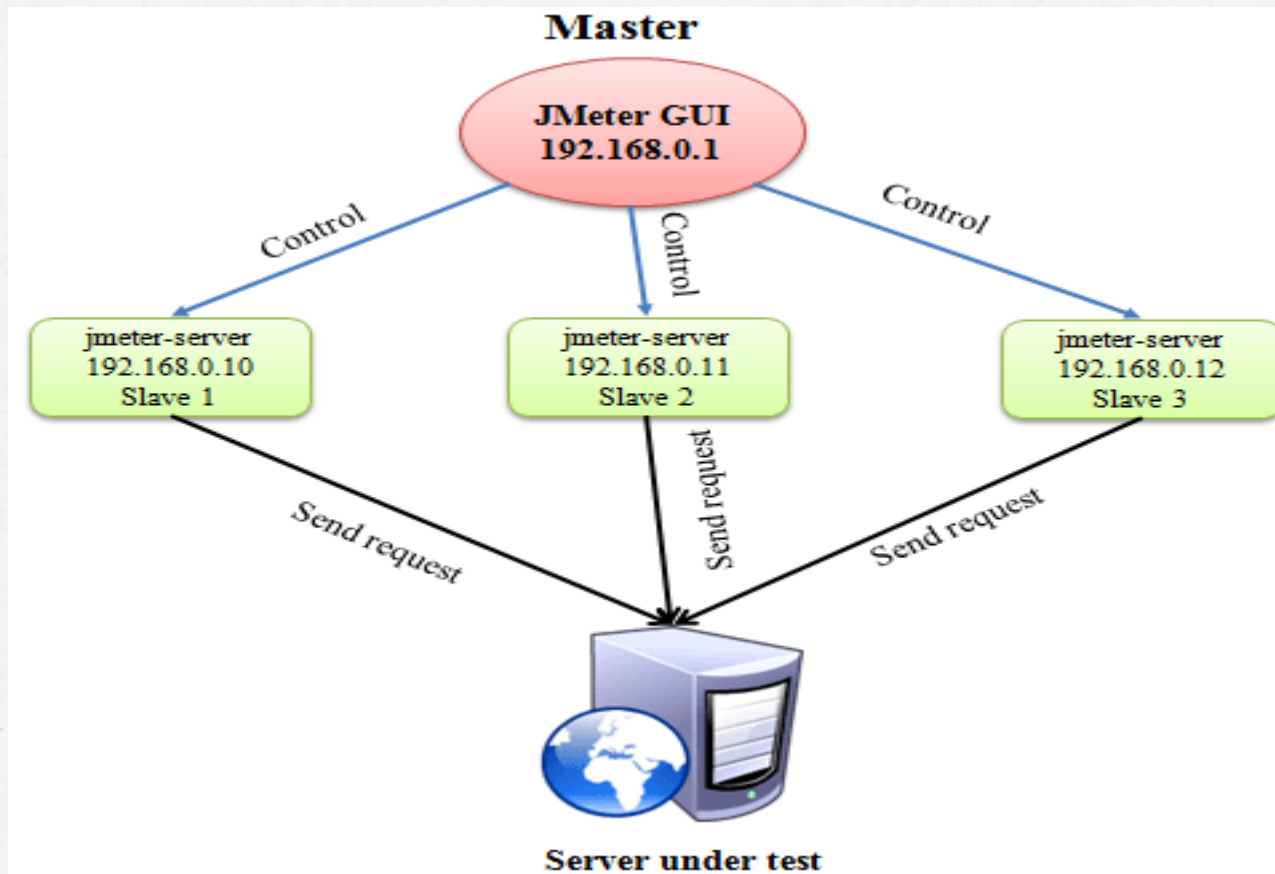


JMETER WOE: THREADS



DEMO

JMETER WITH FRIENDS: ISSUE #2 SOLVED?



GATLING.IO

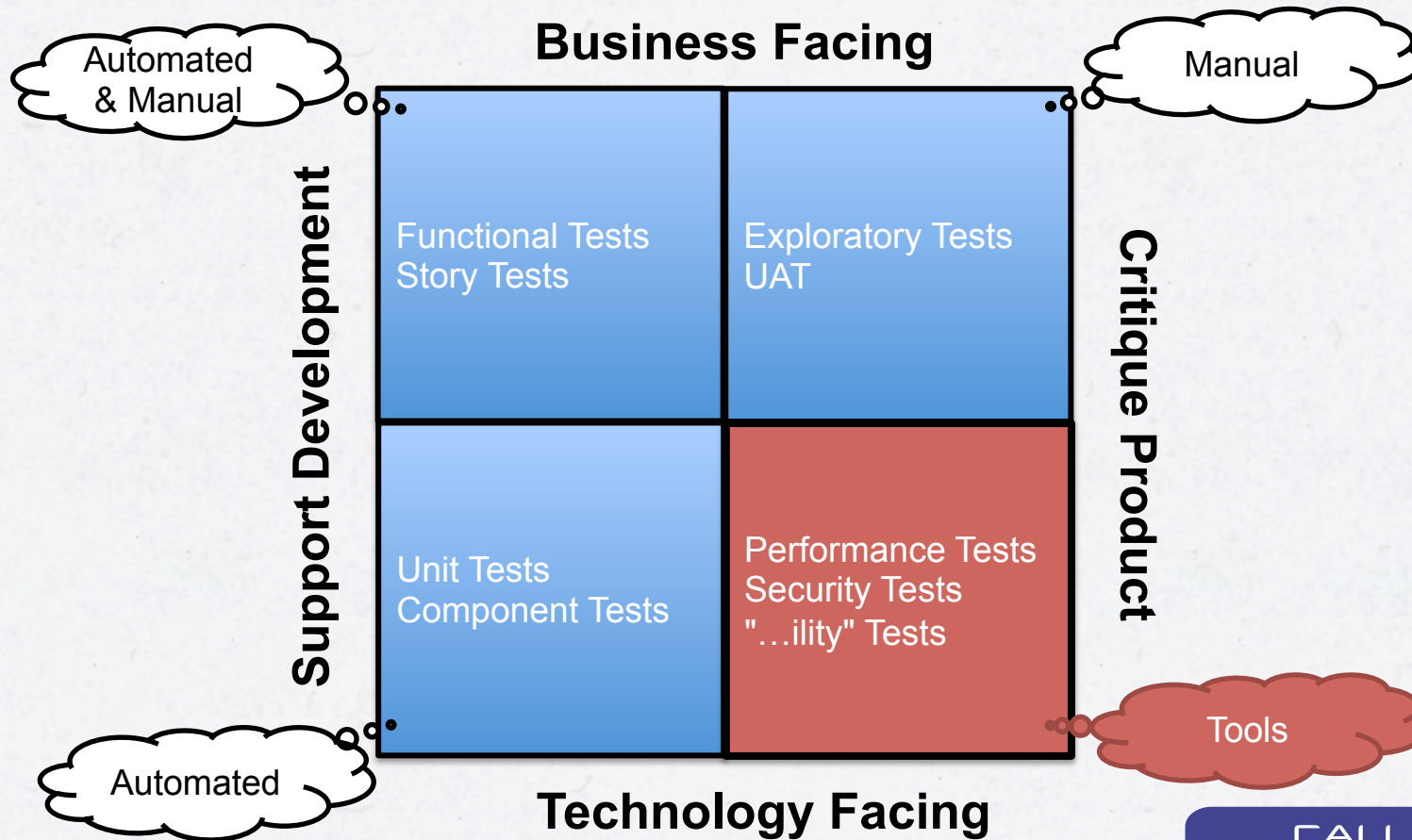
- Released in October 2012
- Now in version 2.0.3
- Different in 2 significant ways
 - Domain Specific Language (DSL) for expressing scenarios, instead of GUI
 - Uses modern, non-blocking technology (Scala, Akka, Netty), which means generating sufficient load on a single machine suddenly becomes feasible



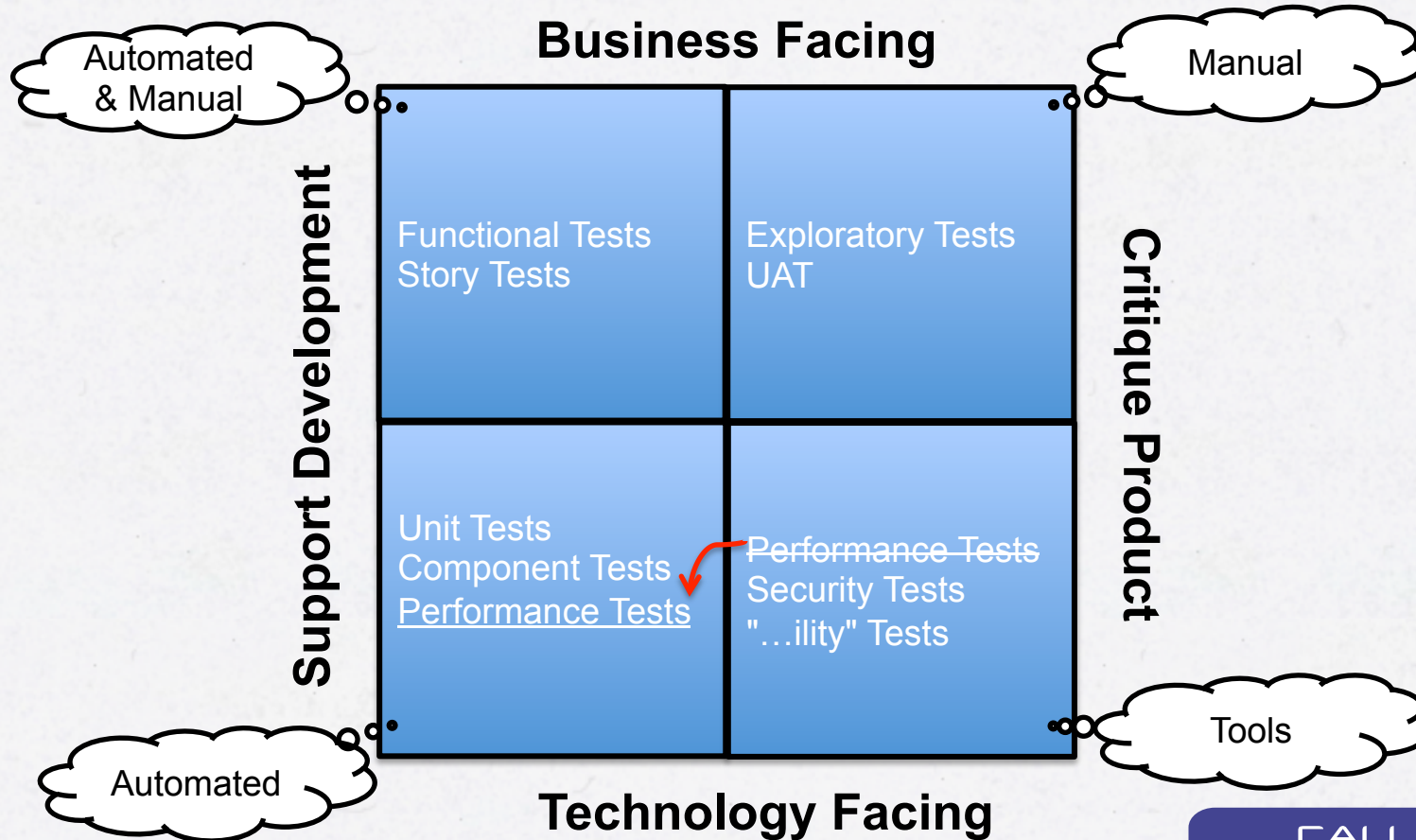
| GATLING TO THE RESCUE!



NON-FUNCTIONAL ASPECTS ...



... SHOULD BE DONE PROACTIVELY AS WELL!



TIME FOR QUESTIONS!

